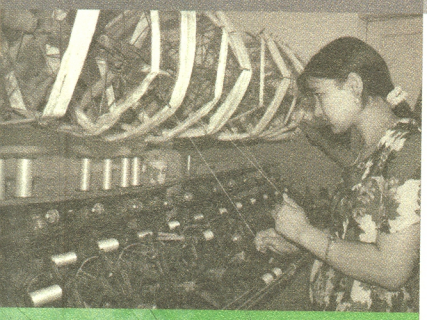
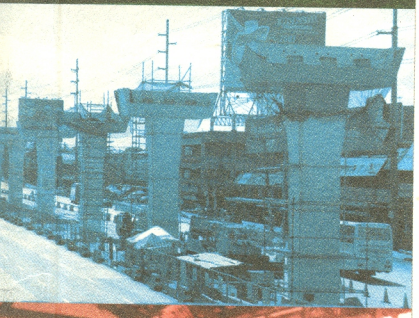
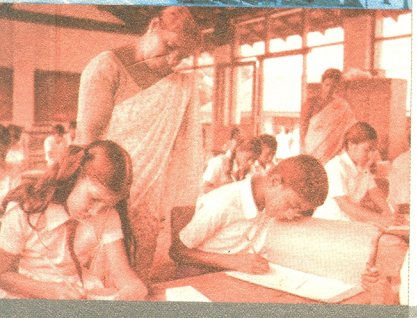
ADB









KEY INDICATORS FOR ASIA AND THE PACIFIC 2009

40th Edition

SPECIAL CHAPTER

Enterprises in Asia: Fostering Dynamism in SME

Asian Development Bank

ADB

KEY INDICATORS FOR ASIA AND THE PACIFIC 2009

40th Edition

Asiya üzrə bazar iqtisadiyyatı illik əsas göstəricilər. 2009 40-cı nəşr

20526

SPECIAL CHAPTER

Enterprises in Asia: Fostering Dynamism in SMEs

August 2009

Asian Development Bank

Azərbaycan Respublikası Dövlət Statistika Komitəsi
Daxil olma № 399
10 " 11 2009 il

© 2009 Asian Development Bank

All rights reserved. Published 2009.
Printed in the Philippines.

ISSN 0116-3000
Publication Stock No. FLS090732

Cataloging-In-Publication Data

Asian Development Bank.
Key Indicators for Asia and the Pacific 2009.
Mandaluyong City, Philippines: Asian Development Bank, 2009.

1. economic indicators 2. financial indicators 3. social indicators 4. energy and environmental indicators
5. millennium development goals 6. infrastructure indicators 7. governance indicators
I. Asian Development Bank.

The views expressed in this book do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use.

By making any designation of or reference to a particular territory or geographic area, or by using the term "country" in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

Asian Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
Tel +63 2 632 4444
Fax +63 2 636 2444
www.adb.org/Statistics

Foreword

The *Key Indicators for Asia and the Pacific 2009* or *Key Indicators 2009* is the 40th edition of this series, a statistical data book presenting economic, financial, social, and environmental indicators for regional members of the Asian Development Bank (ADB). In this edition, the content and presentation of statistical information follows the pattern established in last year's *Key Indicators* with short nontechnical explanations of what the statistics mean and brief analyses on economic, financial, social, and environmental developments in the Asia and Pacific region.

The tables and commentaries are again divided into two groups. The first group refers to the *Millennium Development Goals* and show the progress of the Asia and Pacific countries toward eradicating extreme poverty and hunger, providing universal access to primary education, reducing child mortality, ensuring environmental sustainability, and other important development goals. The second group of tables provides a broader picture of economic, financial, social, and environmental developments in the region. They are divided into seven themes namely, *People: Economy and Output: Money, Finance and Prices: Globalization: Infrastructure; Government and Governance; and Energy and Environment.* Each theme is introduced by a short analytic text identifying the main developments over the recent past.

This issue of *Key Indicators* comes out approximately 1 year after the onset of the global economic crisis. It includes annual statistics up to 2008 for most variables. Some of these, such as the national accounts, exports, and migrants' remittances, show growth in 2008 slowing as the crisis began to bite, but the full impact of the crisis will only become evident when data for 2009 and 2010 are released. It is already clear, however, that the crisis will affect the ability of countries to attain the *Millennium Development Goals (MDGs)*. In Part II, country progress toward the various goals is assessed. Some of the poorest countries have been able to make significant advances; however, under the current economic climate, this progress may be arrested as the downside risks are greater than usual. Early indications are that there will be about 60 million additional $1.25-a-day poor in 2009 in the Asia and Pacific region compared to a scenario where growth had not slowed down.

The special chapter in Part I looks at the impact of the economic crisis on workers and enterprises, including small and medium-sized enterprises (SMEs). It also discusses how to foster greater efficiency in SMEs once the crisis has played out. A key channel through which the economic crisis has affected enterprises is through the reduction in Asian exports. While SMEs tend to work for the domestic rather than export markets, some of the most dynamic SMEs export or supply inputs to larger export-dependent enterprises. Moreover, many SMEs will be affected by the fall in domestic demand as unemployment rises and household incomes contract. In the short run, government efforts at boosting aggregate demand, as well as specific policy initiatives to assist SMEs' access to finance, should help enterprises cope with the crisis. But over the longer term, policies must help SMEs adopt modern technologies and raise their productivity. Above all, governments should avoid creating incentives for small enterprises to remain small and operate with outdated technologies. Fostering dynamism in SMEs will not only help their owners, but also workers at large. In this way, a dynamic SME sector can play an important role in the rebalancing of the economies of Asia by raising household incomes and thus domestic demand.

Other new statistical indicators in this edition include primary education completion rate, number of adults living with HIV, and household electrification rate. The regional tables in Part III are largely based on a comprehensive set of country tables. These country tables are no longer provided in printed form but are on a CD-ROM disk at the back of this publication. They can also be accessed online through ADB's website at www.adb.org/Documents/Books/Key_Indicators/2009/Country.asp and they can be downloaded from ADB's Statistical Database System at sdbs.adb.org.

We appreciate the cooperation of the governments and international agencies in providing data to ADB and, in the process, enhancing this year's issue of *Key Indicators*. We hope that *Key Indicators* will continue to be a valuable resource for monitoring the progress and addressing the development challenges in the region.

H. Kuroda

Haruhiko Kuroda
President

Acknowledgments

The *Key Indicators for Asia and the Pacific 2009* was prepared by the Development Indicators and Policy Research Division (ERDI), Economics and Research Department (ERD), Asian Development Bank (ADB) under the overall guidance of Chellam Palanyandy. Benson Sim and Kaushal Joshi led the research team with the technical assistance of Modesta de Castro and Melissa Pascua.

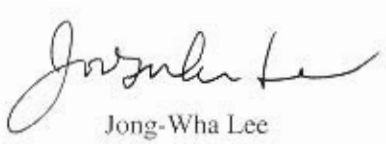
We appreciate the contribution of our statistical partners in the regional members and international organizations that shared data with us. ADB resident missions in Afghanistan, Armenia, Azerbaijan, Bangladesh, Cambodia, People's Republic of China, Georgia, India, Indonesia, Kazakhstan, Kyrgyz Republic, Lao People's Democratic Republic, Mongolia, Nepal, Pakistan, Papua New Guinea, Sri Lanka, Tajikistan, Thailand, Uzbekistan, and Viet Nam provided support in compiling the data from their respective countries. The Japanese Representative Office, the Pacific Liaison and Coordination Office, the Philippines Country Office, the South Pacific Subregional Office, and the Special Office in Timor-Leste also provided invaluable help in data compilation.

The special chapter (Part I), entitled Enterprises in Asia: Fostering Dynamism in SMEs, was written by Rana Hasan and Niny Khor with contributions from Karl Robert Jandoc, Iva Sebastian, and Albert Kirby Tardeo, and technical assistance from Marissa Barcenas, Jewelwayne Salcedo Cain, and Ma. Rhoda Magsombol. The chapter benefited considerably from background papers prepared by Hank Lim, Dipak Mazumdar, Lourdes Homecillo, and Jiangyong Lu. KyeongAe Choe, Aprajit Mahajan, Dalisay Maligalig, Ying Qian, Lei Lei Song, Guntur Sugiyarto, Tulus Tambunan, and Xiaoping Xu provided very useful background notes and boxes. Staff from national statistics offices in Hong Kong, China; Indonesia; Malaysia; Philippines; Taipei,China; and Thailand kindly provided tabulations on the distribution of economic data by enterprise size groups used in the chapter. Valuable suggestions and advice were provided by Armin Bauer, Douglas Brooks, Shiladitya Chatterjee, Martin Endelman, Joao Farinha, Jesus Felipe, Hal Hill, Kaushal Joshi, Chellam Palanyandy, Anthony Patrick, Hyun Hwa Son, and Juzhong Zhuang. Eric Van Zant edited the chapter and typesetting was carried out by Rhommell Rico.

The tables for the Millennium Development Goals (Part II) and Regional Tables (Part III), including the country tables in the accompanying CD-ROM were prepared by ERDI staff and consultants, namely, Glenita Amoranto, Nalwino Billones, Eileen Capilit, Pilar Dayag, Modesta de Castro, Barbara Dizon, Virginia Gañac, Pamela Lapitan, Julieta Magallanes, Melissa Pascua, Regina Reyes, Dennis Sorino, Eric Suan, and Elena Varona. Evelyn Andrada, Ma. Roselia Babalo, Lucila Pery, Clarita Dalaguit-Truong, and Rowena Vicente proofread the country tables with Barbara Dizon as lead.

The commentaries for Parts II and III were prepared by Derek Blades and edited by Peter Wilson under the general guidance of Benson Sim. An interdepartmental review refined the drafts of these commentaries. Invaluable suggestions were also provided by ERDI staff and consultants.

Parts II and III and the country tables were reviewed by Abuzar Asra, Rana Hasan, Kaushal Joshi, Niny Khor, Dalisay Maligalig, Chellam Palanyandy, Benson Sim, and Guntur Sugiyarto, with Cherry Lynn Zafaralla and Wickie Mercado-Baguisi as copy editors. Typesetting was done by Joe Mark Ganaban, and Rhommell Rico, who also took charge of preparing the web files for upload and the CD-ROM. The staff of the ADB Printing Unit, Anna Maria Juico, Victor Lo, and Judy Yniguez under the supervision of Gregg Garcia, were responsible for printing. Andrew Perrin, with the assistance of Vicente Angeles and Muriel Ordoñez, planned and coordinated the dissemination of *Key Indicators for Asia and the Pacific 2009*.



Jong-Wha Lee
Chief Economist

Contents

Foreword iii
Acknowledgments v
Statistical Partners xvi
Guide for Users xxi
Highlights of KI 2009 xxv

PART I – SPECIAL CHAPTER
Enterprises in Asia: Fostering Dynamism in SMEs

1. Introduction 3

2. The Global Economic Crisis and Enterprises in Asia 5
2.1. Impact Channels of the Current Crisis on Firms 5
2.2. Crisis Impact: an Assessment Based on Recent Labor Force Surveys 8
i. Manufacturing has been hit hard 9
ii. The impact has spilled over into other sectors 9
iii. Hours worked and wages are being cut 10
2.3. What Types of Enterprises and Workers Are Being Affected? 11
2.4. Assisting Enterprises Hit by the Crisis 17
2.5. Fostering Enterprise Dynamism in the Aftermath of the Crisis 20

3. Enterprises in Asia: A Snapshot 22
3.1. Microenterprises 22
3.2. Small, Medium, and Large Enterprises 26
3.3. Some Implications of the Pattern of Size Distribution 32

4. Explaining Enterprise Size and its Distribution 34

5. Assisting SMEs 40

6. SME Access to Finance 44
6.1. Are SMEs Credit Constrained? 44
6.2. SME Access to Finance: Policy Responses to Credit Constraints 45

7. Technology and Innovation 50
7.1. Innovation Across Enterprises in Developing Asia 50
7.2. Assisting SMEs with Technology and Learning 54
7.3. Assisting SMEs through Links with Large Enterprises and Cluster-based Development 59

8. Lessons from the New Literature on Structural Transformation 64

9. Concluding Remarks 70

References 71

Tables

Table 2.1 Key Data Sources 5
Table 2.2 Official Unemployment Rates (%) 9
Table 2.3 Hours Worked: Republic of Korea, Philippines, and Thailand 11
Table 2.4 Top 5 Declining Exports, Q1 2008 to Q1 2009 14
Table 2.5 Labor Force Surveys: Characteristics of Workers in the Worst Affected Manufacturing Industries ... 14
Table 2.6 Average Firm Size in Manufacturing 15
Table 2.7 Selected Policy Measures to Assist Enterprises 18
Table 3.1 Manufacturing Employment in Microenterprises 25
Table 3.2 Average Annual Wages in 2005 US$ by Enterprise Size 29
Table 3.3 Productivity Measures (Value Added per Worker/Output per Worker) in 2005 US$ by Enterprise Size 32
Table 4.1 Power Outages 36
Table 5.1 Decomposition of Employment Growth by Enterprise Size-Groups 40
Table 5.2 Constraints Facing SMEs in Asian Developing Countries 41
Table 6.1 Various Programs Assisting SMEs with Finance in Selected Economies 46
Table 7.1 Asian Enterprises that Undertook Innovation (%) 51
Table 7.2 Most Important Sources of Technological Innovation for Asia (% of enterprises) 52
Table 7.3 Main Influence to Reduce Production Cost (% enterprises answering yes) 53
Table 7.4 Main Influence to Develop New Products (% enterprises answering yes) 53
Table 7.5 Technology Programs, Extension Services and Training, and Business Links 55-57
Table 7.6 Clusters in India 62

Figures

Figure 1.1 Share of Manufacturing Employment by Enterprise Size-Groups (%) 3
Figure 2.1 Export Growth (year-on-year, % change) 6
Figure 2.2 Index of Manufacturing Production (January 2004 = 100) 6
Figure 2.3 Monthly Visitor Arrivals in Asia (%, year-on-year changes) 7
Figure 2.4 IT Services in India: Real Annual Revenue Growth 7
Figure 2.5 Private Capital Flows to Developing Asia 7
Figure 2.6 Change in Number of Employees by Industry (year-on-year, * thousands) 12
Figure 2.7 Change in Hours Worked 13
Figure 2.8 Change in Earnings in Singapore and Thailand (%) 13
Figure 2.9 Share of Female Workers in Exporting and Non-Exporting Enterprises (%) 14
Figure 2.10 Share of Total Sales Sold Domestically: Small, Medium, and Large Enterprises (%) 15
Figure 2.11 Share of Bank Finance in Working Capital (%) 16
Figure 2.12 Share of Total Employment by Enterprise Size-Groups in Taipei,China (%) 16
Figure 2.13 Introduction of New Technology by SMEs: Exporters versus Non-exporters (% of enterprises that introduced new technology) 17
Figure 2.14 Average Share of Bank Finance for Working Capital, by Export Status (%) 17
Figure 3.1 Self-Employment in Industry and Services 24
Figure 3.2 Self-Employment in Manufacturing 25
Figure 3.3 Labor Productivity Across Microenterprises and Small Enterprises in Indonesia, Philippines, Thailand, and India 25
Figure 3.4. Share of Total Establishments by Enterprise Size-Groups (%) 28
Figure 3.5 Share of Total Employment by Enterprise Size-Groups (%) 29
Figure 3.6 Productivity (Value Added per Worker) Differentials by Enterprise Size-Groups (large enterprises = 100) 30
Figure 3.7 Wage Differentials by Enterprise Size-Groups (large enterprises = 100) 30
Figure 4.1 Distribution of Employment by Enterprise Size-Groups: Apparel vs. Motor Vehicles and Parts (%) 34

Figure 4.2 Distribution of Employment by Enterprise Size-Groups in Apparel: India and PRC (%) 35
Figure 4.3 Business Compliance Costs 37
Figure 6.1 Effect of Financing Constraints on Growth 44
Figure 7.1 Innovation in Exporting and Non-Exporting SMEs 53
Figure 7.2 Structure of Subcontracting in the Thai Automobile Industry 59
Figure 7.3 Fragmentation of Production 60
Figure 7.4 Distribution of Manufacturing Employment in Footwear and Food Products, Indonesia, 1996 61
Figure 8.1 Policy Experimentation in the People's Republic of China 69

Box

Box 2.1 Remittances 8
Box 2.2 Impact of the 1997/98 Asian Financial Crisis on Workers 10-11
Box 2.3 Policy Measures to Assist SMEs in the People's Republic of China 19
Box 2.4 SMEs in the 1997/98 Asian Financial Crisis 20
Box 2.5 Credit Guarantees for SMEs: Their Efficacy in the Republic of Korea After the 1997/98 Asian Financial Crisis 21
Box 3.1 Size Structure of Enterprises Across Selected Economies: Data Issues 23
Box 3.2 Identifying Microenterprise Owners 27
Box 3.3 Size-Wage Relationship Across Industries in Taipei,China 31
Box 3.4 Efficiency and Innovation in US Manufacturing: the Role of SMEs 33
Box 4.1 Production Technology and Optimum Plant Size 35
Box 4.2 Why Incentives for Self-Discovery Can Be Weak 37
Box 4.3 Transaction Costs and the Size of Firms: Evidence from the Republic of Korea and Taipei,China 38
Box 4.4 Fostering Small Enterprises in the Republic of Korea 39
Box 5.1 Management Intervention for Mid-sized Firms in Maharashtra, India 43
Box 6.1 Are Micro-entrepreneurs Credit Constrained? Evidence from Sri Lanka 45
Box 6.2 Using Psychometric Testing to Screen SME Borrowers 48
Box 7.1 Types of Innovation 50
Box 7.2 Technological Learning in Developing Countries 50
Box 7.3 Innovation in Micro and Small Enterprises 51
Box 7.4 Choice of Production Methods, Scale, and Regulations in the Apparel Industry in India 54
Box 7.5 SME Support for Technology in Singapore 55
Box 7.6 SME Technology Support Institutions in Taipei,China 57
Box 7.7 Fostering Large Firm-Small Firm Links in Thailand 60
Box 7.8 A Framework to Induce Functional Industry-Clusters 63
Box 8.1 India's Textile and Garment Industry: An Assessment of India's National Manufacturing Competitiveness Council (NMCC) 65-66
Box 8.2 Product Space: A Guide for Decision-Making on Structural Transformation 67

Box Figures

Box Figure 2.1 Remittance and Other Financial Flows to Developing Countries 8
Box Figure 2.2 Annual Changes in Manufacturing-Related Indicators in 1997/98 Asian Financial Crisis (%) 10
Box Figure 2.3 Credit Guarantees for KCGF and KOTEC 21
Box Figure 3.2.1 Ability Measures 27
Box Figure 3.3.1 Employment Shares and Average Compensation by Enterprise Size-Groups 31
Box Figure 4.3.1 Value Added in the Footwear Industry in the Republic of Korea and Taipei,China by Size of Enterprise, 1976 and 1981 38
Box Figure 4.4.1 Manufacturing Establishment Size Distribution in the Republic of Korea 39
Box Figure 8.1.1 The Textiles and Garment Production Value Chain 66
Box Figure 8.2.1 The Product Space 68

Box Tables

Box Table 2.1 Estimates of Remittance Flows to Developing Countries, 2009–2010 (annual growth, %) 8
Box Table 2.2 Unemployment and Underemployment during Asian Financial Crisis 11
Box Table 2.3 Change in Employment and Real Wages during Asian Financial Crisis 11
Box Table 2.4 Impact of 1997 Crisis on East Asian Firms 20
Box Table 3.1.1 Enterprises and Employment in Manufacturing, Selected Economies 23
Box Table 7.3.1 Incidence of Innovation and Whether Firm Introduced New Product in Sri Lanka (%) 51

PART 2 – Millennium Development Goals

Introduction to the Millennium Development Goals 81

Goal 1: Eradicate Extreme Poverty and Hunger 85
Table 1.1 Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day 89
Table 1.2 Target 1.B: Achieve full and productive employment and decent work for all, including women and young people 90
Table 1.3 Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger 91

Goal 2: Achieve Universal Primary Education 92
Table 2.1 Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling 95

Goal 3: Promote Gender Equality and Empower Women 98
Table 3.1 Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015 101

Goal 4: Reduce Child Mortality 103
Table 4.1 Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate 106

Goal 5: Improve Maternal Health 107
Table 5.1 Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio 110
Table 5.2 Target 5.B: Achieve, by 2015, universal access to reproductive health 111

Goal 6: Combat HIV/AIDS, Malaria, and Other Diseases 113
Table 6.1 Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS 115
Table 6.2 Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it 116
Table 6.3 Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases 117

Goal 7: Ensure Environmental Sustainability 119
Table 7.1 Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources 123
Table 7.2 Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss 125
Table 7.3 Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation 126

Table 7.4 Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers 128

Goal 8: Develop a Global Partnership for Development 129

Table 8.1 Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term 132

Table 8.2 Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications 133

Millennium Development Goals—Figures

Figure 1.1 Economies where More than 10% of the Population Live on Less than $1.25 a Day 85
Figure 1.2 Share of Total Income or Consumption for Lowest Quintile, Latest Year 86
Figure 1.3 Percentage of Population Suffering from Hunger 87
Figure 1.4 Percentage of Underweight Children under 5 Years Old, Latest Year 87
Figure 1.5 Growth Rate of GDP per Person Employed, 2007 and 2008 88
Figure 2.1 Total Net Enrollment Ratio in Primary Education 92
Figure 2.2 Percentage of Children Starting Grade 1 and Reaching Last Grade of Primary 93
Figure 2.3 Percentage of Literate 15–24-Year-Olds, 1990 and 2007 or Nearest Years 94
Figure 3.1 Primary School Female–Male Enrollment Ratios 98
Figure 3.2 Secondary School Female–Male Enrollment Ratios 99
Figure 3.3 Tertiary Education Female–Male Enrollment Ratios 99
Figure 3.4 Percentage of Women in Non-Agricultural Employment, Latest Year 100
Figure 4.1 Under-Five Mortality and Infant Mortality Rates, 2007 103
Figure 4.2 Under-Five Mortality Rate 104
Figure 4.3 Percentage of 1-Year-Old Children Immunized against Measles, 2000 and 2007 104
Figure 4.4 Under-Five Mortality and Immunization against Measles 105
Figure 5.1 Maternal Mortality Ratio, 2005 or Latest Year 107
Figure 5.2 Births Attended by Skilled Health Personnel, 1995 and 2006 or Nearest Years 108
Figure 5.3 Maternal Mortality and Births Attended by Skilled Health Personnel, 2006 or Latest Year 108
Figure 5.4 Adolescent Birth Rate, 1990 and 2007 or Nearest Years 109
Figure 6.1 Adults Living with HIV, 2007 113
Figure 6.2 Percentage of the Population with Advanced HIV Infection with Access to Antiretroviral Drugs, 2006 and 2007 114
Figure 6.3 Prevalence of Tuberculosis, 1990 and 2007 114
Figure 7.1 Change in Forest Area between 1990 and 2005 120
Figure 7.2 Per Capita Emissions of Carbon Dioxide, 1990 and 2006 or Nearest Years 120
Figure 7.3 Per Capita Emissions of Carbon Dioxide in Five Industrialized Countries and in the Five Most Populous Countries of Asia, 2006 121
Figure 7.4 Proportion of Urban Households without Access to Improved Sanitation 122
Figure 8.1 Debt Service as a Percentage of Exports of Goods and Services, 2000 and 2007 or Nearest Years 129
Figure 8.2 Telephone Lines and Cellular Subscriptions, 2008 or Latest Year 130
Figure 8.3 Internet Users, 2008 or Latest Year 131

Millennium Development Goals—Boxes

Box 1 Millennium Development Goals 81
Box 7.1 Consumption of All Ozone-Depleting Substances, 2007 121

PART 3 – Regional Tables

Introduction to Regional Tables 137

People 141

Population

Table 1.1 Mid-year population 145
Table 1.2 Growth rates in population 146
Table 1.3 Migration and urbanization 147
Table 1.4 Population aged 0–14 years 148
Table 1.5 Population aged 15–64 years 149
Table 1.6 Population aged 65 years and over 150
Table 1.7 Age dependency ratio 151

Labor Force and Employment

Table 1.8 Labor force participation rate 152
Table 1.9 Unemployment rate 153
Table 1.10 Unemployment rate of 15–24-year-olds 154
Table 1.11 Employment in agriculture 155
Table 1.12 Employment in industry 156
Table 1.13 Employment in services 157

Poverty Indicators

Table 1.14 Poverty and inequality 158
Table 1.15 Human development index 159

Social Indicators

Table 1.16 Life expectancy at birth 160
Table 1.17 Births, deaths, and reproduction 161
Table 1.18 Primary education completion rate 162
Table 1.19 Adult literacy rate 163
Table 1.20 Education resources 164
Table 1.21 Health care resources 165
Table 1.22 Estimated number of adults living with HIV 166

Economy and Output 167

National Accounts

Table 2.1 Gross domestic product at PPP 171
Table 2.2 GDP per capita at PPP 172
Table 2.3 GNI per capita, Atlas method 173
Table 2.4 Agriculture value added 174
Table 2.5 Industry value added 175
Table 2.6 Services value added 176
Table 2.7 Private consumption expenditure 177
Table 2.8 Government consumption expenditure 178
Table 2.9 Gross domestic capital formation 179
Table 2.10 Exports of goods and services 180
Table 2.11 Imports of goods and services 181
Table 2.12 Gross domestic saving 182
Table 2.13 Growth rates of real GDP 183
Table 2.14 Growth rates of real GDP per capita 184
Table 2.15 Growth rates of agriculture real value added 185
Table 2.16 Growth rates of industry real value added 186
Table 2.17 Growth rates of services real value added 187
Table 2.18 Growth rates of real private consumption expenditure 188

Table 2.19 Growth rates of real government consumption expenditure 189
Table 2.20 Growth rates of real gross domestic capital formation 190
Table 2.21 Growth rates of real exports of goods and services 191
Table 2.22 Growth rates of real imports of goods and services 192
Production
Table 2.23 Growth rates of agriculture production index 193
Table 2.24 Growth rates of manufacturing production index 194

Money, Finance, and Prices 195
Prices
Table 3.1 Growth rates of consumer price index 199
Table 3.2 Growth rates of food consumer price index 200
Table 3.3 Growth rates of wholesale/producer price index 201
Table 3.4 Growth rates of GDP deflator 202
Money and Finance
Table 3.5 Growth rates of money supply 203
Table 3.6 Money supply 204
Table 3.7 Interest rate on savings deposits 205
Table 3.8 Interest rate on time deposits of 12 months 206
Table 3.9 Lending interest rate 207
Table 3.10 Yield on short-term treasury bills 208
Table 3.11 Domestic credit provided by banking sector 209
Table 3.12 Bank nonperforming loans 210
Table 3.13 Growth rates of stock market price index 211
Table 3.14 Stock market capitalization (US$ million) 212
Table 3.15 Stock market capitalization (percent of GDP) 213
Exchange Rates
Table 3.16 Official exchange rate 214
Table 3.17 Purchasing power parity conversion factor 215
Table 3.18 Price level indexes 216

Globalization 217
Balance of Payments
Table 4.1 Trade in goods balance 221
Table 4.2 Trade in services balance 222
Table 4.3 Current account balance 223
Table 4.4 Workers' remittances and compensation of employees, receipts (US$ million) 224
Table 4.5 Workers' remittances and compensation of employees, receipts (percent of GDP) 225
Table 4.6 Foreign direct investment, net inflows (US$ million) 226
Table 4.7 Foreign direct investment, net inflows (percent of GDP) 227
External Trade
Table 4.8 Merchandise exports 228
Table 4.9 Growth rates of merchandise exports 229
Table 4.10 Merchandise imports 230
Table 4.11 Growth rates of merchandise imports 231
Table 4.12 Trade in goods 232
Table 4.13 Direction of trade: merchandise exports 233
Table 4.14 Direction of trade: merchandise imports 234
International Reserves
Table 4.15 International reserves 235
Table 4.16 Ratio of international reserves to imports 236

Capital Flows
Table 4.17 Official flows from all sources to developing member countries 237
Table 4.18 Net private flows from all sources to developing member countries 238
Table 4.19 Aggregate net resource flows from all sources to developing member countries 239
External Indebtedness
Table 4.20 Total external debt of developing member countries (US$ million) 240
Table 4.21 Total external debt of developing member countries (percent of GNI) 241
Table 4.22 Total external debt of developing member countries (percent of exports of goods, services, and income) 242
Table 4.23 Total debt service paid by developing member countries (US$ million) 243
Table 4.24 Total debt service paid by developing member countries (percent of exports of goods, services, and income) 244

Infrastructure 245
Transport
Table 5.1 Road indicators 248
Table 5.2 Rail indicators 249
Communications and Electrification
Table 5.3 Household electrification rate 250
Table 5.4 Computer and broadband indicators 251
Table 5.5 Expenditures on information and communications technology 252

Government and Governance 253
Government Finance
Table 6.1 Fiscal balance 257
Table 6.2 Tax revenue 258
Table 6.3 Total government revenue 259
Table 6.4 Total government expenditure 260
Table 6.5 Government expenditure on education 261
Table 6.6 Government expenditure on health 262
Table 6.7 Government expenditure on housing and community amenities 263
Governance
Table 6.8 Doing business start-up indicators 264
Table 6.9 Corruption perceptions index 265

Energy and Environment 266
Energy
Table 7.1 GDP per unit of energy use 269
Table 7.2 Energy production 270
Table 7.3 Energy imports, net 271
Environment
Table 7.4 Agriculture land use 272
Table 7.5 Deforestation and pollution 273

Regional Tables—Figures

Figure 1.1 Percentage Distribution of World Population, 2008 141
Figure 1.2 Population Aged 65 Years and Over, 1990 and 2007 142
Figure 1.3 Net Migration Rate, 2000–2005 142
Figure 1.4 Adults Living with HIV, 2007 143
Figure 1.5 Life Expectancy at Birth 144
Figure 2.1 Percentage Distribution of Global GDP at PPP, 2007 167
Figure 2.2 Percentage Distribution of GDP at PPP in the Asia and Pacific Region, 2007 168

Figure 2.3 Per Capita GDP in PPP terms, 2008 168
Figure 2.4 Top Ten Economies in the World in terms of GDP at PPP, 2007 169
Figure 2.5 Real GDP Growth, 2007 and 2008 169
Figure 2.6 Exports of Goods and Services as a percentage of GDP, 2007 and 2008 170
Figure 2.7 Gross Domestic Saving as a Percentage of GDP, Average of Latest Three Years 170
Figure 3.1 Annual Growth in Total Consumer Price Indexes and in the Food Component, 2008 195
Figure 3.2 Domestic Credit Provided by Banking Sector, Average of Latest Three Years 196
Figure 3.3 Yield on Short-Term Treasury Bills, 2000 and 2008 196
Figure 3.4 Total Percentage Change in Currencies in the Asia and Pacific Region, 2000–2008 197
Figure 3.5 Stock Market Price Indexes, 1995–2008 197
Figure 3.6 Price Level Indexes, 2000 and 2008 198
Figure 4.1a Percentage Distribution of Merchandise Exports, 1995 217
Figure 4.1b Percentage Distribution of Merchandise Exports, 2008 217
Figure 4.2a Destination of Merchandise Exports, 2008 218
Figure 4.2b Origin of Merchandise Imports, 2008 218
Figure 4.3 Percentage Share of Selected Parts and Components in Total Exports of Selected Major Exporters in Asia, 1995 and 2007 218
Figure 4.4 Migrant Workers' Remittances, 2006, 2007, and 2008 219
Figure 4.5 Current Account Balance as a Percentage of GDP, Average of Latest Three Years 219
Figure 4.6 Net Inflows of Foreign Direct Investment, 2006, 2007, and 2008 220
Figure 5.1 Percentage Breakdown of Road Networks in Asia and the Pacific, Latest Year 245
Figure 5.2 Percentage Breakdown of Rail Networks in Asia and the Pacific, Latest Year 245
Figure 5.3 Road Density, Latest Year 246
Figure 5.4 Household Electrification Rate, Latest Year 246
Figure 6.1 Government Fiscal Balance as a Percentage of GDP, Average of Latest Three Years 253
Figure 6.2 Tax Revenue as a Percentage of GDP, 1995 and 2008 or Nearest Years 254
Figure 6.3 Government Expenditure on Education as a Percentage of GDP, Average of Latest Three Years 254
Figure 6.4 Government Expenditure on Health as a Percentage of GDP, Average of Latest Three Years 255
Figure 6.5 Number of Days Required to Register a New Business, 2008 255
Figure 7.1 Percentage Breakdown of Energy Production by Region, 2006 266
Figure 7.2 Average Annual Growth in Energy Production, 1995–2006 267
Figure 7.3 GDP per Unit of Energy, 1995 and 2006 267
Figure 7.4 Emissions of Carbon Dioxide, Methane and Nitrous Oxide, 1995, 2000, and 2005 268
Figure 7.5 Average Deforestation Rate, 1990–2000 and 2000–2007 268

Regional Tables—Boxes

Box 1 What are Purchasing Power Parities? 138
Box 1.1 Asia and the Pacific Economies Ranked by the Human Development Index, 2006 143
Box 5.1 Fixed Broadband Internet Subscribers, 2008 or Latest Year 247
Box 6.1 Rank in Perceived Corruption, 2008 256

PART 4 – Definitions

Millennium Development Goals 277
Regional Tables 283

Statistical Partners

The preparation and publication of *Key Indicators for Asia and the Pacific 2009* would not have been possible without the support, assistance, and cooperation of the Asian Development Bank's partners in the regional members and international, private, and nongovernment organizations. These partners, who shared their data, knowledge, expertise, and other information, will provide the Asian Development Bank, policy makers, and other data users a better understanding of the performance of countries around the Asia and Pacific region so that better policies can be formulated to improve the quality of life of people around the region.

REGIONAL MEMBERS

Afghanistan	Central Statistics Office Da Afghanistan Bank
Armenia	Central Bank of Armenia National Statistical Service of the Republic of Armenia
Australia	Australian Bureau of Agricultural and Resource Economics Australian Bureau of Statistics Reserve Bank of Australia
Azerbaijan	National Bank of Azerbaijan State Statistical Committee of the Republic of Azerbaijan
Bangladesh	Bangladesh Bank Bangladesh Bureau of Statistics
Bhutan	Ministry of Finance National Statistics Bureau Royal Monetary Authority of Bhutan
Brunei Darussalam	Department of Statistics Ministry of Finance
Cambodia	Ministry of Economy and Finance National Bank of Cambodia National Institute of Statistics
China, People's Republic of	National Bureau of Statistics People's Bank of China State Administration of Foreign Exchange
Cook Islands	Cook Islands Statistics Office
Fiji Islands	Bureau of Statistics Reserve Bank of Fiji
Georgia	Department of Statistics Ministry of Finance of Georgia National Bank of Georgia

Hong Kong, China	Census and Statistics Department Hong Kong Monetary Authority
India	Central Statistical Organization Ministry of Finance Reserve Bank of India
Indonesia	Bank Indonesia Central Bureau of Statistics (BPS-Statistics Indonesia)
Japan	Bank of Japan Economic and Social Research Institute Ministry of Agriculture, Forestry and Fisheries Ministry of Economy, Trade and Industry Ministry of Finance Statistics Bureau
Kazakhstan	Agency of Statistics of the Republic of Kazakhstan National Bank of Kazakhstan
Kiribati	Kiribati National Statistics Office
Korea, Republic of	Bank of Korea National Statistical Office
Kyrgyz Republic	National Bank of the Kyrgyz Republic National Statistical Committee of the Kyrgyz Republic
Lao People's Democratic Republic	Bank of the Lao PDR Department of Statistics Ministry of Finance
Malaysia	Bank Negara Malaysia Department of Statistics
Maldives	Maldives Monetary Authority Ministry of Finance and Treasury Ministry of Planning and National Development
Marshall Islands, Republic of	Economic Policy, Planning and Statistics Office
Micronesia, Federated States of	Division of Statistics Office of Statistics, Budget and Economic Management, Overseas Development Assistance and Compact Management
Mongolia	Bank of Mongolia National Statistical Office of Mongolia
Myanmar	Central Bank of Myanmar Central Statistical Organization Ministry of National Planning and Economic Development

Nauru	Nauru Bureau of Statistics
Nepal	Central Bureau of Statistics Ministry of Finance Nepal Rastra Bank
New Zealand	Ministry of Economic Development Reserve Bank of New Zealand Statistics New Zealand The Treasury
Pakistan	Federal Bureau of Statistics Ministry of Economic Affairs and Statistics Ministry of Finance State Bank of Pakistan
Palau	Office of Planning and Statistics, Bureau of Budget and Planning
Papua New Guinea	Bank of Papua New Guinea Department of Treasury National Statistical Office
Philippines	Bangko Sentral ng Pilipinas Bureau of the Treasury Department of Energy National Statistical Coordination Board National Statistics Office
Samoa	Central Bank of Samoa Statistical Services Division Treasury Department of Samoa
Singapore	Economic Development Board International Enterprise Singapore Ministry of Finance Ministry of Manpower Monetary Authority of Singapore Singapore Department of Statistics
Solomon Islands	Central Bank of Solomon Islands Statistics Office
Sri Lanka	Central Bank of Statistics Department of Census and Statistics
Taipei,China	Central Bank of China Directorate-General of Budget, Accounting and Statistics Ministry of Education Ministry of Finance

Tajikistan	National Bank of Tajikistan State Committee on Statistics of the Republic of Tajikistan (Goskomstat)
Thailand	Bank of Thailand Ministry of Finance National Economic and Social Development Board National Statistical Office
Timor-Leste	Banking and Payments Authority of Timor-Leste National Statistics Directorate
Tonga	Ministry of Finance National Reserve Bank of Tonga Statistics Department
Turkmenistan	National Institute of State Statistics and Information (Turkmenmillihasabat)
Tuvalu	Central Statistics Division
Uzbekistan	Cabinet of Ministers, Government of Uzbekistan Center for Effective Economic Policy, Ministry of Economy of Uzbekistan Central Bank of Uzbekistan Ministry of Finance State Committee on Statistics
Vanuatu	Ministry of Finance and Economic Management Reserve Bank of Vanuatu Vanuatu National Statistics Office
Viet Nam	General Statistics Office Ministry of Finance State Bank of Viet Nam

INTERNATIONAL, PRIVATE, AND NONGOVERNMENT ORGANIZATIONS

CEIC Data Company Ltd.
Energy Information Administration
European Bank for Reconstruction and Development
Food and Agriculture Organization
German Agency for Technical Cooperation
International Energy Agency
International Labour Organization
International Monetary Fund
International Telecommunication Union
Organisation for Economic Co-operation and Development
Secretariat of the Pacific Community
Transparency International
United Nations Children's Fund
United Nations Development Programme
United Nations Economic and Social Commission for Asia and the Pacific
United Nations Economic Commission for Europe
United Nations Educational, Scientific and Cultural Organization
United Nations Industrial Development Organization
United Nations Population Division
United Nations Statistics Division
United States Department of Energy
World Bank
World Health Organization
World Resources Institute

Guide for Users

The *Key Indicators for Asia and the Pacific* has the following structure. Part I contains a special chapter that varies every year and deals with a special topic on policy issues, measurement issues, or development challenges. This year's special chapter is on fostering dynamism in small and medium-sized enterprises.

Part II comprises the indicators for the Millennium Development Goals (MDGs). The indicators are presented according to the United Nations revised MDG framework, which was expanded in January 2008 to include new targets for full and productive employment and decent work for all, access to reproductive health, access to treatment for HIV/AIDS, and protection of biodiversity, as agreed by member states at the 2005 World Summit. This year's *Key Indicators 2009* includes as many of the indicators for the new targets as possible. Tables in Part II represent an MDG target and contain indicators associated with that target.

Part III consists of 107 regional tables, which are not part of the MDG framework. To help readers identify the indicators more easily, the regional tables are grouped into seven themes: People; Economy and Output; Money, Finance, and Prices; Globalization; Infrastructure; Government and Governance; and Energy and Environment. Each theme is further divided into subtopics. Accompanying tables in Part III contain indicators related to a subtopic.

The MDGs and themes in Parts II and III start with a short commentary with charts and boxes describing progress made by countries toward selected targets and key trends of selected indicators. Accompanying statistical tables are disaggregated into developing and developed member countries of the Asian Development Bank (ADB). The developing member countries are further divided into country groups aligned with those of ADB's regional departments.

Finally, Part IV defines the indicators in the MDGs and regional tables. The publication also has a CD-ROM containing Parts I, II, III, and IV, plus individual country tables for the 48 regional members of ADB. The four parts and country tables are also available on ADB's website at www.adb.org/Documents/Books/Key_Indicators/2009/default.asp.

Data for the MDG indicators, regional tables, and country tables are mainly obtained from two sources: ADB's statistical partners in regional members, and international statistical agencies. Data obtained from the regional members are comparable to the extent that the regional members follow standard statistical concepts, definitions, and estimation methods recommended by the United Nations and other applicable international agencies. Nevertheless, regional members invariably develop and use their own concepts, definitions, and estimation methodologies to suit their individual circumstances; and these may not necessarily comply with the recommended international standards. Thus, even though attempts are made to present the data in a comparable and uniform format, they are subject to variations in the statistical methods used by regional members, such that full comparability of data may not be possible. These variations are reflected in the footnotes of the statistical tables.

General Guidelines

The data cut-off date for this issue is **July 2009**.

Twenty-five regional members have varying fiscal years not corresponding to the calendar year. Whenever the statistical series (for example, national accounts or government finance) are compiled on a fiscal year basis, these are presented under single year captions corresponding to the period in which most of the fiscal year falls, as follows:

Regional Members	Fiscal Year	Year Caption
Afghanistan	21 March 2008–20 March 2009	2008
Cook Islands (before 1990)	1 April 1990–31 March 1991	1990
Cook Islands (after 1990)	1 July 2007–30 June 2008	2008
Brunei Darussalam (after 2002) Hong Kong, China India Japan Myanmar New Zealand Singapore	1 April 2008–31 March 2009	2008
Indonesia (until 1999)	1 April 1999–31 March 2000	1999
Australia Bangladesh Bhutan Nauru Pakistan Samoa Timor-Leste Tonga	1 July 2007–30 June 2008	2008
Taipei,China (until 1999)	1 July 1999–30 June 2000	2000
Nepal	16 July 2007–15 July 2008	2008
Lao People's Democratic Republic (after 1992) Marshall Islands, Republic of the Micronesia, Federated States of Palau Thailand	1 October 2007–30 September 2008	2008

Key Symbols

...	Data not available at cut-off date
–	Magnitude equals zero
0 or 0.0	Magnitude is less than half of unit employed
*	Provisional/preliminary/estimate/budget figure
I	Marks break in series
>	Greater than
<	Less than
≥	Greater than or equal to
≤	Less than or equal to
na	Not applicable

Measurement Units

kg	kilogram
km	kilometer
kWh	kilowatt-hour
kt	kiloton

Abbreviations and Acronyms

ADB	Asian Development Bank
AIDS	acquired immunodeficiency syndrome
ADO	Asian Development Outlook
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ASI	Annual Survey of Industries
BOI	Board of Investment
BOP	balance of payments
BOD	biochemical oxygen demand
BPNG	Bank of Papua New Guinea
BPS	Badan Pusat Statistik
BSID	Bureau of Supporting Industries Development
CEIC	CEIC Data Company Ltd
CFC	chlorofluorocarbon
cif	cost, insurance, and freight
CO_2	carbon dioxide
CPI	consumer price index
DAC	Development Assistance Committee
DMC	developing member country
DOTS	Directly Observed Treatment Short Course
DTI	Department of Trade and Industry
fob	free on board
FAO	Food and Agriculture Organization
FDI	foreign direct investment
GCF	gross capital formation
GDP	gross domestic product
GNI	gross national income
HDI	human development index

HIV	human immunodeficiency virus
IADB	Inter-American Development Bank
ICP	International Comparison Program
ILO	International Labour Organization
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
IT	information technology
ITU	International Telecommunication Union
KCGF	Korea Credit Guarantee Fund
KOTEC	Korea Technology Credit Guarantee Fund
Lao PDR	Lao People's Democratic Republic
LCU	local currency unit
LE	large enterprise
LFS	Labor Force Survey
MDG	Millennium Development Goal
MMF	money market fund
NCEUS	National Commission for Enterprises in the Unorganized Sector
NIE	newly industrialized economy
NMCC	National Manufacturing Competitiveness Council
NSO	National Statistics Office
NSSO	National Sample Survey Organization
OECD	Organisation for Economic Co-operation and Development
ODP	ozone-depleting potential
PLI	price level index
PPP	purchasing power parity
PRC	People's Republic of China
R&D	research and development
RBF	Reserve Bank of Fiji
RBI	Reserve Bank of India
Rs	Indian Rupees
SDR	Special Drawing Rights
SITC	Standard International Trade Classification
SME	small and medium-sized enterprise
SMFI	small and medium-sized financial institution
SMIDEC	Small and Medium Industries Development Corporation
SNA	System of National Accounts
TB	tuberculosis
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
US	United States
USD	United States Dollar
WBES	World Bank Enterprise Survey
WHO	World Health Organization

Unless otherwise indicated, "$" refers to United States dollars.

Highlights of KI 2009

The *Key Indicators for Asia and the Pacific 2009* is the flagship annual statistical data book of the Asian Development Bank (ADB). It presents the latest available economic, financial, social, environmental, and Millennium Development Goal (MDG) indicators for regional members of ADB. Data are grouped under MDG and Regional Tables. Nontechnical explanations and brief analyses of the MDG achievements and economic, financial, social, and environmental developments are included. The regional tables are largely based on a comprehensive set of country tables. The country tables are not available in printed form but are available in CD-ROM and through ADB's website at www.adb.org/Documents/Books/Key_Indicators/2009/Country.asp. The special chapter in *Key Indicators 2009*, "Enterprises in Asia: Fostering Dynamism in SMEs" looks at the actual and expected impacts of the current global economic crisis on small and medium-sized enterprises and discusses how to foster greater dynamism in small and medium-sized enterprises once the crisis has played out.

PART 1: Special Chapter

Enterprises in Asia: Fostering Dynamism in SMEs

The Special Chapter assesses the actual and expected impacts of the current global economic crisis on workers and enterprises in Asia, including small and medium-sized ones. It also discusses how to foster greater dynamism in small and medium-sized enterprises (SMEs) once the crisis is over. Noting that weak access to finance, new technologies, and markets operate as important constraints to the growth and diversification of smaller enterprises in the region, a variety of policy options for assisting SMEs are considered.

The Global Economic Crisis and Asian Enterprises

- Asian enterprises have been hit hard by the global economic crisis. Many of the region's most dynamic and export-oriented enterprises have been forced to scale back operations, cutting production and laying off workers.

- The manufacturing sector has been hit hard. In seven out of eight East and Southeast Asian countries tracked, manufacturing employment has declined by about 2% to 7% between the first quarters of 2008 and 2009.

- As aggregate demand has weakened, more enterprises and workers have been affected, including those engaged in non-manufacturing activities such as construction and wholesale and retail trade services.

- SMEs, defined as enterprises having less than 200 workers, tend to be more domestically oriented than large enterprises and are therefore more likely to be hit by the decline in aggregate demand than be directly affected through the export channel. Nevertheless, many SMEs do play an important role in exporting in some economies and industries. They also play an important role in the global production value chain, so that even when they do not export directly, their products can be important inputs into larger enterprises that are exporting.

- Governments have taken steps to support economies through fiscal stimulus and the easing of monetary policies. Some have directly assisted enterprises through credit guarantee, subsidized loans, and fiscal incentives, among other programs. While these steps will help—indeed there are signs that fiscal stimulus and easing monetary policies are already helping—the crisis provides an opportunity to think hard about how to foster dynamism among SMEs.

- In view of the weak outlook for the major global economies, demand for Asia's exports is likely to recover only gradually. Furthermore, there will be less tolerance for wide current account deficits in the United States and elsewhere. Asian economies are therefore unlikely to be able to export their way out of this slump, as they did after the 1997/1998 Asian financial crisis. Consequently, some economies need to accelerate the *rebalancing* of economic growth toward domestic sources.

- The emergence of a large and rapidly growing urban middle class in the region is key to increasing domestic demand. The expansion of the middle class will hinge on the dynamism of Asian enterprises, especially SMEs. This is because most Asian workers depend on SMEs for their livelihoods. In manufacturing, for example, the share of employment in SMEs ranges from about 50% to as high as 90%. The corresponding shares outside manufacturing are even greater.

- Given the important role of SMEs in employing Asian workers, steps to eliminate the constraints to growth on SMEs, and spur their adoption of productivity-enhancing modern technologies will lift domestic demand by not only providing well-paid jobs but also by increasing the supply of goods and services required by domestic markets.

Making SMEs More Dynamic in the Longer Term

In designing policies to foster dynamism among SMEs, policy making needs to recognize the following features of the different types of enterprises that exist in the region:

  - First, it is useful to distinguish between microenterprises (those with less than five workers and typically operating in the informal sector) and other small enterprises (those with between 5 and less than 50 workers). While microenterprises account for 30% or more of non-agricultural employment in a majority of countries in the region, especially lower-income ones, their potential for expansion may be fairly limited. In particular, they are unlikely to be generators of good jobs and "engines of growth". In manufacturing, for example, labor productivity, an important determinant of earnings and wages in microenterprises, is found to be only about a third of that in small enterprises.

  - Second, larger SMEs and large enterprises hold more promise in terms of generating good jobs and driving growth. As found in other regions of the world, average wages tend to increase with enterprise size. In addition, larger enterprises tend to have an advantage in developing and adopting new technologies and breaking into new markets.

  - Third, this is not to suggest that policy should promote large enterprises at the expense of smaller enterprises. Comparisons of wages and labor productivity across countries reveal that small enterprises can be extremely productive. Indeed, wages and productivity of small enterprises in advanced developing Asian economies, such as the Republic of Korea and Taipei,China, are many multiples of those found in their counterparts elsewhere in the region.

  - Fourth, as found in industrialized countries, small enterprises, especially *new* ones, play an important role in fostering dynamic efficiencies. Unlike larger enterprises, they can be particularly flexible in trying innovative but untested technologies.

- Major factors that constrain the growth of smaller enterprises are weak access to finance, new technologies, and dynamic markets. Weakness in infrastructure (particularly transportation and electricity supply) and government regulations also restrict growth of firms. Most damaging are policies that weaken the incentives for small enterprises to grow, such as reserving production of certain products for small enterprises.

- Government programs to assist smaller enterprises access finance through directed credit programs and through state-owned banks have been generally unsuccessful. Better results could be achieved by governments working with commercial forces to correct market failures.

- One of the most important roles for governments is to improve the institutional underpinnings of financial transactions by strengthening creditor rights, defining property rights so property can be used as collateral for credit, and enhancing credit registries and systems to screen borrowers. In addition, governments have an important role to play in improving the informational infrastructure that underlies the working of financial markets.

- If smaller firms are to raise their levels of productivity and employment, they must innovate, which includes adopting new technology and diversifying into new markets. Survey data reveal that compared to large firms, the majority of which are found to develop new product lines, only between a quarter and a third of SMEs do so. Governments can assist firms by providing information services on technology and markets, vocational training, and technical support services, and by fostering linkages between SMEs and large enterprises. Governments also can encourage cluster-based development, where enterprises that make and sell related or complementary products are grouped in close proximity, often with their suppliers, buyers, and government support facilities. These clusters facilitate innovation, among other benefits.

- A key challenge for public policy is to understand, within individual country contexts, which specific factors constrain the growth of SMEs and their diversification from traditional low productivity activities to modern, higher productivity activities, and how to design and implement interventions that are truly effective.

- The private sector and government must work together to identify obstacles to restructuring and determine the policy interventions that would best remove them. Some important elements of design include providing incentives only for activities that are new to enterprises in a given country, adopting clear benchmarks for judging success and failure, and building in systems to evaluate the effectiveness of the programs. Sunset clauses should be included so the support programs do not become permanent.

- More broadly, governments and donor agencies must rigorously monitor existing and new initiatives to assist firms.

- Adopting an experimental mindset toward policies, combined with a commitment to rigorous evaluation, would greatly help in finding policies and programs to encourage the growth of firms and their diversification into new product lines and markets.

PART 2: Millennium Development Goals

- **MDG 1: Eradicate Extreme Poverty and Hunger**
  Extreme poverty and hunger affects at least 10% of the population in many countries in the Asia and Pacific region. Children are often underweight and economic growth is insufficient to provide full and productive employment and decent work for all.

- **MDG 2: Achieve Universal Primary Education**
  Substantial progress has been made toward achieving universal primary education and basic reading and writing skills. But in economies with lower literacy rates, there are clear gender disparities—women are still more likely to be illiterate than men.

- **MDG 3: Promote Gender Equality and Empower Women**
  Male-female equality in primary school enrollment has now been achieved in most economies in the region and good progress has been made at the secondary level, but fewer countries have achieved gender equality in tertiary education. When women do enroll in school, they tend to study longer than men.

- **MDG 4: Reduce Child Mortality**
  Once a child has survived the first year of life, the chances of reaching the age of five are very good. Early immunization against diseases such as measles can be particularly effective in reducing infant mortality, in conjunction with post-natal care and advice for mothers.

- **MDG 5: Improve Maternal Health**
  There is still a high level of maternal mortality in many countries in the region, but deaths in childbirth are likely to fall when a trained health worker is present during the birth. Adolescent births show that in many countries, young women are still poorly advised about reproductive health care.

- **MDG 6: Combat HIV/AIDS, Malaria, and other Diseases**
  The prevalence of tuberculosis has been reduced in most economies. Many adults still live with HIV. The incidence of HIV is heavily concentrated in six economies and in most cases those in need of them do not currently have the necessary access to antiretroviral drugs.

- **MDG 7: Ensure Environmental Sustainability**
  Deforestation and rising per capita emissions of carbon dioxide continue to pose a threat to environmental sustainability. Although emissions by the five most populous economies in the Asia and Pacific region are still low compared to those in the industrialized countries, rising living standards will inevitably increase global emissions with serious consequences for climate change unless this is offset by reductions in developed countries.

- **MDG 8: Develop a Global Partnership for Development**
  While the burden of debt has been falling for most countries in the region since 2000, less progress has been made in spreading the benefits of new technologies more widely. The digital divide still means that 50% or more of the population in eight economies have internet access, while the rate is less than 20% in the majority of countries.

PART 3: Region at a Glance

- **People**
  Life expectancy has been rising. There has been significant progress in some of the poorest countries, which started from a low life expectancy in 1990. Population aging is now emerging as a problem in several countries in the region. With a smaller number of workers supporting a growing number of retirees, health and welfare infrastructure in these countries are coming under increased pressure.

- **Economy and Output**
  The Asia and Pacific region now accounts for almost one third of global gross domestic product. Eight countries in the region have per capita GDP of $25,000 or more although most countries in the region are much poorer, with per capita income below $6,000. As a result of the global financial crisis, GDP growth rates in 2008 were significantly lower than those in 2007, but they continue to be substantially above the growth rates of Europe and North America.

- **Money, Finance, and Prices**
  In common with other parts of the world, consumer price inflation rose throughout the region in 2008 largely due to rising world prices for food, energy, and raw materials. In general, price levels are higher in richer economies than in poorer ones but differences in price levels between countries have generally been falling since 2000.

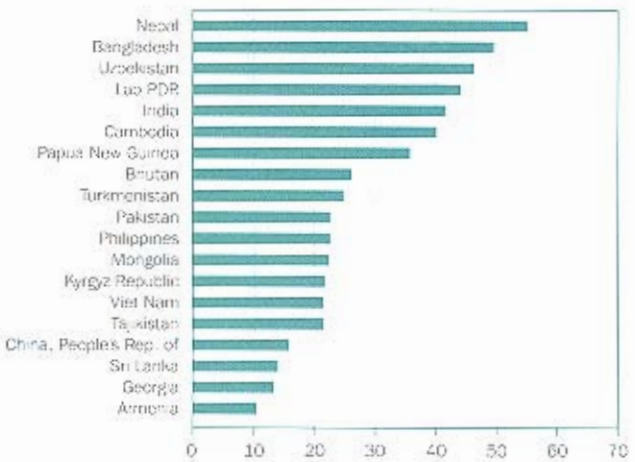
- **Globalization**
  Direct trade between Asia and Europe, and Asia and North and Central America is much smaller than intra-Asian trade. However, because much of intra-Asian trade consists of trade in parts and components, which are ultimately embedded in final products exported to the rest of the world, Asia is still coupled to the developed world. Migrant workers' remittances, which are an important source of income for many Asian economies, rose in 2008 but may fall as a result of the global downturn.

- **Infrastructure**
  Increasing the number of households with access to electricity is a prerequisite for extending the benefits of modern information and communications technology. There has been some progress in household electrification in recent years but fixed broadband internet subscribers in the Asia and Pacific region are still few.

- **Government and Governance**
  In more than half of the economies in the region, governments run budget deficits and tax burdens are tending to grow, which can discourage entrepreneurship and risk-taking. The number of days it takes to register a new business, which is an indicator for the ease of doing business, varies significantly across Asia and the Pacific—ranging from 1 day to more than 100 days.

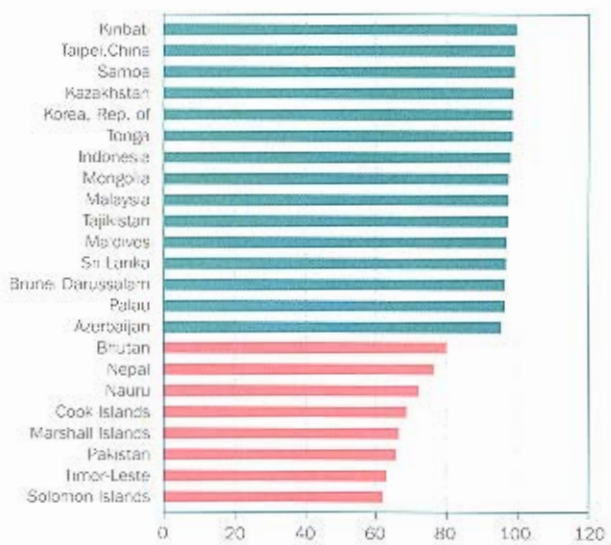
- **Energy and Environment**
  Economies use energy more or less efficiently and have different energy requirements due to differences in their economic structures, but since 1995, most Asian economies have recorded increases in energy productivity. The growth in greenhouse gas emissions, however, continues to be worrying.

Figure H1 **Economies where More than 10% of the Population Live on Less than $1.25 a Day, Latest Year**



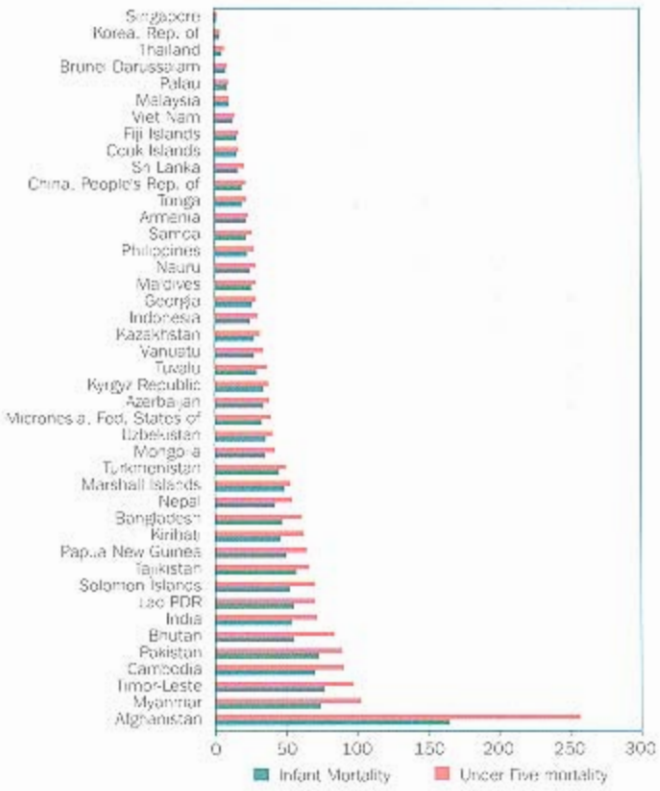
Many people in the region live in countries where extreme poverty affects at least 10% of the population.

Figure H2 **Total Net Enrollment Ratio in Primary Education, 2007 or Latest Year**



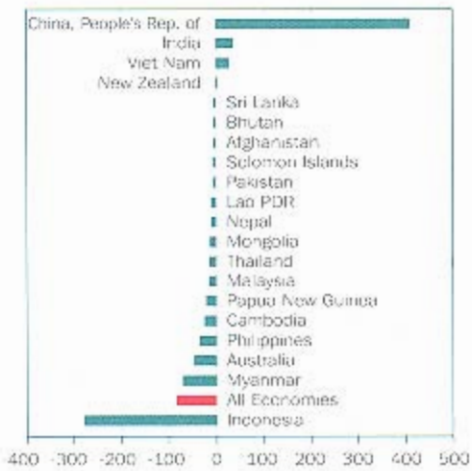
Fifteen countries have achieved primary education enrollment ratios of at least 95%; the ratios remain below 80% in eight countries.

Figure H3 **Under-Five Mortality and Infant Mortality Rates, 2007 (per 1,000 live births)**



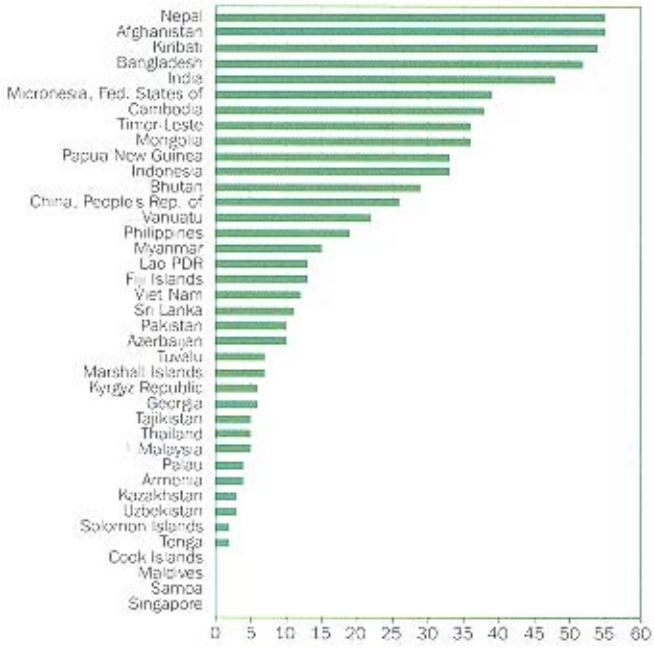
The first year of life is especially hazardous, with mortality rates high in many countries. However, if a child survives the first year, the chances of reaching the age of five are very good.

Figure H4 **Change in Forest Area between 1990 and 2005 (thousand square kilometers)**



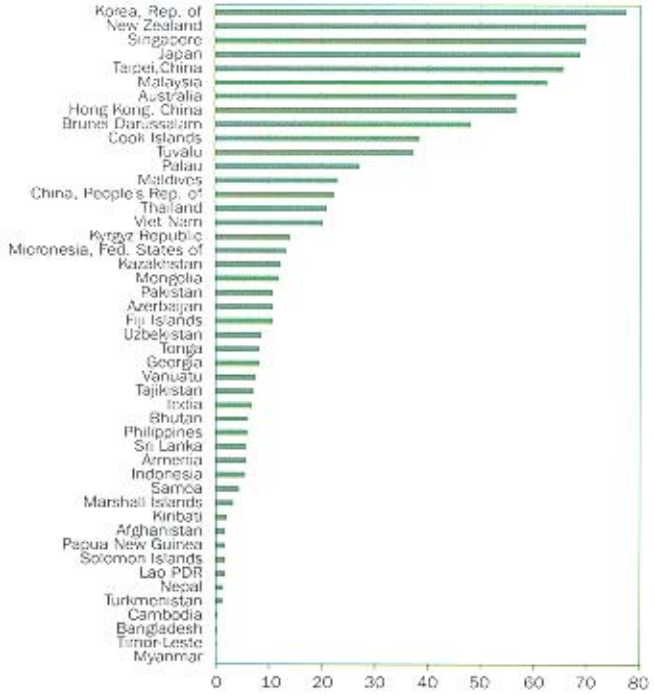
Four countries reported increases in forest area, with the PRC making significant gains in forest regeneration. However, sustainable use of forest resources is still a distant prospect for many countries.

Figure H5 **Proportion of Urban Households without Access to Improved Sanitation, 2006 or Latest Year (percent)**



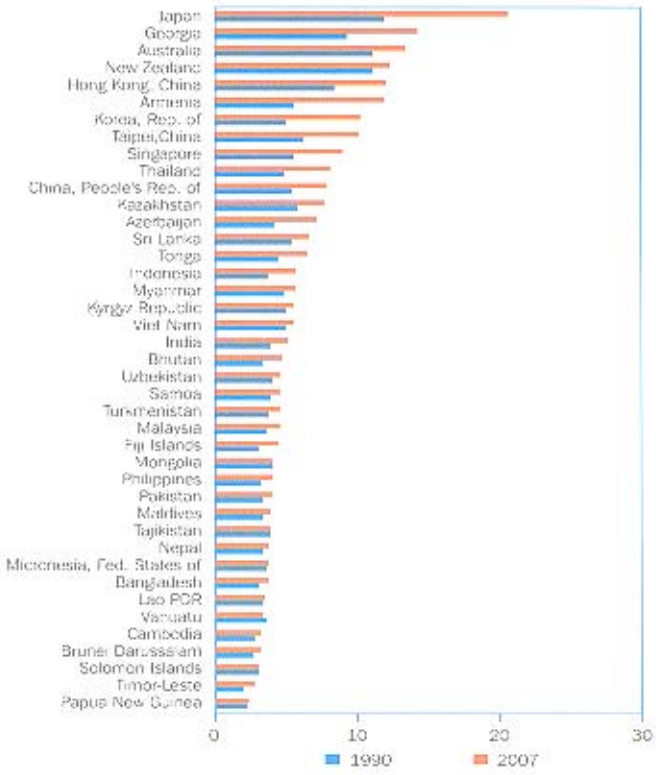
More than a quarter of urban households in 13 countries do not have access to improved sanitation.

Figure H6 **Internet Users, 2008 or Latest Year (per 100 population)**



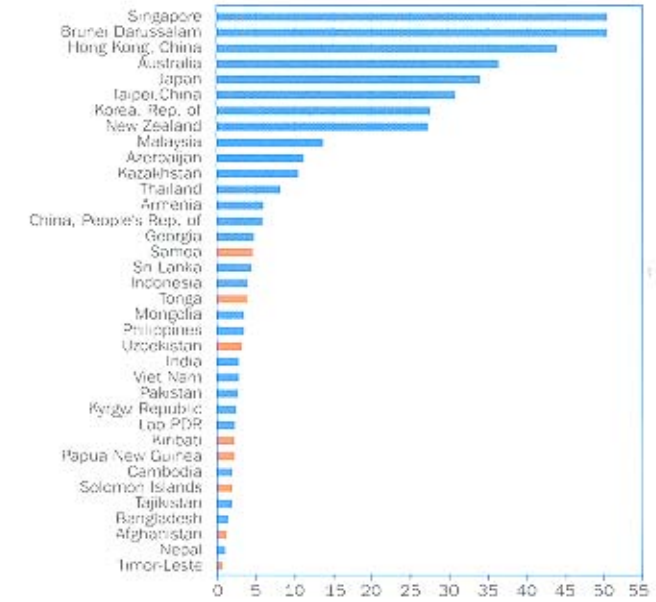
The "digital divide", as measured by internet access, is still wide. In eight economies, 50% or more of the population have internet access, but access is less than 20% in the majority of economies.

Figure H7 **Population Aged 65 Years and Over, 1990 and 2007 (percent of total population)**



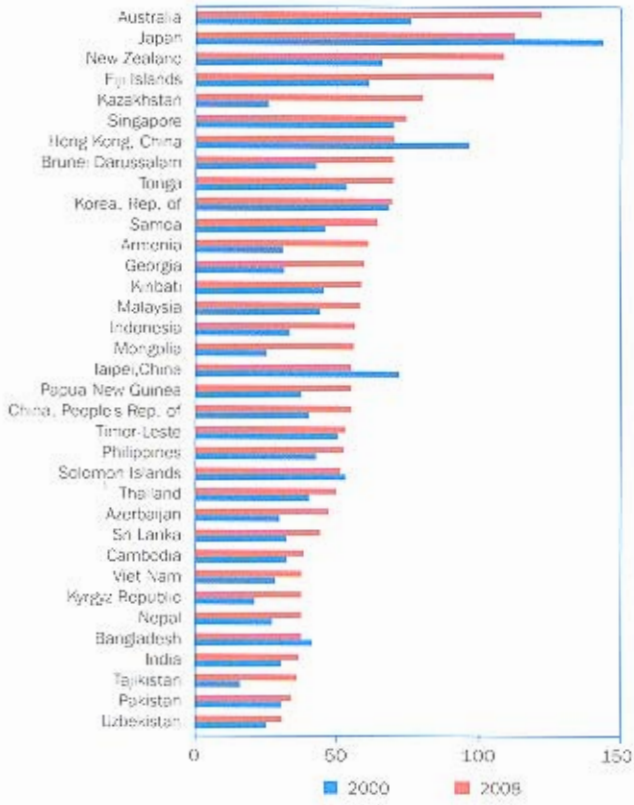
Population aging is becoming a problem in several countries, with the proportion of population aged 65 years and over rising above 10%.

Figure H8 **Per Capita GDP in PPP terms, 2008 (thousand, current international dollars)**



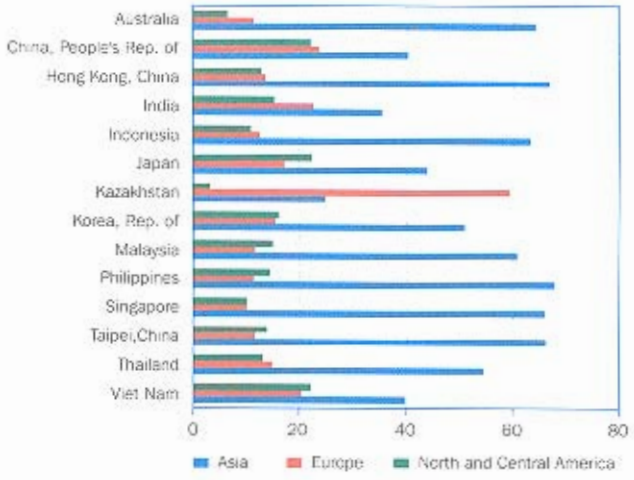
Using Purchasing Power Parities (PPPs) instead of exchange rates to compare per capita income, Singapore ranks highest in the region, its population earning on average 62 times more than the lowest-ranked country, Timor-Leste.

Figure H9 **Price Level Indexes, 2000 and 2008 (United States = 100)**



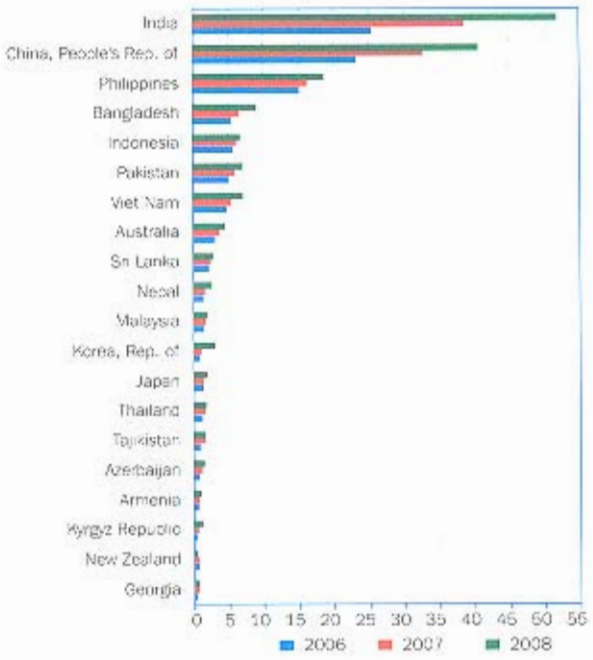
In 2000, the price level in Japan was about 44% higher than that in the US, but by 2008, it was only about 13% higher.

Figure H10 **Destination of Merchandise Exports, 2008 (percent)**



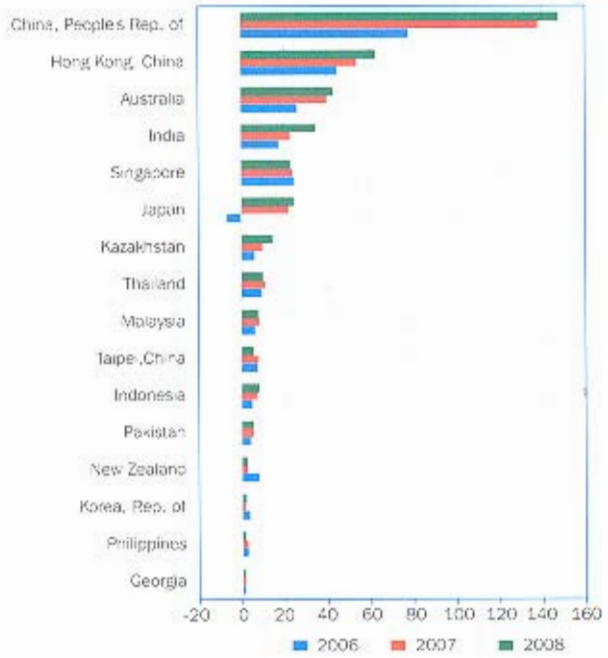
Asian economies are now by far the biggest export markets for Asian exports. Much of the trade within Asia consists of trade in parts and components that are incorporated into finished goods destined for markets in Europe and the US.

Figure H11 **Migrant Workers' Remittances, 2006, 2007, and 2008 (US$ billion)**



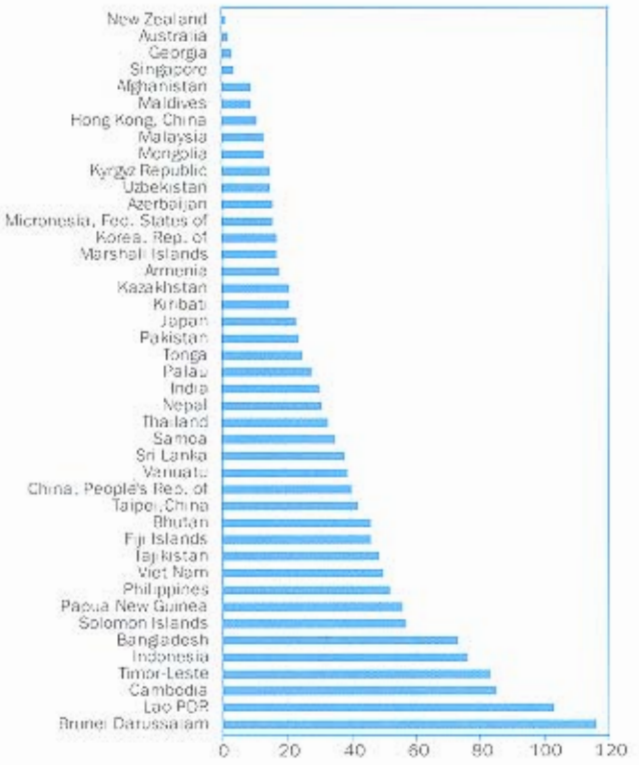
Migrant workers' remittances remain a vital source of income for many countries, increasing more than sixfold since the mid-1990s.

Figure H12 **Net Inflows of Foreign Direct Investment, 2006, 2007 and 2008 (US$ billion)**



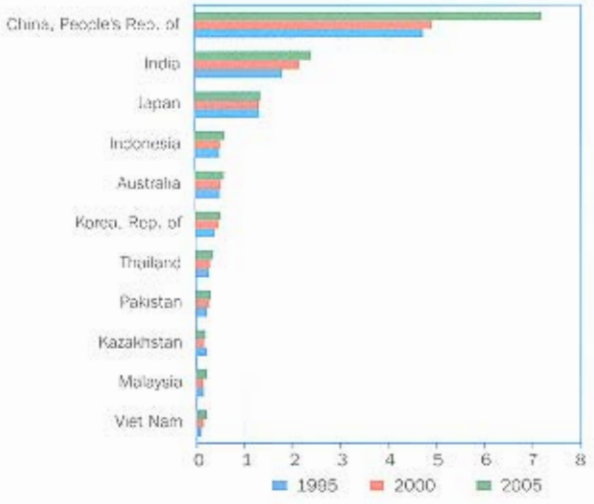
A number of economies experienced a fall in net inflows of FDI in 2008. Total net inflows of FDI for 16 economies increased by only 9.5% in 2008 compared to 51% in 2007.

Figure H13 **Number of Days Required to Register a New Business, 2008**



The time taken to register a new business varies enormously within the region. Lengthy registration procedures are a disincentive for foreign and domestic investors alike.

Figure H14 **Emissions of Carbon Dioxide, Methane and Nitrous Oxide, 1995, 2000, and 2005 (billion metric tons of CO_2 equivalent)**



Emission of greenhouse gases from the PRC grew much faster since 2000, while many countries have stabilized emissions or have at least slowed the rate of increase.

PART I

SPECIAL CHAPTER

Enterprises in Asia: Fostering Dynamism in SMEs



1. Introduction

Asian enterprises have been hit hard by the global economic crisis. While the initial impact has fallen heavily on firms dependent on exports, the effects of the crisis have begun to spread into such non-manufacturing activities as construction and retail trade as aggregate demand has weakened.

Yet, in view of the weak outlook for the major global economies, demand for Asia's exports is likely to recover only gradually, and there will be less tolerance for wide current account deficits in the United States and elsewhere. Asian economies are therefore unlikely to be able to export their way out of this slump, as they did after the 1997/98 Asian financial crisis. Some countries as a result need to accelerate the *rebalancing* of economic growth toward domestic sources, a process in which the region's small and medium-sized enterprises (SMEs) can play a crucial role.

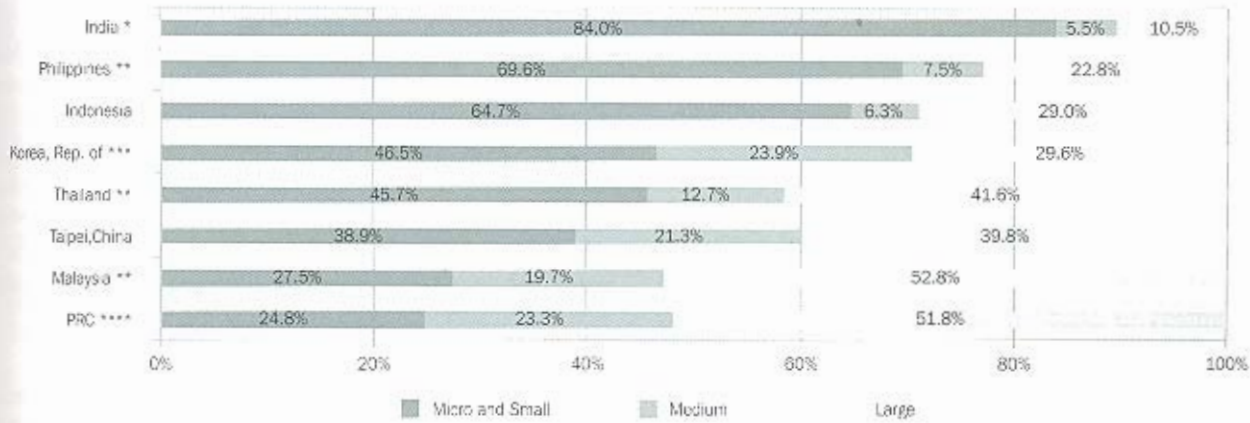
A large share of Asian workers—clear majorities in many countries—are employed in SMEs, especially when these include microenterprises (see, for example, Figure 1.1 for the case of manufacturing in selected economies). Thus their productivity, the earnings they generate, and the wages they pay matter crucially for general living standards. Steps to spur their adoption of productivity enhancing technologies and diversification into modern production activities will be important in lifting domestic demand by providing well-paid employment. In this way, the crisis provides an opportunity to think hard about fostering dynamism among SMEs.

This chapter first presents evidence from a variety of sources to describe the actual and expected impact of the still-unfolding crisis on enterprises and workers. In particular, it examines the impact of the crisis as it has unfolded through the trade channel. It is admittedly too early to rigorously describe the impact—analysis based on micro-data from large-scale enterprise and labor force surveys before and after the crisis broke will probably take at least another year if not longer. But it is possible to use recent industry-level data on exports and micro-data from enterprise surveys and labor force surveys carried out before the crisis to infer the probable impacts on different types of enterprises and workers.

Later sections then take a longer-term view and describe the nature of enterprises in Asia and how public policy can improve enterprise performance, especially of SMEs. The analysis reveals several important features of Asian SMEs that will help better design policy and achieve the above goals.

It is important, for example, to distinguish microenterprises from SMEs. Employing five or fewer workers, typically operating in the informal economy, and accounting for as much as 30% or more of nonagricultural employment in many countries in the region, microenterprises may have limited potential in generating good jobs and serving as engines of growth. This is not to suggest that policy should neglect micro-entrepreneurs. Assisting microenterprises can be an important way to alleviate poverty, and some micro-entrepreneurs have considerable potential to expand their businesses and should be helped in doing so.

Figure 1.1 **Share of Manufacturing Employment by Enterprise Size-Groups (%)**



Notes: Micro and Small: 1–49 workers in all countries except Thailand (1–50 workers); Medium: 50–199 in all countries except Thailand (51–200 workers); Large: 200 or more workers in all countries except Thailand (more than 200 workers).
* India's manufacturing employment includes workers in own-account manufacturing enterprises (OAME).
** Includes imputation for the self-employed based on differentials between labor force survey and enterprise survey/census data.
*** Data on Korean microenterprises are not available.
**** Adds the 5.9 million self-employed described in Box 3.1.
PRC = People's Republic of China.
Source: Authors' estimates. See Box 3.1 for details.

Nevertheless, the big gains in growth and jobs are likely to come from understanding how public policy can help SMEs become more productive. In particular, while the data examined in this chapter indicate that, on average, wages and labor productivity tend to rise as enterprises get bigger, this does not mean that policy should bypass smaller enterprises in favor of encouraging large enterprises. The policy challenge is instead to understand whether something is holding back SMEs and what to do about it.

SMEs often operate under difficult circumstances. They are especially disadvantaged when it comes to access to finance, and often feel the brunt of weak infrastructure. Faced with erratic power supply they are less likely to be able to purchase their own generators. In a similar way, poorly designed regulations and policies can constrain SMEs by diminishing their incentives and/or ability to grow. Finally, market failures due to learning externalities and missing markets can impinge strongly on the adoption of new technologies by smaller firms.

Under the right conditions, SMEs can be quite productive. The average small enterprise in the Republic of Korea (Korea) and Taipei,China, for example, is far more productive than the average large enterprise in India or Indonesia. Additionally, within countries, small enterprises linked to large enterprises through subcontracting networks or to dynamic and profitable markets—such as through global production and distribution networks—can be productive and pay well relative to other small enterprises. Smaller enterprises can also be particularly flexible in trying untested technologies and in developed countries have been found to be important in fostering dynamic efficiencies within industries.

How then should public policy assist SMEs? This chapter notes that while country context will often determine the specific factors that constrain SME dynamism, and thus the nature of public assistance, two issues which require special attention virtually everywhere are (i) improving SME access to finance; and (ii) helping SMEs adopt new technologies and access new markets.

On the first point, recent international experience suggests that one of the most important ways governments can increase access to finance is to improve the institutional underpinnings of financial transactions by strengthening creditor rights, defining property rights so property can be used as collateral for credit, and enhancing credit registries and systems to screen borrowers. They can also improve the informational infrastructure that underlies the working of financial markets.

To help firms adopt technologies and enter new markets, meanwhile, government can provide information on improved production methods, products, and markets, technical support services, and vocational training. They can also foster links between SMEs and large enterprises and encourage cluster-based development by exploiting the fact that many enterprises that make and sell related or complementary products are grouped in close proximity, often with their suppliers and buyers.

More generally, recent experience suggests that discovering the obstacles to growth and diversification, as well as determining the policy interventions that would best remove them requires a close collaboration between the private sector and government. Moreover, in view of the uncertainties associated with the ultimate efficacy of a given intervention, adopting more of an experimental mindset toward policies—combined with rigorous evaluation—can help find policies and programs to encourage the growth and dynamism of Asia's enterprises.

The remainder of this chapter is organized as follows. After looking at the affect of the global economic crisis on Asia's enterprises in the next section, Section 3 examines the types of enterprises in which developing Asia's workers are employed with, the discussion organized around the size structure of enterprises.[1] The data indicate that a large share of nonagricultural employment in many developing Asian economies takes place in the context of small enterprises operating with low productivity and generating relatively low incomes for their owners and workers (even when we exclude microenterprises). For purposes of public policy, two related questions are particularly relevant. First, is something keeping small enterprises from becoming larger? Second, how can smaller enterprises become more productive? Section 4 sheds light on these two questions by describing the factors that may explain enterprise size and its distribution. Section 5 then provides a short introduction to public assistance provided to SMEs, leading into the discussion in Sections 6 and 7 of access to finance, and technology and innovation related issues. Section 8 presents a general discussion of recent debates on industrial policy issues, motivated by recent work on structural transformation—that is, the process by which countries and enterprises move from the production of traditional goods and services to more diverse and modern goods and services. Section 9 concludes.

1 The terms enterprise, firm, and establishment are sometimes used interchangeably in this chapter, although, strictly speaking, they are distinct concepts. An establishment is a single physical location at which business is conducted or where services or industrial operations are performed. An enterprise or firm is a business organization consisting of one or more domestic establishments under common ownership or control. For companies with only one establishment, the enterprise and the establishment are the same.

2. The Global Economic Crisis and Enterprises in Asia

While there are several excellent recent discussions of the global economic crisis, most cover its macroeconomic aspects. In this section we investigate the impact, actual and expected, of the global crisis on Asian workers and enterprises as it works through the trade channel. We begin by examining the channels through which the crisis is affecting Asian firms and workers. We then review recent labor force data from national statistics offices in the region, and address the following questions: which industrial sectors have seen the steepest declines in exports? Given available data on enterprises what can we say about the types of enterprises likely to be hardest hit? In particular, how is the crisis affecting SMEs? We next discuss how governments are helping enterprises cope, especially SMEs. We conclude this part of the chapter by discussing longer-term issues, including the importance of fostering dynamism in SMEs, within the context of the crisis, and in its aftermath.

For the analysis in this section we draw upon various sources of information, including industrial statistics, individual-level labor force surveys, and enterprise level surveys.[2] Given the diversity of the sources, not all the countries are covered by each dataset, as shown in Table 2.1 below. We supplement these data with labor force statistics updates and information on the size distribution of enterprises from various official statistics agencies.

Table 2.1 **Key Data Sources**

	Exports Data* (monthly)	UNIDO Data	Labor Force Surveys (micro data)	World Bank Enterprise Survey (WBES)
PRC	√	√		√
Hong Kong, China	√	√		
India	√	√	√	√
Indonesia	√	√	√	√
Korea, Republic of	√	√		√
Malaysia	√	√		
Philippines	√	√	√	√
Singapore	√	√		
Taipei,China	√			
Thailand	√		√	√
Viet Nam	√	√		√

* Export data are monthly and are obtained through the CEIC Data Company Ltd
PRC = People's Republic of China; UNIDO = United Nations Industrial Development Organization; WBES = World Bank Enterprise Survey.

2 Various agencies have done rapid assessment surveys, especially the International Labour Organization (ILO). Additionally, more in-depth survey work is ongoing and being planned. For example ADB and ILO are collaborating on a study that will assess the impact of the crisis on workers in several countries, including the electronics sector in the Philippines, furniture production in the People's Republic of China, the garment sector in Cambodia, and car accessory production in Thailand.

2.1 Impact Channels of the Current Crisis on Firms

The global economic crisis is affecting developing Asia's firms through a number of channels. For its most export-oriented economies, the contraction in international trade has been the most important, driving a severe contraction of demand for Asian exports that began in the last quarter of 2008 (see Figure 2.1).[3] This has led to a corresponding decline in industrial production in many countries (see Figure 2.2).

It is certainly not only export-oriented manufacturers that have been hurt. For example, in countries with large tourism sectors, the economic contraction in the industrialized world can be expected to hurt enterprises engaged in travel and tourism (see Figure 2.3). Similarly, demand, or growth in demand of other services exports has declined. For example, in India, annual growth rates of sales of information technology (IT) services, outsourcing, and software exports for the year ending March 2009 fell to almost half of the double-digit growth rates of the preceding five years (see Figure 2.4).

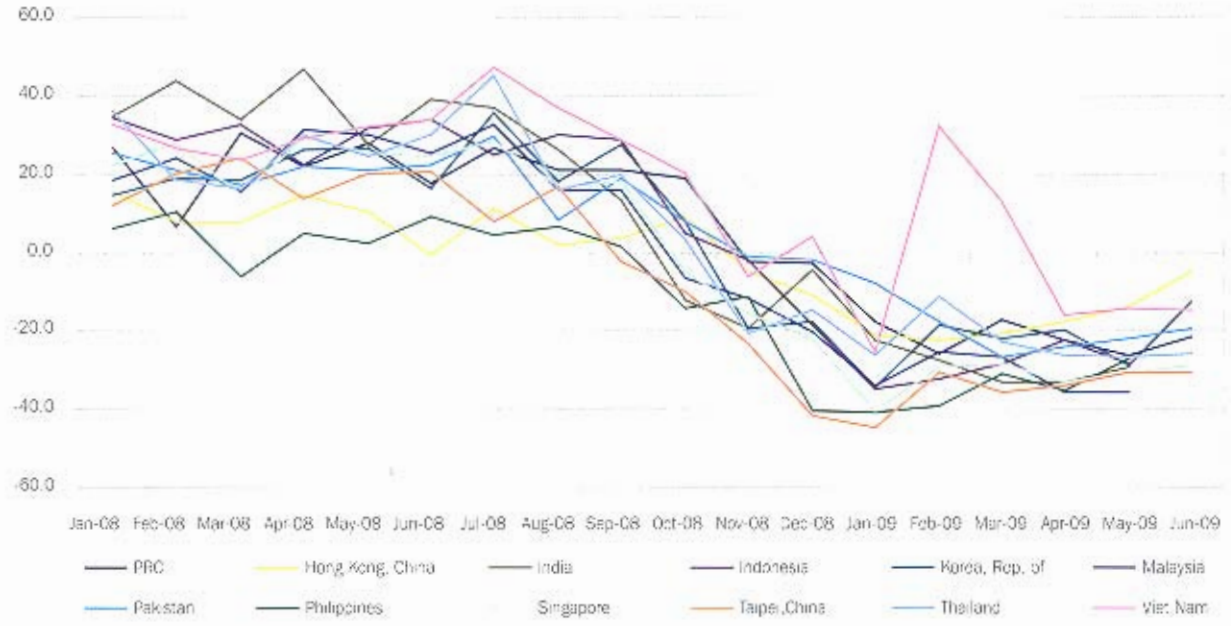
The availability of finance is a second channel through which Asian enterprises have been affected by the global financial crisis. While Asia's financial institutions and systems have so far been relatively stable and largely unscathed—thanks to their limited exposure to subprime assets and related financial products and the relative strength of Asia's banking systems[4]—access to external finance has remained tight as investors from industrial countries have pulled back from developing countries to bolster balance sheets at home, and plans for direct investment have been postponed or shelved.[5] Indeed, as

3 The initial analysis, in 2008, had been much more optimistic that Asia would 'decouple' and escape the economic downturn that began sometime in 2007/08 in the US and Organisation for Economic Co-operation and Development economies. This belief was rooted in the growing share of intraregional trade, the health of Asian firms a year ago, and the low exposure of Asian financial institutions to the types of assets that plagued their highly leveraged western counterparts. Although Asian financial institutions have indeed been in better health, many analysts have given insufficient attention to the fact that the European Union, Japan, and the United States (G3) accounted for around 60% of final demand for developing Asia's exports. Thus, weaknesses in the G3 economies and their demand for imports have hurt Asian exporters.

4 Indeed, taking a cue from the missteps leading to the 1997/98 Asian financial crisis, Asian governments have improved the soundness of the banks' balance sheets. By 2007/08, the ratio of non-performing loans on bank balance sheets of various Asian countries was lower than for the United States, and the return on assets mostly higher than in Japan or the United States.

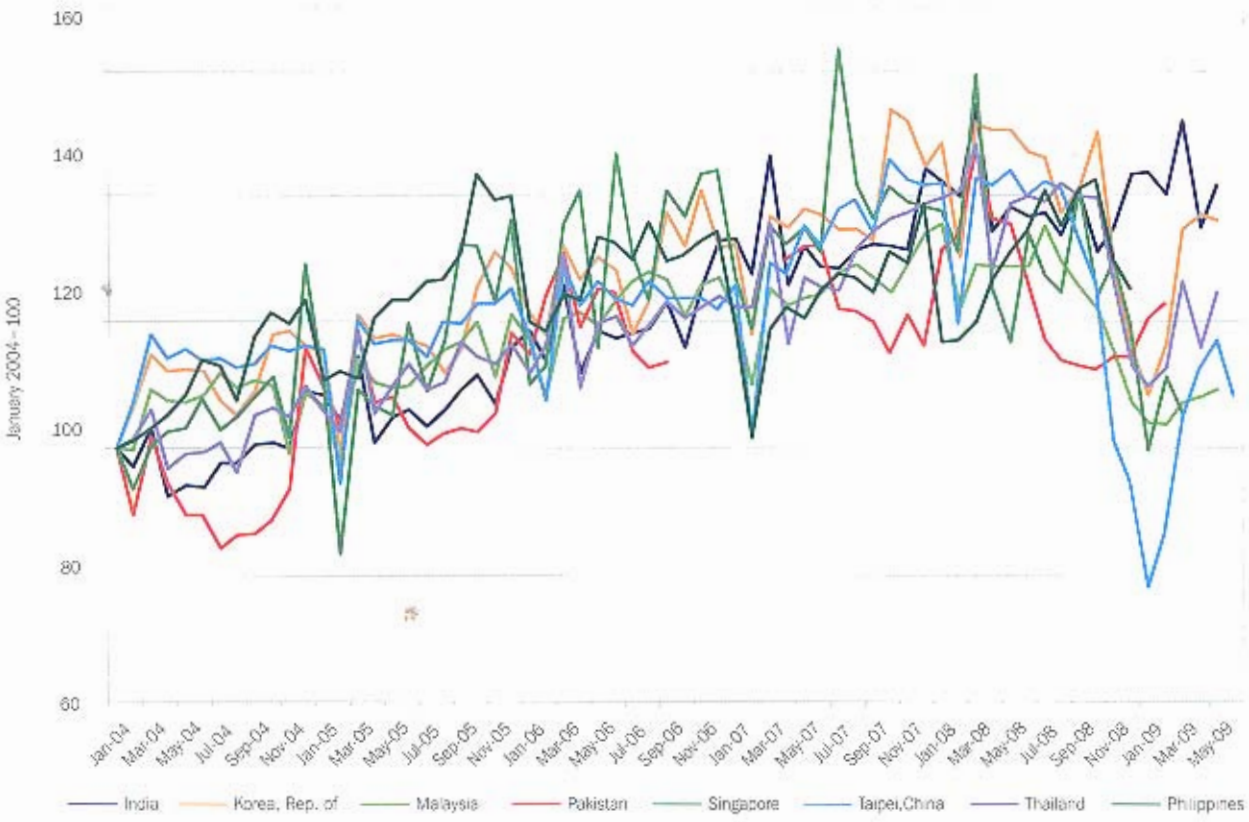
5 Total net portfolio investment for the newly industrialized economies (Hong Kong, China; Republic of Korea; Singapore; and Taipei,China) returned to positive in the first quarter of 2009. For the ASEAN-4 countries (Indonesia, Malaysia, Philippines, Thailand), capital outflows fell from 5.9% of GDP to 0.7% of GDP (see ADB 2009a).

Figure 2.1 **Export Growth (%, year-on-year changes)**



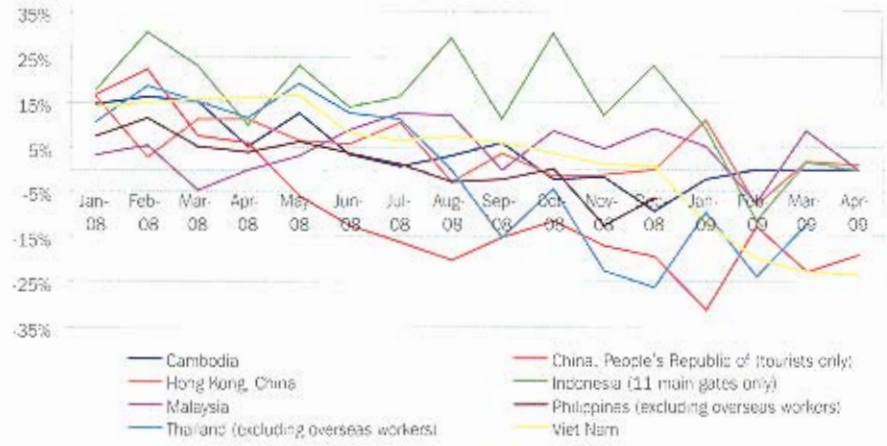
PRC = People's Republic of China
Sources: CEIC Data Company Ltd. and authors' estimates.

Figure 2.2 **Index of Manufacturing Production (January 2004 = 100)**



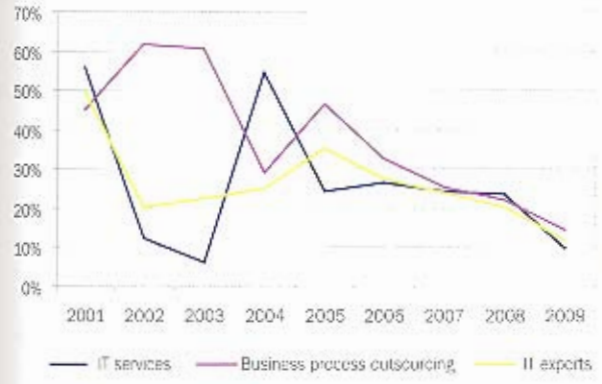
Sources: CEIC Data Company Ltd. and authors' estimates.

Figure 2.3 **Monthly Visitor Arrivals in Asia (%, year-on-year changes)**



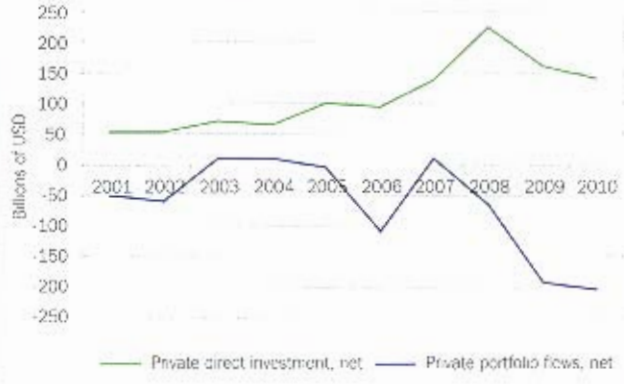
Sources: CEIC Data Company Ltd. and authors' estimates.

Figure 2.4 **IT Services in India: Real Annual Revenue Growth**



Note: The data represent annual totals ending March of each year as reported by the National Association of Software and Services Companies.
Sources: CEIC Data Company Ltd. and authors' estimates.

Figure 2.5 **Private Capital Flows to Developing Asia**



Note: Data for 2009 and 2010 are projected values.
Source: ADO 2009 Statistical Appendix, Table A13, pg.212.

Figure 2.5 shows, foreign direct investment flows into the region have fallen since peaking in 2008 and are expected to remain sluggish through 2009.

There are other indications of the tightening of credit. Data suggests that trade financing shrank in the last quarter of 2008.[6] An International Monetary Fund (IMF) survey of 40 banks in early 2009 suggests a worldwide decline in the value of trade finance in Jan-Oct 2008 (IMF 2009a), while syndicated loans for trade finance in Asia contracted the most since the 1997/98 Asian financial crisis (IMF 2009b).[7] In addition, evidence suggests that lending to SMEs fell more sharply than lending to larger firms (IMF 2009b). And there is growing evidence in the region that banks have constrained lending to riskier borrowers, which tend to be smaller enterprises. Widening bond spreads in some countries, such as Malaysia, are another sign that credit may be scarcer, especially for smaller firms.

Smaller enterprises, especially informal ones, may also be facing difficulty gaining finance because of downward pressure on remittances. As Box 2.1 explains, remittances fund both consumption and investment. While consumers may spend those funds on the products of large or smaller enterprises, investments go more generally to meet the capital needs of small startups and enterprises. Declining remittances are likely to prove particularly important for developing countries in Central Asia, as seen in the box table.

6 A lack of trade financing triggered the rash of bankruptcies and defaults in the 1997/98 Asian financial crisis.

7 However, it bears noting that the causality is not clear: the decline in the value of trade financing could be due to a reduction in actual trade, which does lead to decreased demand for trade financing.

Box 2.1 **Remittances**

International remittances are a very important source of foreign exchange and funds for developing countries (Box Figure 2.1) and, as migrants worldwide reach around 200 million people, their earnings are a powerful force for reducing poverty.

The latest available data shows that remittance flows to developing countries reached $328 billion in 2008, but are expected to decline about 7.3% in 2009 due to the current global crisis (World Bank 2009). Remittance flows to Latin America declined earlier and more steeply, especially because the US remains the main country destination for Latin American migrant workers. On the other hand, flows to South Asia and East Asia remained strong, even through the first quarter of 2009. But near-term prospects may not be as bright (Box Table 2.1) because of two factors that work in tandem: declining new deployments from sending countries and an increasing number of returning workers from destination countries. The first is a result of declining demand and tightening of immigration policies, the second a consequence of rising layoffs in destination countries. In this context, rising remittances in recent months can be partly explained by returning workers sending or bringing home their income and savings. This is, of course, not to ignore the fact that remittance flows are much more stable than other financial flows and that the flows can even be countercyclical, that is, increasing during times of economic downturns (Box Figure 2.1).

Box Table 2.1 **Estimates of Remittance Flows to Developing Countries, 2009–2010 (annual growth, %)**

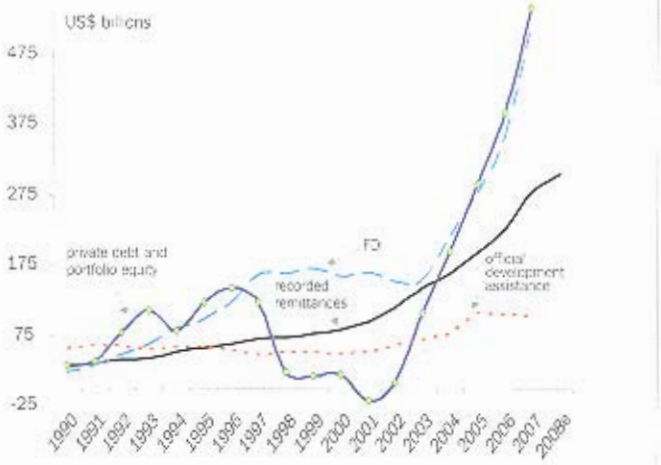
				Base Case Forecast		Low Case Forecast	
	2006	2007	2008e	2009f	2010f	2009f	2010f
Developing Countries	17.2	25.2	14.8	-7.3	2.9	-10.1	-0.3
East Asia and Pacific	13.4	23.4	19.6	-5.7	3.0	-8.8	-0.5
Europe and Central Asia	24.1	36.5	12.0	-14.9	3.0	-17.2	0.5
South Asia	19.7	40.1	32.8	-3.6	3.9	-6.4	0.5

Source: Ratha et al (2009, Table 1, pg. 10).

Impact on Small Enterprises

For recipient economies, remittances are a significant source of income that can boost domestic demand by financing consumption and investment. While the consumption financed by remittances may be spent on products of either large or smaller enterprises, the investments that remittances fund are typically used to meet the capital needs of recipients operating small startups and enterprises. The impact of remittances on entrepreneurial dynamism can be significant—for example, in Mexico, it is estimated remittances account for 20% of invested capital for urban microenterprises (Woodruff and Zenteno 2001). In the Philippines, exogenous shocks to the income of migrant households are found to be correlated with household investments (Yang 2008). In particular, a one-standard-deviation increase in the exchange rate at which remittance flows are converted into pesos leads to a 0.9 percentage point increase in household entry into manufacturing, a large effect considering that only 3.8% of households engage in manufacturing activities at the baseline.

Box Figure 2.1
Remittance and Other Financial Flows to Developing Countries



Sources: Revisions to Remittance Trends 2007, available: econ.worldbank.org; WB Migration and Remittance March 2009 data; World Development Indicators Online database; and Global Development Finance Online database.

Source: ADB Staff.

Of course, few sectors can expect to remain unscathed as aggregate demand declines. For example, the shelving of investment plans has adverse implications for enterprises and workers engaged in the construction sector.

2.2 Crisis Impact: an Assessment Based on Recent Labor Force Surveys

While national statistics offices usually collect enterprise-related statistics only annually, they often collect labor force statistics quarterly. The most recent updates based on labor force surveys conducted in the first quarter of 2009 show that with a couple of exceptions unemployment is on the rise across developing Asia (see Table 2.2).[8]

8 The exceptions are Indonesia and the Philippines, where first-quarter 2009 unemployment rates have actually declined slightly on a year-on-year basis. The most recent update from the BPS-Statistics Indonesia shows that the number of jobs in February 2009 is still a few million more than in the previous year. In the Philippines, despite a sharp decline in exports, the unemployment rate declined from 8.0% last year to 7.5% in April 2009, even while labor force participation rates increased slightly.

Table 2.2 **Official Unemployment Rates (%)**

Economy	2006	2007	2008*	2009*
China, People's Republic of[1]	4.1	4.0	4.2	4.3
Hong Kong, China[2]	4.8	4.0	3.3	5.1
Indonesia[3]	10.5	9.8	8.5	8.1
Korea, Republic of[4]	3.2	3.2	3.0	3.8
Malaysia[5]	3.3	3.2	3.3	4.0
Philippines[6]	8.2	7.4	8.0	7.5
Singapore[7]	2.2	2.5	1.8	3.0
Taipei,China[8]	3.8	3.9	3.8	5.8
Thailand[9]	1.9	1.6	1.7	2.1
Viet Nam[10]	4.8	4.6	4.6	n.a.

Notes: n.a. – not available

* Data for the People's Republic of China refer to official urban unemployment rate, most recently updated by July 24, 2009, referring to the quarter ending June 2009. Hong Kong, China data for 2006 and 2007 refer to annual data. Data for 2008 and 2009 refer to quarterly data collected as of March of each year. Indonesia data refer to semi-annual data collected as of February of each year. Republic of Korea data refer to monthly data collected as of May of each year. For Malaysia, data from 2006 to 2008 refer to annual data, and 2009 refer only to first quarter data. Philippines data refer to quarterly data collected as of April of each year. Singapore data refer to first quarter data of each year. Taipei,China data refer to monthly data collected as of May of each year. Thailand data refer to quarterly data collected as of March of each year. Viet Nam data refer to official annual urban unemployment rate, and figures for 2007 and 2008 are still estimates.

Sources: Data downloaded July 10, 2009 from the following sources:

1 National Bureau of Statistics of China (www.stats.gov.cn/english/)
2 Census and Statistics Department (www.censtatd.gov.hk)
3 BPS-Statistics Indonesia (www.bps.go.id)
4 Korean Statistical Information Service (www.kosis.kr)
5 Department of Statistics Malaysia (www.statistics.gov.my/eng/)
6 National Statistics Office (www.census.gov.ph)
7 Ministry of Manpower (www.mom.gov.sg)
8 National Statistics (eng.stat.gov.tw)
9 National Statistical Office (web.nso.go.th)
10 General Statistics Office of Viet Nam (www.gso.gov.vn/).

Although the magnitude of the rise is still smaller than in the US, this is a significant change for some of the fast-growing countries. In the PRC, the rise of official urban unemployment to 4.3% in June brought it to its highest level in the last five years.[9] The rise in unemployment rates has been more pronounced in Asia's more advanced economies, such as Hong Kong, China; Korea; Singapore; and Taipei,China.[10]

Perhaps more importantly, an aggregate statistic like the unemployment rate can mask considerable job creation and destruction at the sector level, the movement of employment from sectors with higher average wages to sectors with lower average wages—for example, losing a job in a manufacturing factory and moving to an informal job in the wholesale and retail trade sector—and growing underemployment. As Box 2.2 describes, such processes were very much at work during the Asian financial crisis of 1997/98. Below we highlight some findings from recent official labor force statistics that suggest similar processes are at work in the current crisis.

(i) Manufacturing has been hit hard

One of the most striking features of the statistics is that, with the exception of Indonesia, manufacturing employment has declined across all economies noted above (panels a–h, Figure 2.6). There were even manufacturing job losses in the Philippines, where overall unemployment decreased and where jobs in all other sectors increased. In addition, in a majority of countries, job losses in manufacturing are much greater than those in other sectors (except in Korea and Hong Kong, China). This is quite consistent with the notion that the main transmission channel from the global economic crisis to developing Asian countries is through a decline in manufacturing exports. It may be noted that while India does not collect or generate labor force statistics on a quarterly basis, a special survey of enterprises in specific sectors reveals that on net almost 100,000 jobs were lost in the manufacturing enterprises covered by the survey (panel i, Figure 2.6). In contrast, employment in IT and business process outsourcing enterprises expanded.

(ii) The impact has spilled over into other sectors

The manufacturing sector is not the only one hurting. Given the curtailment of investment plans, construction activity has also slowed, hurting the group of workers probably most vulnerable to poverty, especially in urban areas. Indeed, construction sector job losses mounted in Indonesia, Korea, and Taipei,China (panels b, c, and g, Figure 2.6).

Moreover, as general economic activity declines, workers in the service sector have also begun to feel the pinch. For example, in Hong Kong, China, job losses have been severe in the external trade sector. In Indonesia, transport and storage sectors have shed jobs. In Korea, the number of employees in most major industries declined in 2008 and 2009, with the retail trade, restaurant and hotel sectors laying off the most workers (although for now the jobs lost are still being counterbalanced by an increase in employment in other service sectors). In Taipei,China retail trade jobs have been hit hard.

9 Jobless urbanites jumped to 8.86 million by the end of the fourth quarter 2008, up more than half a million from the third quarter 2008. But some researchers estimated that true urban unemployment ought to be twice the official figure, and rural unemployment rates even higher than urban. Officially, in the third quarter of 2008 more than 10 million migrant workers lost their jobs, while 670,000 factories closed. Official data also showed a moderation in the rise of unemployment—urban joblessness by the end of June 2009 was less than the level in March 2009.

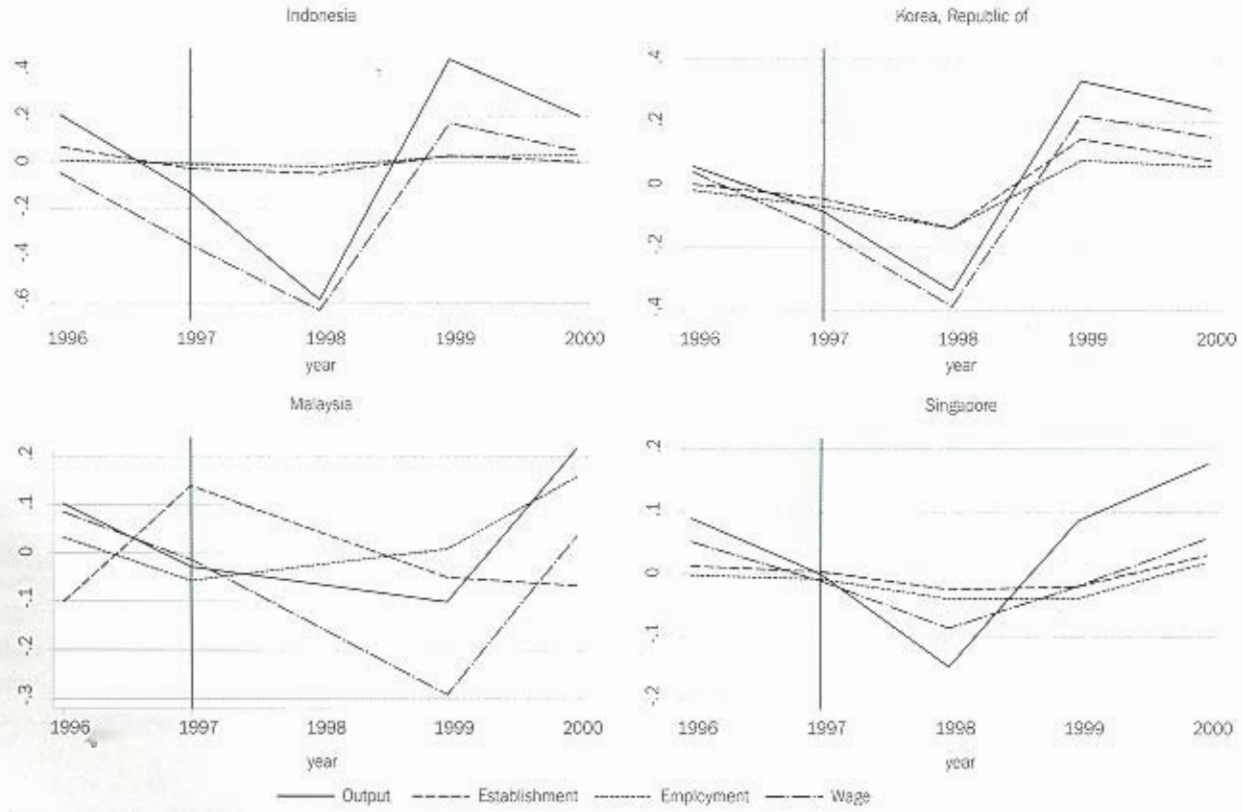
10 The unemployment rate in Taipei,China hit a record high of 5.8% in May 2009 after almost a year of consecutive monthly rises.

Box 2.2 **Impact of the 1997/98 Asian Financial Crisis on Workers**

Overall, the burden of labor market adjustment during the crisis was in reduced income and wages rather than employment loss. Despite the sharp contraction in manufacturing sectors in Indonesia, Malaysia, and Philippines, the actual decline in total employment was not as severe as the contraction in output (see Box Figure 2.2).[1] On the other hand, it took longer for the number of firms to return to pre-crisis levels.

But unemployment presents only a partial view of the devastation wrought. Across all five severely affected countries (Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand), the percentage of underemployed rose in the subsequent year, and was especially large in Indonesia. This highlights the fact that while workers were still employed, they were working fewer hours, and thus earned less income (see Box Table 2.2). In addition, although the first wave of layoffs emanated from manufacturing firms, we see that agriculture and service sectors were affected within a year of the crisis. But for some countries these two sectors acted as a safety-valve in absorbing the employment losses from the industrial sector (see Box Table 2.3).[2]

Box Figure 2.2 **Annual Changes in Manufacturing-Related Indicators in 1997/98 Asian Financial Crisis (%)**



Note: Output and average wages are percentage changes of the real values (with 2000 as base year).
Source: United Nations Industrial Development Organization International Yearbook of Industrial Statistics.

Box 2.2 continued on next page

(iii) Hours worked and wages are being cut

Furthermore, available evidence suggests that even when people have retained their jobs they have variously faced cuts in hours worked, salary, and benefits. In Hong Kong, China workers in construction, public administration, and transportation sectors have experienced a decline in median hours of work (Figure 2.7, panel a). In Singapore, although employment in sectors other than manufacturing grew (Figure 2.6, panel f), hours worked has declined almost across the board (Figure 2.7, panel b). Similarly, Table 2.3 shows that in Korea, Philippines, and Thailand the percentage of workers working less than 40/45 hours has increased year-on-year. In earnings, real declines have taken place almost across the board in Singapore and Thailand (Figure 2.8 panels a and b).

Box 2.2 continued from previous page

Box Table 2.2 **Unemployment and Underemployment during Asian Financial Crisis**

	Unemployment			Underemployment		
	1997	1998	Percentage point change 1997–98	1997	1998	% Changes 1997–98
Indonesia	4.7	5.4	0.7	35.8	39.1	9.2%
Korea, Rep.of	2.6	6.8	4.2	7.3	9.3	27.4%
Malaysia	2.6	4.0	1.4	7.3	7.9	8.2%
Philippines	8.7	10.1	1.4	11.3	11.9	5.3%
Thailand	2.2	5.2	3	0.9	1.2	33.3%

Note: Underemployment is defined as: Malaysia, less than 30 hours per week; Republic of Korea, 35 hours or less per week; Indonesia, less than 35 hours per week; Thailand and the Philippines, less than 40 hours per week and available for more hours.
Source: Betcherman and Islam (2001, Table 1.3, pg.13).

Box Table 2.3 **Change in Employment and Real Wages during Asian Financial Crisis**

	% Changes in Employment, 1996–1998			% Change in Real Wages		
	Agriculture	Industry	Service	1996	1997	1998
Indonesia	5.4	-1.5	1.3	10.8	8.7	-41.0
Korea, Rep. of	0	-13.2	-4.4	6.7	2.4	-9.3
Malaysia	-5.4	-2.9	-1.9	2.1	3.3	-1.1
Philippines	-8.3	-8.6	21.4	-2.0	-1.1	-2.0
Thailand	-1.8	-1.9	na	2.3	1.4	-7.4

Source: Betcherman and Islam (2001, Table 1.4-1.5, pg.14).

1 Total employment in Thailand recovered within two years. In Republic of Korea, one of the worst hit countries, total employment contracted by about 6%, and it took four years before employment was back to pre-crisis levels.
2 In Indonesia, job losses in manufacturing were alleviated by positive growth in agriculture and services employment. In the Philippines, although job losses extended into the agricultural sector, service jobs grew by an astounding 21.4% between 1996 and 1998.

Table 2.3 **Hours Worked: Republic of Korea, Philippines, and Thailand**

Country	% of Workers Working Less than 40 hours* Per Week first quarter 2008	first quarter 2009
Korea, Republic of *	39.0	43.9
Philippines	35.2	36.3
Thailand	28.9	29.2

* 45 hours for Republic of Korea
Source: Korean Statistical Information Service (Republic of Korea), National Statistics Office (Philippines), National Statistics Office (Thailand).

2.3 What Types of Enterprises and Workers Are Being Affected?

While the aggregate numbers we have examined so far are helpful in understanding how workers and which sectors are being affected by the current global crisis, they do not tell us about the types of enterprises and workers. For example, is it the relatively smaller enterprises that are facing the brunt of the export decline, or relatively larger enterprises? To the extent that the economic crisis is putting pressure on the availability of finance, are smaller enterprises more vulnerable than others? Similarly, are female workers more likely to be affected than male workers? Having a sense of these characteristics is useful for policy purposes. It can help target assistance and policy responses to those worst affected.

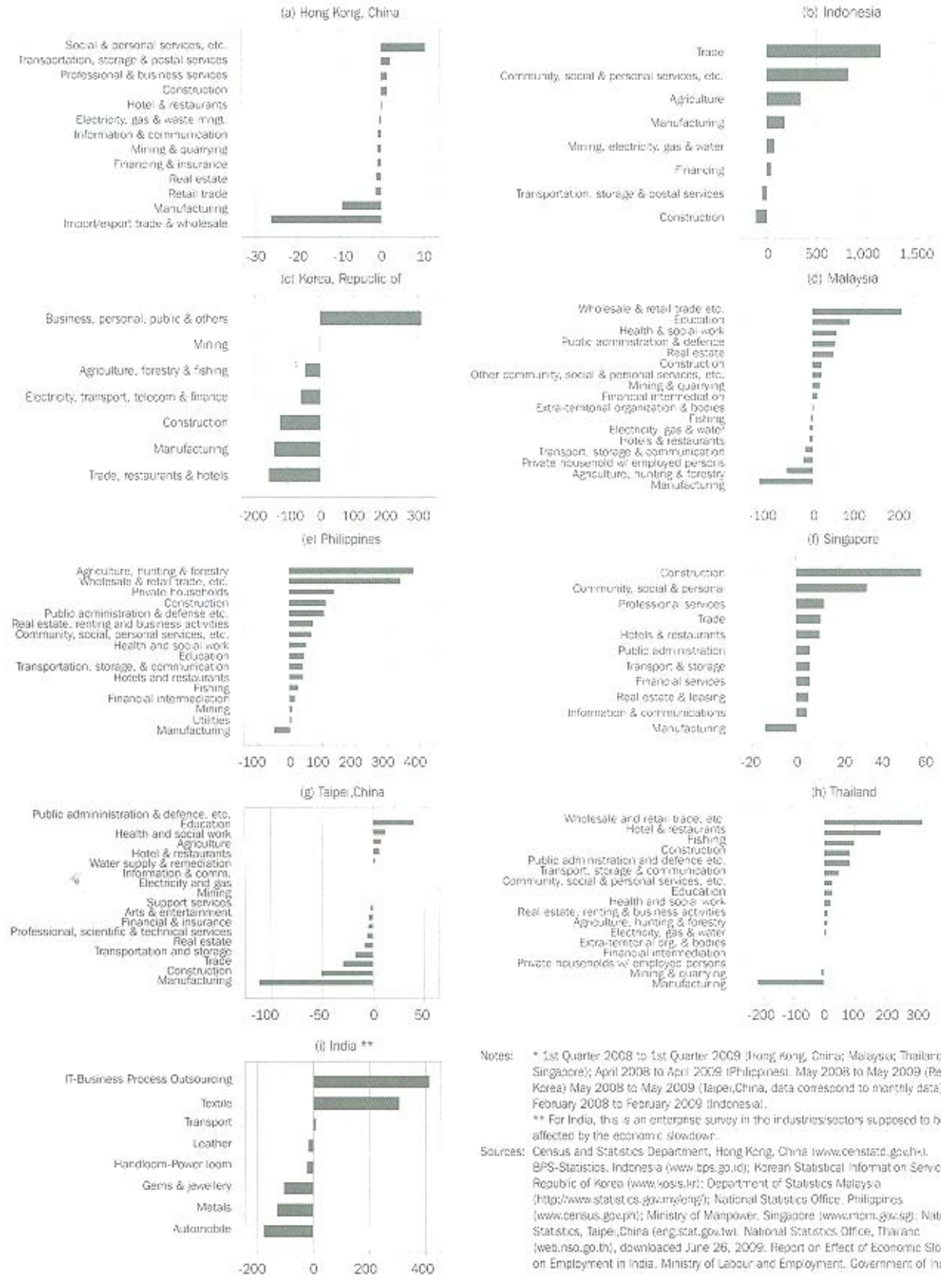
We face a data-related challenge in identifying these characteristics. As noted earlier, micro-data from nationally representative enterprise and labor force surveys since the crisis began remains scarce. The approach we take is to use micro- and sector-level data collected prior to the crisis and compare enterprise and worker characteristics across those manufacturing sectors that have seen the most severe slowdown in exports to the remaining manufacturing sectors. In particular, we examine enterprise and worker characteristics across two groups of manufacturing sectors: the five manufacturing industries that experienced the largest absolute decline in exports between March 2008 and March 2009, and the remaining manufacturing industries. Table 2.4 lists the former for selected developing countries from East Asia, Southeast Asia, and South Asia. Khor and Sebastian (forthcoming) identify these industries and combine current monthly exports data with industrial statistics in PRC, Indonesia, India, Korea, Malaysia, Philippines, Singapore, Thailand, and Viet Nam. They find that the decline in exports is severe for the most affected products, at times exceeding 50% year-on-year, even when the total exports of the country as a whole are only mildly affected.

Worker characteristics

Table 2.5 summarizes key worker characteristics across three sectors using microdata from labor force surveys from India, Indonesia, the Philippines, and Thailand.[11] A quick glance reveals considerable diversity across countries in the characteristics of workers in the worst affected manufacturing sectors, relative to other manufacturing sectors.

11 Data for India comes from National Sample Survey Organization (NSSO) Employment and Unemployment Schedule 10 Survey of 2004–05. Indonesian data refers to the 2007 SAKERNAS survey. The Philippines data comes from Labor Force Survey 2007, while Thailand data comes from the Thai Labor Force Survey 2005.

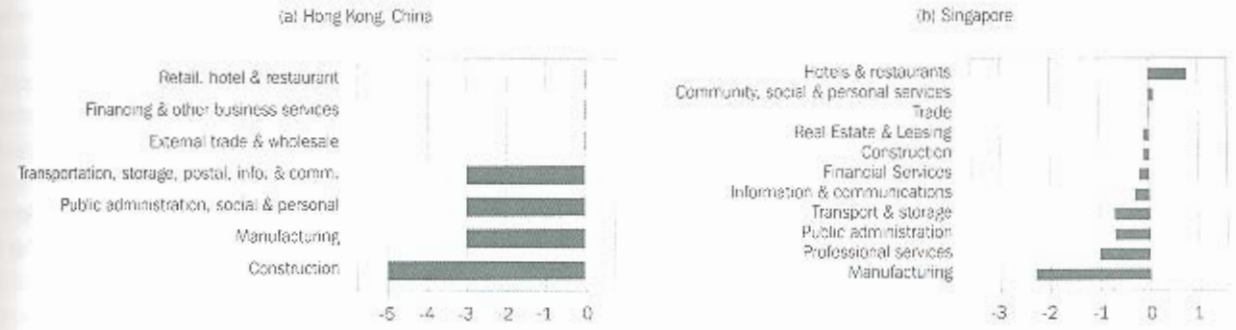
Figure 2.6 **Change in Number of Employees by Industry (thousands, year-on-year*)**



Notes: * 1st Quarter 2008 to 1st Quarter 2009 (Hong Kong, China; Malaysia; Thailand; Singapore); April 2008 to April 2009 (Philippines); May 2008 to May 2009 (Republic of Korea) May 2008 to May 2009 (Taipei,China, data correspond to monthly data); February 2008 to February 2009 (Indonesia).
** For India, this is an enterprise survey in the industries/sectors supposed to be badly affected by the economic slowdown.

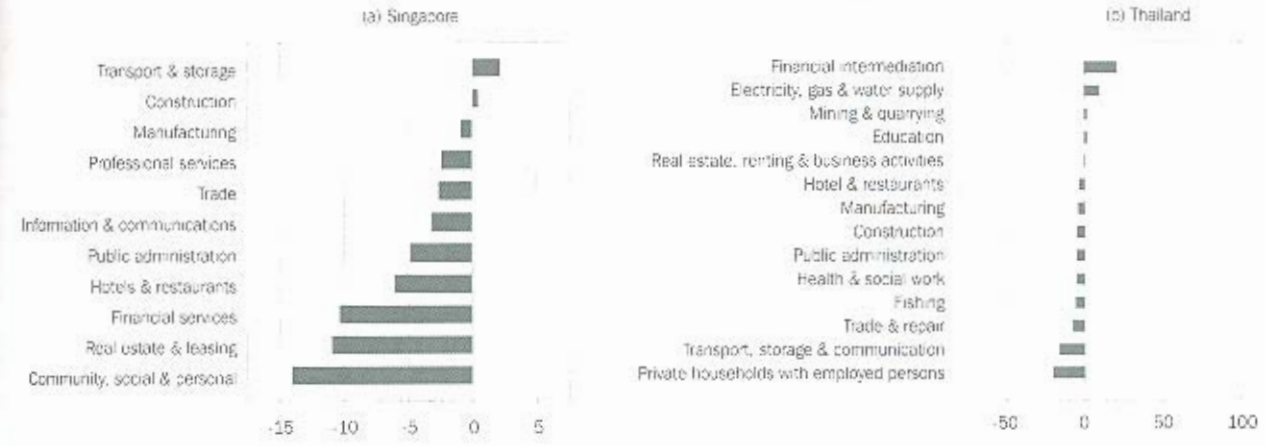
Sources: Census and Statistics Department, Hong Kong, China (www.censtatd.gov.hk); BPS-Statistics, Indonesia (www.bps.go.id); Korean Statistical Information Service, Republic of Korea (www.kosis.kr); Department of Statistics Malaysia (http://www.statistics.gov.my/eng/); National Statistics Office, Philippines (www.census.gov.ph); Ministry of Manpower, Singapore (www.mom.gov.sg); National Statistics, Taipei,China (eng.stat.gov.tw); National Statistics Office, Thailand (web.nso.go.th), downloaded June 26, 2009; Report on Effect of Economic Slowdown on Employment in India, Ministry of Labour and Employment, Government of India.

Figure 2.7 **Change in Hours Worked**



Notes: Hong Kong, China—change in median hours of work per week by industry, first quarter 2008 to first quarter 2009. Singapore—change in average hours of work per week by industry, first quarter 2008 to first quarter 2009.
Sources: Census and Statistics Department, Hong Kong, China (www.censtatd.gov.hk); Ministry of Manpower, Singapore (www.mom.gov.sg).

Figure 2.8 **Change in Earnings in Singapore and Thailand (%)**



Notes: (a) Singapore—percentage change in real monthly earnings per employee per industry, 1st quarter 2008 to 1st quarter 2009; (b) Thailand—percentage change in real average monthly wage of employed persons, 1st quarter 2008 to 1st quarter 2009. CPI from International Finance Statistics Online was used as deflator.
Sources: Ministry of Manpower, Singapore (www.mom.gov.sg) and National Statistics Office, Thailand (web.nso.go.th).

Nevertheless, a couple of patterns seem to be common. In particular, workers in the worst-affected sectors tend to be more educated and urban than those in other manufacturing. For example, in Indonesia, workers in the worst affected manufacturing sectors average 9.3 years of schooling, but only 8.5 years in the other manufacturing sectors. Only in India is this pattern less pronounced.

Somewhat similarly, for Philippines and Indonesia—where labor force surveys distinguish between casual and regular wage workers (unlike Thailand), and self-employment is not particularly high (unlike India where almost half of manufacturing workers are self-employed)—regular wage workers are more prevalent than casual wage workers. In view of the fact that the most vulnerable group of workers tends to be casual wage workers, the sectoral averages here suggest that relatively more of the laid-off workers in the worst affected industries would be able to get some sort of severance-related benefits from employers as compared to a hypothetical scenario where other manufacturing industries were worse hit.

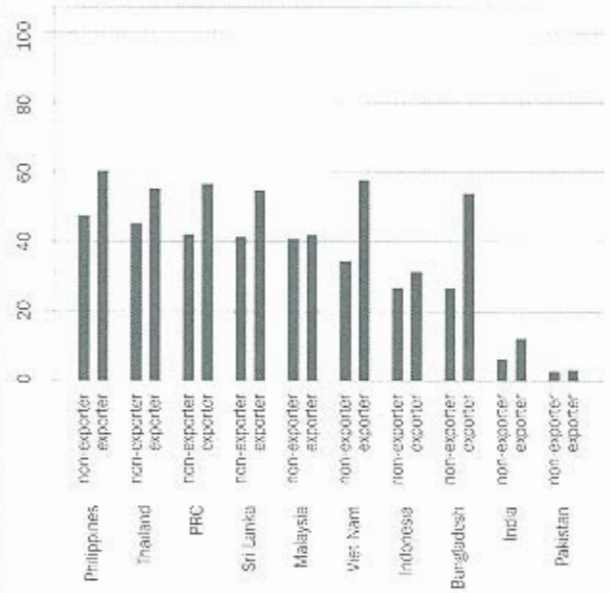
Table 2.4 **Top 5 Declining Exports, Q1 2008 to Q1 2009**

Economy	Exports Arranged By Largest Absolute Year-on-Year Decline (% year-on-year decline in parenthesis)
China, People's Republic of	Non-electrical machinery (-21.7%)
	Wearing apparel including footwear (-33.4%)
	Electrical machinery and apparatus (-23.5%)
	Textiles (-33.2%)
	Professional and scientific equipment (-37.6%)
Hong Kong, China	Wearing apparel including footwear (-76.5%)
	Iron, steel and non ferrous metals (-64.5%)
	Non-electrical machinery (-24.2%)
	Plastic products (-26.2%)
	Electrical machinery (-23.8%)
India	Jewelry and related articles (-27.8%)
	Basic iron & steel (-43.9%)
	Grain mill products (-38.6%)
	Textile yarns, fabrics and made-up articles (-23.4%)
	Casting of iron, steel and non-ferrous metals (-62.7%)
Indonesia	Basic precious and non-ferrous metals (-60.5%)
	Produced, processed and preserved meat, fish, fruit, vegetables, oils and fats (-51.9%)
	Basic chemicals, rubber and plastics products (-47.1%)
	Electrical machinery and apparatus (-41.9%)
	Textiles (-33.7%)
Korea, Republic of	Electrical machinery and apparatus (-29.1%)
	Telecom, sound recording & reproducing apparatus (-26.5%)
	Basic chemicals, rubber and plastics products (-26.5%)
	Special purpose machinery and equipment (-41.1%)
	Road vehicles and components (-8.0%)
Malaysia	Processed and preserved meat, fish, fruit, vegetables, oils and fats (-29.5%)
	Basic chemicals, rubber and plastics products (-37.3%)
	Metal manufactures & general industrial non-electrical machinery (-41.4%)
	Telecom, sound recording & reproducing apparatus (-32.7%)
	Office accounting and computing machinery (-17.2%)
Philippines	Electrical machinery and apparatus (-44.0%)
	Office accounting and computing machinery (-41.6%)
	Road vehicles and components (-31.8%)
	Clothing, leather products and footwear (-20.2%)
	Processed and preserved meat, fish, fruit, vegetables, oils/fats, beverages (-17.3%)
Singapore	Other food products / Tobacco products (-46.2%)
	Electrical machinery and apparatus (-28.7%)
	Basic chemicals, rubber and plastics products (-26.6%)
	Office accounting and computing machinery (-32.9%)
	Metal manufactures,general industrial non-electrical machinery and equipment (-33.3%)
Viet Nam	Food and beverages (-20.4%)
	Leather, leather products and footwear (-22.7%)
	Textiles (-11.6%)
	Rubber and plastics products (-47.1%)
	Wood products (excl. furniture) (-30.1%)

Note: Export data for India refer to November 2007 and November 2008.
Source: Khor and Sebastian (forthcoming).

A final feature of Table 2.5 is that female workers are not uniformly more prevalent in the worst-hit sectors. In fact, it is only in the Philippines and Indonesia where female workers are more prevalent in those sectors relative to other manufacturing. However, it needs to be kept in mind that in so far as employment in *exporting* firms is concerned—something that the labor force surveys are silent on—there is evidence that female workers may be disproportionately affected by export slowdowns. As Figure 2.9 based on World Bank Enterprise Survey (WBES) data shows, females make up a higher proportion of exporting firms' workforces in a broad cross-section of manufacturing industries in a majority of the developing Asian countries shown.

Figure 2.9 **Share of Female Workers in Exporting and Non-Exporting Enterprises (%)**



PRC = People's Republic of China
Source: Authors' estimates based on WBES.

Table 2.5 **Labor Force Surveys: Characteristics of Workers in the Worst Affected Manufacturing Industries**

	Years of Schooling		% Urban		% of Regular Workers *		% Female	
Country	Top 5 affected industries	Other industries	Top 5 affected industries	Other industries	Top 5 affected industries	Other industries	Top 5 affected industries	Other industries
India	6.4	6.27	52.67%	45.45%	47.94%	47.37%	24.76%	25.70%
Indonesia	9.35	8.53	63.92%	59.01%	77.35%	59.46%	47.57%	38.54%
Philippines	11.27	10.16	71.44%	62.80%	59.56%	49.98%	52.72%	35.24%
Thailand**	8.89	7.83	44.46%	40.35%	-	-	35.07%	59.05%

* Regular wage workers as a share of total regular wage workers, casual wage workers, and the self-employed.
** Thai data do not allow us to distinguish casual from regular employees.
Source: Authors' estimates from Labor Force Surveys.

Enterprise characteristics

Data from industrial statistics show that average firm size (as measured by number of workers) in the sectors most affected by the export slowdown is larger than in other sectors (see Table 2.6). While in a couple of cases the reported differences in average firm size are minor, in many others the differences are quite significant. For example, in Indonesia, Korea, Malaysia, Philippines, and Singapore the average firm size in the top five affected sectors is 40% (or more) larger than in the rest of manufacturing.

Table 2.6 **Average Firm Size in Manufacturing**

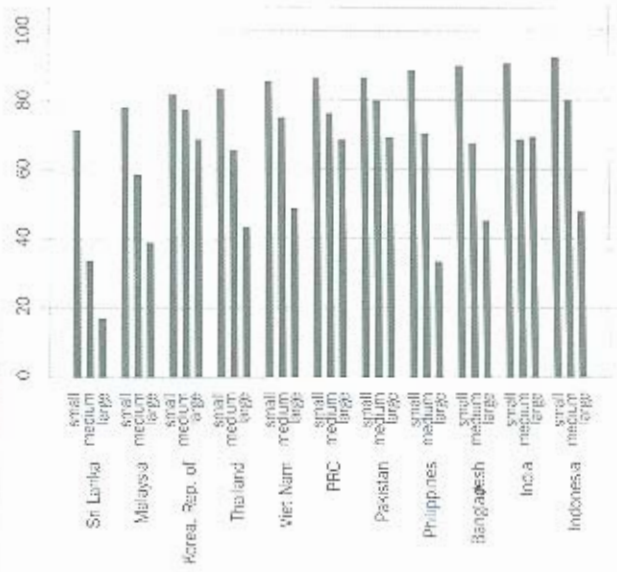
Economy	Average Firm Size	
	top 5 affected sectors	other industries
China, People's Republic of	252	211
Hong Kong, China	12	11
India	66	63
Indonesia	265	185
Korea, Republic of	38	20
Malaysia	88	49
Philippines	270	109
Singapore	65	37
Viet Nam	141	120

Notes: 1. Average firm size is measured by dividing the total number of employees by the total number of establishments across the various groups of sectors considered here.
2. The top 5 affected sectors in manufacturing refers to those that experienced the biggest absolute decline in exports.
Source: Khor and Sebastian (forthcoming) using UNIDO industrial statistics.

This does not necessarily mean the direct impact of export declines everywhere would be felt more by large enterprises than by others. Assuming small enterprises to be those with less than 50 workers, large enterprises those with 200 or more, and medium-sized in between, Table 2.6 (first column) reveals that the average firm in the most affected manufacturing sectors is small in Hong Kong, China and Korea and medium-sized in India, Malaysia, and Singapore.

Of course, figures on average size can mask considerable heterogeneity in enterprise size within sectors. Moreover, not all enterprises in a sector are involved in exporting—typically most are not. For example, it is possible that smaller enterprises in a given sector are focused more on domestic demand, while exports come more from larger enterprises. Alternatively, the opposite may be true. To examine this issue, we turn again to the WBES database. Among other things, information is provided on the share of each firm's output that is exported, directly or indirectly. As Figure 2.10 reveals, the output of small enterprises is on average clearly oriented towards the domestic market. For example, in 9 of 11 Asian countries for which data are available, 80% or more of the output of small enterprises is geared toward the domestic market,

Figure 2.10 **Share of Total Sales Sold Domestically: Small, Medium, and Large Enterprises (%)**



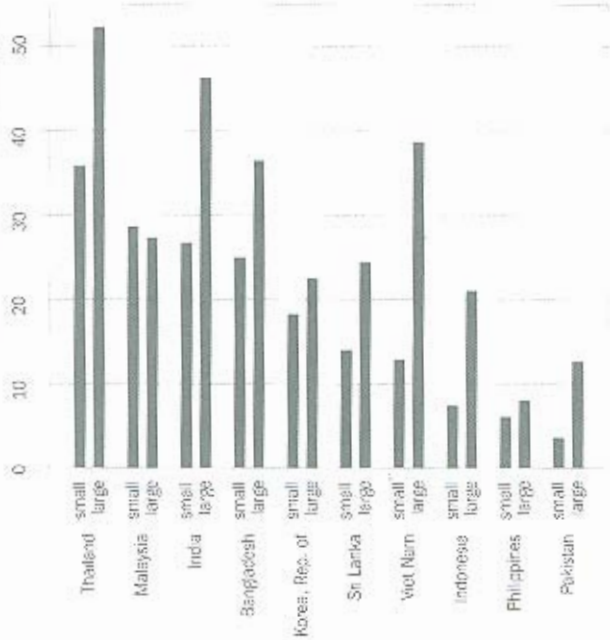
PRC = People's Republic of China
Note: small firms, 5–49 workers; medium: 50–199 workers; large: 200 and above workers.
Source: Authors' estimates based on WBES data.

and 70–80% in the other two. As for large enterprises, the range of average output oriented towards the domestic market is quite wide—from around 20% in Sri Lanka to around 70% in PRC, India, Korea and Pakistan. While the industries surveyed and the specific sampling procedures used to choose enterprises may be driving some of the specifics, the overall pattern across countries is quite clear: on average, smaller enterprises will be more oriented toward the domestic market and therefore larger firms are, initially, more likely to be the worst-hit.

In addition to their domestic orientation, SMEs, especially small ones, may be partly shielded from the tightening of conditions in formal financial markets because even in the best of times they typically face considerable difficulty accessing formal finance, such as from banks. Figure 2.11 contrasts the share of bank finance in working capital for small and large enterprises using the WBES database. With the exception of Malaysia, small enterprises everywhere are less likely than large enterprises to use bank finance.[12] For example, in most of the other countries in the figure, the share of bank finance in working capital is often at least 10 percentage points less for small enterprises than large enterprises.

12 Though not shown here, medium-sized enterprises tend to access bank finance less than large enterprises as well, but there are a few exceptions (as per the WBES data).

Figure 2.11 **Share of Bank Finance in Working Capital (%)**



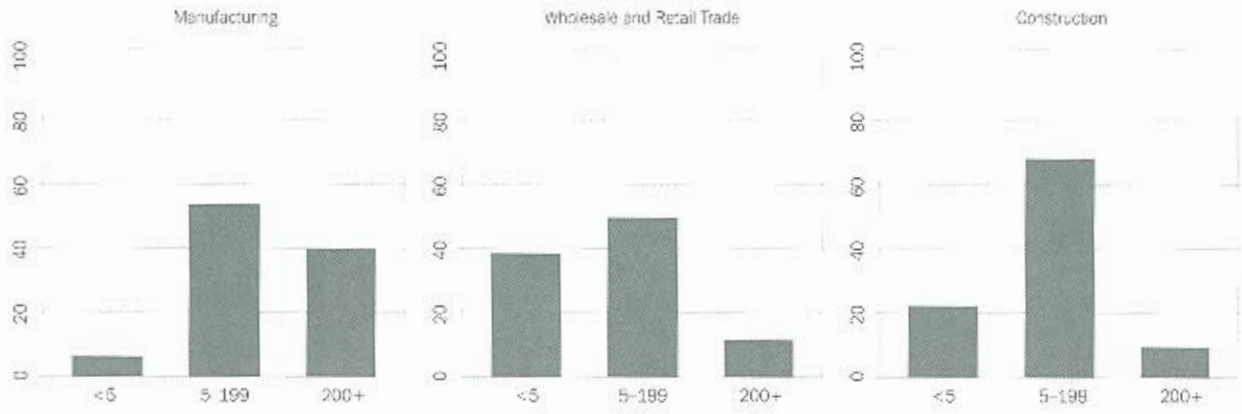
Note: small: 5–49 workers; large: 200 workers and above.
Source: Authors' estimates based on WBES data.

The foregoing discussion should not be taken to indicate that SMEs are escaping the crisis unscathed. First, much of the discussion so far has focused on the impact emanating from declining exports, and the direct impact on exporters. Quite apart from the fact that in some industries SMEs play a significant role in exporting—such as gems and jewelry in India—SMEs can also be an important part of the production value chain. Thus, even if they do not export, their products feed into the production of goods that do. This is certainly the case in the automobile industry, where SMEs producing a variety of components are linked to large automobile manufacturers through subcontracting relationships (see Section 7 for more details on these links). Moreover, backward links in production mean that not only exporting sectors, but also those that produce inputs in other sectors will be affected. The extent of the links can be illustrated by data from input-output tables. In wearing apparel, for example, a large chunk of final value added comes from intermediate goods and services. Thus a $1 drop in apparel exports implies a drop in intermediate manufacturing inputs of 53.6 cents in the PRC, 43.6 cents in India, and 46.9 cents in Indonesia (Khor and Sebastian).

More generally, very few enterprises can remain unaffected by a drop in aggregate demand. To see this, consider Taipei,China. As noted in Section 2.2, manufacturing, construction, and trade services are three sectors where employment has declined. In Taipei,China, while the importance of SMEs in manufacturing employment is well-known, information on the size distribution of enterprises in other sectors reveals that if anything, SMEs dominate the landscape even more in construction and trade services (Figure 2.12). The figure presents the distribution of employment across SMEs and large enterprises (where SMEs can be taken to include microenterprises, or enterprises with less than 5 workers). In both trade and construction, large enterprises account for a much smaller portion of total employment than manufacturing does.

Finally, SMEs that export are precisely the type that need to be encouraged. As will be explained in detail in Section 3, microenterprises and SMEs account for a very large share of employment in most developing Asian countries. Unfortunately, wages and productivity tend to be low in many of these enterprises, with adverse

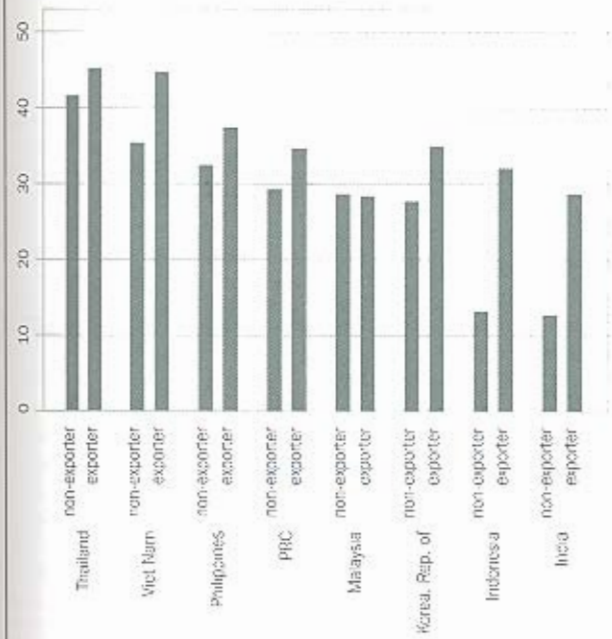
Figure 2.12 **Share of Total Employment by Enterprise Size-Groups in Taipei,China (%)**



Note: Enterprise size is measured in terms of the number of workers.
Sources: 2006 Industry, Commerce, and Service Census, Census Bureau; Directorate-General of Budget, Accounting and Statistics.

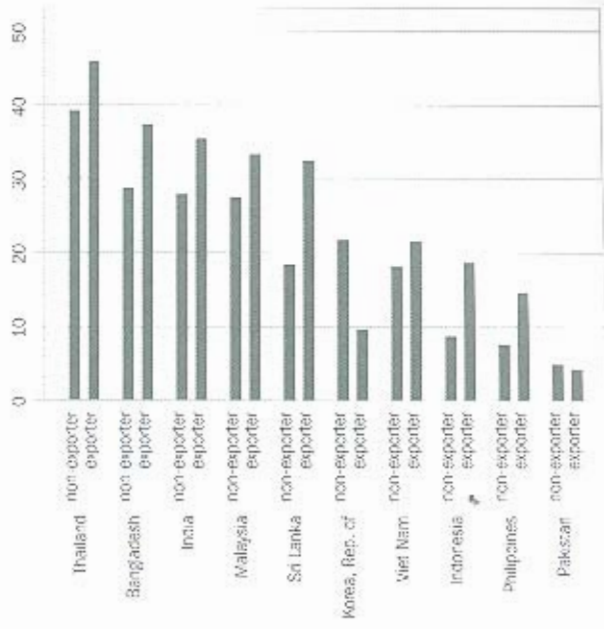
consequences for living standards. While the prospects for making microenterprises more dynamic seems somewhat limited, there is considerable potential for making SMEs more dynamic. Figure 2.13 describes the introduction of new technology by SMEs based on whether or not they export: as can be seen clearly, exporting SMEs are more likely to introduce new technologies, especially in lower income countries such as India and Indonesia. Similarly, exporting SMEs are also more likely to be a part of the formal financial system. This can be seen in Figure 2.14. A squeeze on bank credit is likely to affect these enterprises more, all else being equal.

Figure 2.13 **Introduction of New Technology by SMEs: Exporters versus Non-exporters (% of enterprises that introduced new technology)**



PRC = People's Republic of China
Note: SME: 5–199 workers.
Source: Authors' estimates based on the WBES.

Figure 2.14 **Average Share of Bank Finance for Working Capital, by Export Status (%)**



Note: SME: 5–199 workers.
Source: Authors' estimates based on the WBES.

2.4 Assisting Enterprises Hit by the Crisis

In view of the foregoing discussion it should not be surprising that governments in the region have taken several measures to support enterprises, especially SMEs, and their workers. Table 2.7 highlights some of these. (Box 2.3 provides more details of the case of the PRC as far as SMEs are concerned.)

One way to determine the effectiveness of the various measures in helping enterprises and workers is to examine experiences from previous crises. As discussed in Box 2.2, the 1997/98 financial crisis resulted in severe contractions in output and created widespread challenges for firms and workers. Interestingly, there seems to be no simple relationship between enterprise size and the impact of the crisis. As Box 2.4 explains, the evidence that SMEs can act as shock absorbers in times of crisis and that they safeguard employment is mixed. Indeed, it is precisely because SMEs were also hit hard by that crisis that governments in virtually all affected economies issued a variety of laws, decrees, and regulations to help workers and SMEs. In some cases, agencies were created exclusively to support SMEs, especially to increase their access to financing. In addition, SMEs received direct financial support, for example, through the creation of special credit funds and credit guarantee funds. Indirect financial support was provided through tax incentives, lower interest rates, and the relaxation of regulatory requirements.

A comparison of the SME sectors in Taipei,China and Korea after the 1997/98 crisis demonstrates the importance of government policies. Although the Korean firms were subject to greater external impact and turbulence than their Taipei,China counterparts, they seem to have performed better in the period immediately after 1997. This can be partly attributed to the Korean government's heightened commitment to SMEs in mid-1998, and the subsequent creation of a framework of SME policies aimed at helping SMEs overcome barriers and supporting structural reforms and technological development (Gregory et al. 2002). The government's effort to restructure the financial system in the 1990s is another key factor explaining the ability of Korea's SME sector to cope (Hall and Harvie 2003). SME-friendly reforms included easing regulations on

Table 2.7 **Selected Policy Measures to Assist Enterprises**

Region/ Economy	SME Loans	Loan Guarantees	Tax Incentives	Others
		South and Central Asia		
Bangladesh	Continue current thrust of providing adequate credit support to agriculture, SMEs, and other productive sectors that are primary sources of job expansion			
India	Stimulus package focusing on access to credit, and to protect employment in labor-intensive industries and government infrastructure; provided shipment credit for labor-intensive exports with interest subvention	Credit Guarantees; Fund Trust for Micro and Small Enterprises	Duty reductions/eliminations and service tax refunds	Additional allocation for export incentive schemes
Kazakhstan				Macroeconomic Stabilization Plan costing $15 billion, which includes SME development
Kyrgyz Republic			Unified tax code for small businesses fell from 10% to 6%	
Pakistan	Subsidized interest rates; provided credit finance to exporters by enhancing bank limits under the Export Finance Schemes and Long-term Financing Facility by Rs35 billion	Credit Guarantee Agency; Credit Information Center		
Sri Lanka				Stimulus package valued at Rs16 billion which includes cuts in fuel prices and incentives to tea, rubber, cinnamon, and garments export sectors
Uzbekistan	Lending on concessional terms for exporters		Tax cuts for SMEs, tax deferments and tax exemptions for export industries	
		Southeast Asia		
Indonesia	Simplified requirements for lending to SMEs	Direct People's Business Credit Scheme (KUR)		
Malaysia		SME Credit Bureau; $16 billion stimulus package that focused on job creation and credit guarantees to SMEs		
Philippines			Exempt from income tax, import duty, for 6 years	
Singapore	$1.5 billion package that improves business access to credit and trade finance scheme to help exporters obtain loans and insurance		$1.8 billion for tax measures & grants to improve cash flow and competitiveness of firms	
Thailand		Portfolio Guarantee Scheme for SMEs	Enacted tax measures to promote SMEs in January 2009; extension of tax allowance for mortgage interest payments and property tax breaks for companies	
		East Asia		
China, People's Republic of	5 state banks to open special service credit outlets for SMEs in 5 yrs; additional CNY 1 billion for SMEs; reserve requirements for banks have been reduced and lending quotas have been increased		Tax rebates for exports; VAT cut by allowing companies to deduct the full cost of capital equipment	
Hong Kong, China		Expansion of SME Credit Guarantee Scheme to HK$100 billion while continuing to provide 70% loan guarantees		
Korea, Republic of	Increase loans to SME from $21.4 billion to $31.4 billion	Increase credit guarantee for SME to 62.6 trillion won in 2009; and cut interest rates on special loans to SMEs		
Taipei,China		Increased donation to SME Credit Guarantee Fund by NT$1 billion		NT$200 billion to develop competitive industries and NT$42.7 billion to promote employment and provide on-the-job training to workers over 4 years

Source: Various reports compiled by ADB staff.

Box 2.3 **Policy Measures to Assist SMEs in the People's Republic of China**

Small- and medium-sized enterprises (SMEs) in the People's Republic of China (PRC), like their counterparts elsewhere, have been hurt by the current worldwide economic crisis, and began to feel the effects at a time (in the first half of 2008) when they were already facing serious operational difficulties due to increases in input and labor costs, yuan appreciation, and the then tighter monetary policies aimed at slowing an over-heated economy.

The combined effect of the earlier difficulties and the current crisis has been stark. According to one official estimate, by the end of 2008, about 7.5% of the PRC's SMEs had already gone out of business, and an even greater number were forced to curtail their operations. While the PRC's export-oriented SMEs were the first to be affected by the crisis, the impact on other SMEs has also been severe, according to media reports.

The government's expansionary fiscal and monetary policy should help alleviate a difficult situation. Some of the measures are aimed directly at assisting SMEs. For example, on the fiscal front, the government has canceled a number of fees previously levied on SMEs, and increased the tax rebate rate for enterprises in certain sectors (such as textiles). Similarly, the People's Bank of China has reduced the required reserve ratio for small and medium-sized financial institutions (SMFIs) by 4 percentage points, twice that for major financial institutions. This policy is widely believed to favor SMEs given that SMFIs are expected to lend disproportionately more to them.

A number of steps have also been taken in developing financial markets and institutions. In direct financing, the main policy developments include the issuance of "SME collective bonds", permitting eligible SMEs to finally raise funds directly from the capital market for long-term development. Another development is the recent launch, after years of hesitation, of the Growth Enterprise Board in the capital market to meet the needs of rapidly growing SMEs. In indirect financing, important policy developments—some initiated almost 3 years ago but expected to bear fruit over the short and medium term—have included:

(i) Allowing private capital to enter rural financial markets by establishing "village-township banks", credit companies, and rural credit unions in rural areas.
(ii) Permitting the establishment of small credit companies to provide loans to small enterprises. (By the end of March 2009, 583 small credit companies had been set up.)
(iii) Urging existing commercial banks to establish separate pseudo-subsidiary style special SME departments to serve the special financing needs of SMEs.
(iv) Allocating large scale funds to develop SME-oriented credit guarantee agencies and waiving three years' business tax for such credit guarantee institutions.

An assessment of the effectiveness of these policies is premature, as it will take time for their effect to become clear. However, the following points may be noted: first, while the PRC's SMEs have been considerably under-serviced by its formal financial institutions, the reason for this is not some specific weaknesses in these institutions, but the general lack of development of a comprehensive and well-functioning formal financial sector. Until such progress is made, SMEs are likely to remain under-serviced. Second, a comprehensive range of formal financial institutions can ensure that problems inherent to any financial system, such as risks and information asymmetries, can be addressed by the right institutions for the right clients. Thus, SMEs may be better serviced by SMFIs, including village-township banks and small credit companies. In this context, steps to establish and effectively regulate these and other similar institutions are welcome. In summary, there are few quick fixes to the difficulties SMEs face accessing finance. As the discussion in Section 6 of this chapter indicates, progress on this front will take time.

Source: Xiaoping Xu, Center for Small Enterprise Financing Studies, Shanghai University of Finance and Economics.

entry barriers and business activities; allowing foreigners to purchase long-term non-guaranteed bonds issued by SMEs; and introducing measures to increase the availability of credit (Oh et al. 2008).

Unfortunately, the effectiveness of these measures is hard to judge rigorously. Studies such as Oh et al (2008), whereby the effect of a credit guarantee program was introduced by the Korean government to support SMEs, seem to be quite rare (Box 2.5). (A credit guarantee program reduces the losses incurred by banks from defaulting SMEs by assuming a share of the losses normally in return for a guarantee fee.) More generally, there is a suspicion that in many cases the interventions undertaken may have been poorly implemented. For example, in the PRC, while the government lowered benchmark interest rates for banks, some banks still increased interest rates for SMEs by 20–60%, charged advisory fees, and required cash-strapped enterprises to repay loans in advance. As Box 2.3 has argued on the basis of the experience in the PRC, there is in general no quick fix solution to such problems. What is required are longer-term measures aimed at strengthening financial development.

In the context of the crisis today, the most common government response seems to be an increase in credit guarantee programs for SMEs.[13] Anecdotal evidence suggests, however, that banks have been slow to participate for several reasons. To some extent, the issue is one of timing—more time is needed to implement the program through the network of local branches. But more generally, commercial banks have difficulty finding bankable SMEs—an enduring problem that is discussed in more detail in Section 6—while government SME banks face huge amounts of nonperforming loans. Indeed, one

13 In 2009, the Korean government's credit guarantee for SMEs will be increased by W62.6 trillion, more than 7% of Korean gross domestic product (GDP), up significantly from around 5% of GDP in 2008.

Box 2.4 **SMEs in the 1997/98 Asian Financial Crisis**

There is considerable interest in policy circles in understanding the links between industrial structure and economic resilience. For example, it is often claimed that small firms, because they can adjust faster to changing circumstances, can better deal with economic shocks, or that they can better absorb labor in times of crisis. The experience of the 1997/98 Asian financial crisis sheds some useful light on these issues.

The evidence of SMEs as shock absorbers is mixed. In Indonesia, on one hand, the data seems to suggest that SMEs weathered the crisis better than large enterprises.[1] On the other, small firms recorded the highest rate of closures among all enterprises. Indeed, small firm exits led to a rupiah (Rp) 354 billion loss in exports from 1996 to 2000, but expansions and new entries to the sector accounted for a Rp 1,187 billion gain in exports, suggesting that a high exit rate in the sector was coupled with high entry rates.[2]

As for SMEs safeguarding employment, the evidence has not been consistent. In Malaysia and Republic of Korea, a smaller proportion of small firms reported fewer workers after the crisis as compared to their large counterparts, suggesting the former engaged in less retrenchment; but the data from Indonesia and Thailand shows the opposite (see Box Table 2.4). Also, in capacity utilization, large enterprises performed better in all five countries, although this is inconclusive given that firms' capacity utilization before the crisis is unavailable for comparison.

Box Table 2.4 **Impact of 1997 Crisis on East Asian Firms**

		Share of Firms with Fewer Workers After Crisis (%)	Capacity Utilization Level After Crisis (%)
Korea, Rep. of	Small	61	71
	Large	80	77
Indonesia	Small	54	51
	Large	45	63
Philippines	Small	50	76
	Large	50	79
Malaysia	Small	29	64
	Large	40	73
Thailand	Small	56	57
	Large	45	67

Source: Dwor-Frécaut, Colaço, and Hallward-Driemeier (2000). Table 1.3, pg.9.

1 A study by Wengel and Rodriguez (2006) found that over the period of 1996 to 2000, exports by small firms (those with fewer than 100 workers) grew by 83%, while those of the largest enterprises fell by 10%. Illustrating SMEs' contribution to the Indonesian economy, the sector's share of total industrial exports increased from 28.4% in 1996 to 34.4% in 2000.

2 A possible reason large Indonesian enterprises fared worse in exports than SMEs is because the former were too dependent on imported inputs. SMEs' low import requirements allowed them to reinforce their international competitiveness, and easily shift from domestic to overseas markets. Another possibility is that SMEs were less reliant on formal credit—only one in five SMEs had formal bank loans (Brazier and Rodriguez 2002)—sparing them the financial burdens that large enterprises suffered because of the banking sector meltdown.

lesson learned from the measures taken in the aftermath of the 1997/98 Asian financial crisis is that forcing state banks to provide cheap and easy credit to SMEs without careful review is likely to result in resource misallocation. For example, the SME Bank of Thailand reported that nonperforming loans of SMEs amounted to 22% of total credit outstanding compared to an average of 16–17% in the financial sector as a whole.

Finally, it should be noted that the provision of credit alone cannot ensure SMEs will be successful. As will be argued later in this chapter, a key constraint for SMEs relates to technology and skills. The focus of assistance should thus be on providing holistic and long-term solutions to the problems SMEs face, not just on helping SMEs survive the crisis but also supporting their capacity for long-term development and growth.

2.5 Fostering Enterprise Dynamism in the Aftermath of the Crisis

It is too early to know whether a global economic recovery is taking hold. However, there seems to be agreement among many analysts about the broad contours of global trade and finance that will emerge in its aftermath. In particular, it is widely believed that world trade will grow slower than in the run-up to the crisis, and there will be less tolerance for large current account balances in the US and other industrialized nations (ADB 2009b and Rodrik 2009).

In developing Asia, while the vast majority of enterprises are oriented toward meeting domestic demand, exports of manufactured products in particular are widely believed to have contributed to the broader economic dynamism of successful East and Southeast Asian economies.[14] (Conversely, the weak record of South Asian countries in exporting manufactured products is often taken as both symptom and cause of that region's weaker performance.) Moreover, exports represented an important way out of the Asian financial crisis of 1997/98 for affected economies such as Indonesia, Korea, Malaysia, and Thailand.

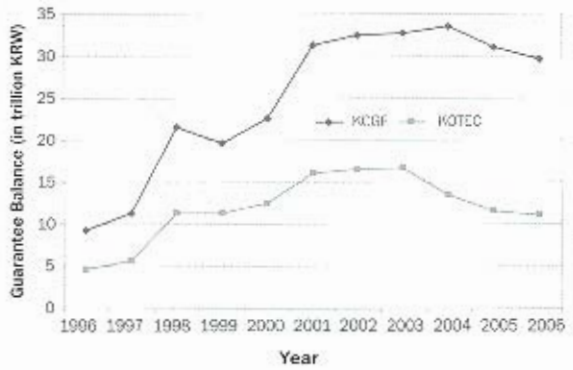
14 There are many channels that have been put forward for the special role for exports. These range from highlighting the connection between exporting and gains from learning about new technologies and markets; the fact that export earnings enabled countries to import productivity improving capital goods and other inputs to production; and also that exports allow an expansion of aggregate demand without much inflationary pressure and without the danger of a wage-price spiral (see ADB (2005b) and Felipe (2003) for a detailed discussion).

Box 2.5 **Credit Guarantees for SMEs: Their Efficacy in the Republic of Korea After the 1997/98 Asian Financial Crisis**

Credit guarantees became a popular policy instrument for Asian governments to help domestic firms, especially SMEs, in the wake of the crisis. However, despite the scale of funding required for the program to function, there has been scant evaluation of credit guarantees. Oh et al. (2008) examine the efficacy of such schemes in Korea, using propensity score matching methods and a complete, comprehensive panel database of all manufacturing firms with more than five employees.

Public credit guarantees in Korea are provided by two major institutions: Korea Credit Guarantee Fund (KCGF) and the Korea Technology Credit Guarantee Fund (KOTEC). KCGF was established in 1976 with the aim of extending credit guarantees to promising enterprises lacking tangible collateral. KOTEC was founded in 1989 to focus on technology-based enterprises. As shown in Box Figure 2.3, the amount of credit guarantee increased steeply in 1998.

Box Figure 2.3 **Credit Guarantees for KCGF and KOTEC**



Source: Oh et al (2008).

For the manufacturing industry, these public guarantees cover about a third of total credit guarantee balances for 2001 and 2002. For their sample, Oh et al. (2008) exclude firms that do not have complete data over 2000–2003, yielding a sample encompassing roughly half of all manufacturing plants. In these two years, credit guarantees covered almost one fifth of these manufacturing firms: about 9% of all manufacturing firms received credit guarantees from KCGF and KOTEC each, and another 2% received them from both agencies.

An important finding is that there were initial differences in characteristics of firms that eventually received support in 2001. Thus it is important for evaluators to account for selection. In particular, credit guarantees are significantly more likely to be allocated to firms with larger sales and more workers. The researchers also found evidence of adverse selection, in that firms supported by both programs are more likely to have lower levels of total factor productivity than non-supported firms.

The impact of these credit guarantees is large and significant for both KCGF and KOTEC: sales in supported firms grew more than 16% faster than in non-supported firms. This positive differential is observed for employment and wage growth, albeit at a lower level. Credit guarantees also slightly increased the survival probability of firms (about 2–3%).[1]

1 Of course, if the firms covered were those that were less productive to begin with—as suggested by their lower levels of total factor productivity—it is possible that the credit guarantees may have hurt the long-run productivity of the economy by extending the life of less productive firms.

Source: Oh et al. (2008).

Yet, a period of muted post-crisis growth in world trade need not have dire implications for developing Asia. First, the region is very diverse and there are many countries where exports are by no means particularly large relative to the size of their economies. For such countries, including those from South Asia as well as Cambodia and Lao People's Democratic Republic (Lao PDR), greater international integration will remain both possible and desirable. This is especially so if these countries also diversify their production structures so that their exports are not overwhelmingly dependent on narrowly defined product lines or one or two major markets.

Second, for countries with persistent current-account surpluses, such as the PRC, some rebalancing of growth toward domestic demand will be required, as argued in ADB (2009b). Of course, this is not going to be easy. But if the process is successful, the benefits will accrue to the whole region, not only the countries achieving this. In particular, a successful rebalancing would lead to more robust regional integration (that is, rather than regional integration in which production networks are heavily geared to final demand in industrialized countries).

The success of rebalancing will depend on several factors. A crucial one is the emergence of a large and rapidly growing middle class. This in turn will hinge on the dynamism of Asian enterprises, especially small- and medium-sized enterprises (SMEs), where a large fraction of Asia's workers are employed. Understanding how public policy can improve enterprise performance, especially of SMEs, therefore becomes critical—a subject explored in the remainder of this chapter.

3. Enterprises in Asia: A Snapshot

There can be big payoffs from public policy efforts to improve enterprise performance, especially of smaller enterprises. But before we discuss the specific shape and form public policy should take, it is vital to better understand the very diverse nature of Asia's enterprises. Enterprises obviously vary in the sectors they operate in and in what they produce. But they also vary considerably in production technology, productivity, and the earnings and wages they generate, which can have important implications for public policy.

We organize our discussion around the size structure of enterprises in Asia.[15] The main reason for doing so is that enterprise size may be positively correlated with measures of (labor) productivity and higher wages. Indeed, at least since the Moore (1911) statistical study of daily wages of Italian working women in textile mills, the finding that wages are higher in larger enterprises has been confirmed repeatedly in different contexts. As put by Oi and Idson (1999, pg. 2,207) in their review of the relationship between firm size and wages in mostly industrialized countries, the facts Moore uncovered had not changed nearly a century later:

> "A worker who holds a job in a large firm is paid a higher wage, receives more generous fringe benefits, gets more training, is provided with a cleaner, safer, and generally more pleasant work environment. She has access to newer technologies and superior equipment. She is, however, obliged to produce standardized as opposed to customized goods and services, and for the most part to perform the work in tandem with other members of a larger team. The cost of finding a job with a small firm is lower. The personal relation between employee and employer may be closer, but layoff and firm failure rates are higher, resulting in less job security."

To the extent that an important part of this correlation reflects a causal relationship running from size to productivity and wages, any factor that constrains firm size will have adverse implications for the growth of productivity and wages. In this way, an understanding of the size structure of enterprises in Asia and the factors that explain it can be key to an analysis of the potential constraints to enterprise growth and, ultimately, economic growth. Accordingly, we examine how employment is distributed across enterprises of different sizes in developing Asia, and whether it is the case that larger enterprises pay higher wages and are more productive.

We examine these questions mainly (though not exclusively) using manufacturing sector data. These data are described in Box 3.1. As this box explains, comparisons of the size structure of enterprises across countries in the region are made difficult on account of both data collection and data reporting issues. Comparability problems tend to be most severe so far as Asia's smallest enterprises are concerned. We therefore split our discussion into two. We first discuss microenterprises in the region and then move on to the remaining enterprises—that is, the small, medium, and large. To the extent possible, we use what is a fairly standard way of distinguishing these enterprises in the literature. That is, we treat microenterprises as those with less than five workers; small enterprises as those with 5–49 workers; medium-sized enterprises as those with 50–199 workers; and large enterprises, as those with 200 or more workers.[16]

3.1 Microenterprises

Often defined as having less than five workers and engaged in non-primary activities, microenterprises are dominant in large parts of developing Asia. But because most operate 'informally', that is, without formal registration, official statistics based on enterprise surveys may underestimate the number of microenterprises (as described in Box 3.1)

Even so, the available data clearly show the numerical importance of microenterprises, especially in lower income economies. In the manufacturing sector, for example, where enterprise-related statistics tend to be most

15 The terms enterprise (or firms) and establishment are often used interchangeably in this chapter. These are distinct concepts. An establishment is a single physical location at which business is conducted or where services or industrial operations are performed. An enterprise or firm is a business organization consisting of one or more domestic establishments under common ownership or control. For companies with only one establishment, the enterprise and the establishment are the same. Most surveys and censuses in developing Asia use the establishment as their unit of analysis. However, there are exceptions. In the People's Republic of China, Taipei,China and Viet Nam, for example, the enterprise is usually the statistical unit used in census enumeration. A detailed discussion of data and measurement issues as they concern enterprises and establishments in developing Asia is provided in Homecillo, Maligalig, and Hasan (forthcoming).

16 The employment thresholds used in this breakdown are not necessarily the ones used by individual countries. Indeed, country practices vary considerably. For example, for the Indonesian census, while microenterprises are defined as those with less than 5 workers as above, small, medium, and large enterprises are defined on the basis of the following thresholds: 5–19 workers, 20–99 workers, and 100 workers or more. Moreover, different agencies within countries may use different criteria. Indeed, it is common in countries to have, in addition to an employment-based system for classifying enterprises, an asset-based one as well. Details on country practices can be found in Homecillo, Maligalig, and Hasan (forthcoming).

Box 3.1 Size Structure of Enterprises Across Selected Economies: Data Issues

Box Table 3.1.1 presents important attributes of the data we use for describing the size structure of enterprises across the developing Asian economies for which detailed information was available. The following points are important to note. First, we rely primarily on tabulations from enterprise surveys and censuses conducted by national statistics offices. (The exception is India, where we work directly with establishment level data and for which information is provided in two rows.) These tabulations provide information on key variables of interest, such as total employment and value added, for different size groups of enterprises. For example, the tabulations for Malaysia tell us the total number of employees in enterprises with under 5 workers, 5–49 workers, and so on.

Second, the size groups used in the tabulations vary by country. This can be seen from column 3 which describes the smallest size group reported by the different countries. While this is enterprises with less than 5 workers in many countries, the tabulations for the People's Republic of China (PRC), Republic of Korea, and Thailand use different employment thresholds.

Third, although the different employment thresholds for defining enterprise size groups across countries creates comparability problems, fortunately these diminish considerably once we go beyond the smallest enterprises. Thus, consider the fairly standard breakdown of enterprises across countries into four groups that we rely on: microenterprises, those with less than five workers; small enterprises, those with 5–49 workers; medium-sized enterprises, those with 50–199 workers; and large enterprises, those with 200 or more workers. As it turns out, the reported employment thresholds are such that comparability problems are virtually nonexistent for medium-sized enterprises and large enterprises.

Fourth, a different comparability problem arises on account of the differential coverage of 'informal' enterprises in surveys and censuses across economies. Since informal enterprises are businesses that are operated without formal registration with official authorities, surveying these enterprises is difficult. Indeed, very few countries in the region have a robust data collection strategy for enterprises in the informal sector (Homecillo, Maligalig, and Hasan forthcoming). An important exception is India where the national statistics office carries out a comprehensive survey of informal enterprises once every five years. Indeed, including the so-called 'own-account manufacturing enterprises' (essentially individually or family-run microenterprises) would increase the number of manufacturing enterprises from 2.6 million (as listed in row 2 of Box Table 3.1.1) to 17 million (row 3). The corresponding effect on manufacturing employment would be to more than double it (from around 21 million to 45 million). Similarly, though to a much lesser extent, including the 5.9 million self-employed workers in People's Republic of China manufacturing would take the employment total in manufacturing to 97.6 million (from the 91.7 million reported in row 1).

As the vast majority of informal enterprises tend to be microenterprises, differential coverage of informal enterprises across countries' surveys or censuses leads to comparability problems that are once again most severe in the case of microenterprises.

A sense of the extent to which enterprise surveys and censuses capture informal enterprises can be obtained by comparing the total employment figures based on enterprise data with the corresponding employment figures for manufacturing obtained from labor force surveys. Since informal enterprises are typically run by the self-employed, and the labor force surveys typically do a good job of capturing this category of workers, large discrepancies between the two sets of manufacturing employment totals would suggest that the corresponding enterprise survey or census is missing out on informal enterprises. As can be seen from column 5, which reports whether the discrepancies are large or minor, the enterprise surveys of the Philippines and Thailand, in particular, seem to be missing out on capturing informal enterprises.

Box Table 3.1.1 **Enterprises and Employment in Manufacturing, Selected Economies**

Economy	Source	Lowest Size Group Covered	Survey/Census Data in Manufacturing (in 100,000)		Survey/Census Manufacturing employment (% of LFS manufacturing employment)
			Number of Enterprises	Number of Workers	
China, People's Republic of	National Economic Census (2004)	1–8	13.7	917	110%
India (without own-account manufacturing enterprises)	ASI (2004–2005) and NSSO (2005–2006)	n.a.	25.7	209	n.a.
India (with own-account manufacturing enterprises)	ASI (2004–2005) and NSSO (2005–2006)	n.a.	171	446	102%
Indonesia	Economic Census (2006)	1–4	32	121	104%
Korea, Republic of (firms employing > 4)	Report on Mining and Manufacturing (2004)	5–9	1.1	27.9	n.a.
Malaysia	Annual Survey of Manufacturing Industries (2005)	1–4	0.3	16.7	84%
Philippines	Annual Survey of Philippine Business and Industry (2005)	1–4	1.1	14.4	47%
Taipei,China	Industry, Commerce and Service Census (2006)	1–4	1.5	26.9	97%
Thailand	Industrial Census (2007)	1–15	4.6	33.8	60%

ASI = Annual Survey of Industries; NSSO = National Sample Survey Organisation; LFS = Labor Force Survey; n.a. = not applicable

Note: Tabulated distribution data for PRC is drawn from Lu (2009).

complete, data from India and Indonesia reveal that 90–93% of establishments operate with less than five workers. In contrast, the corresponding number for manufacturing in Taipei,China is 49%. However, it may be noted that even in Taipei,China, microenterprises account for a large majority of the total number of enterprises outside manufacturing: the share of total non-manufacturing (and nonprimary) enterprises made up of microenterprises is around 82%.

Contribution to employment

Microenterprises are an important source of employment for Asia's workers. One way to see this is by examining statistics on self-employment. As the left panel of Figure 3.1 reveals, self-employment accounts for 30% or more of total nonagricultural employment in a wide range of developing Asian countries, including Bangladesh, Indonesia, India, Pakistan, Philippines, and even Thailand. The overwhelming majority of the self-employed in these countries is made up of 'own-account' workers,[17] and therefore represents individuals and families operating microenterprises (the right panel of Figure 3.1). The main exceptions are the newly industrialized economies (NIEs),[18] where a nontrivial proportion of the self-employed are employers. However, many of these self-employed employers may also be operating microenterprises. The pattern of results remains similar if we consider manufacturing employment (Figure 3.2).[19]

Of course, to the extent that microenterprises also employ wage labor, the proportion of employment accounted for by microenterprises will be even higher than what self-employment statistics suggest. Again, this is more so for lower income countries. Table 3.1 reports employment in microenterprises based on enterprise surveys and/or censuses (with the first column listing the employment thresholds used for defining microenterprises). As may be seen from the third column, in India and Indonesia around 61% and 44% of manufacturing employment, respectively, is in microenterprises, considerably higher than the share of self-employment reported in Figure 3.2 and based on labor force surveys (around 50% and 30% for India and Indonesia, respectively).[20]

However, the figures for the other countries are far lower, including the lower-income Philippines. To what extent is this due to different data collection methodologies? As readers may recall from Box 3.1, the comparison of manufacturing employment totals from enterprise data versus labor force survey data reveals significant differences for the Philippines, Malaysia, and

Figure 3.1 **Self-Employment in Industry and Services**



Source: Authors' estimates for India using National Sample Survey Organization (NSSO) Employment-Unemployment Survey data (2004–05) and International Labour Organization LABORSTA On-line Statistics for the remaining.

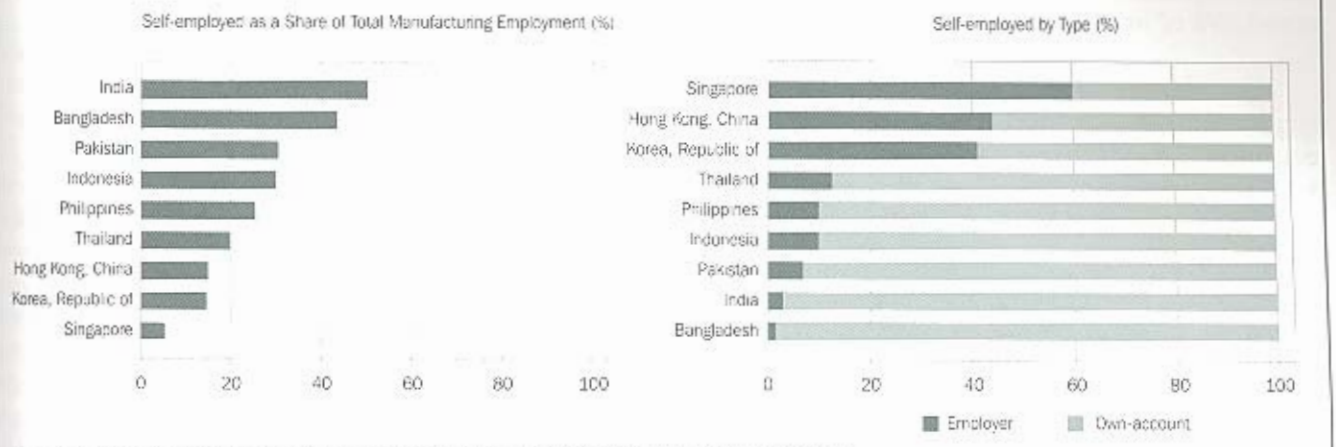
17 Own-account workers are those self-employed workers who operate their enterprises on their own account or with one or a few partners. By and large, they run their enterprises without hiring any labor. In this way, they can be distinguished from self-employed *employers*.

18 NIEs = Hong Kong, China; Republic of Korea; Singapore; and Taipei,China

19 What is interesting in this case, however, is the larger share of the self-employed in high income economies such as Hong Kong, China; Republic of Korea; and Singapore, that can be classified as employers, as opposed to own-account workers.

20 The employment shares in microenterprises for India are generated using establishment level data from the Annual Survey of Industries and National Sample Survey Organisation survey of unorganized manufacturing enterprises and computing the number of workers in enterprises, formal or informal, with less than 5 workers.

Figure 3.2 **Self-Employment in Manufacturing**



Source: Authors' estimates for India using National Sample Survey Organisation (NSSO) Employment-Unemployment Survey data (2004–05) and International Labour Organization (ILO) LABORSTA On-line Statistics for the remaining.

Table 3.1 **Manufacturing Employment in Microenterprises**

Economy	size	Manufacturing Enterprise Survey/Census (adjusted share in parentheses) number of workers	share in total
PRC**	1–8	1,617,807	2% (8%)**
India***	1–4	27,055,699	61%
Indonesia	1–4	5,352,789	44%
Malaysia	1–4	23,352	1% (17%)*
Philippines	1–4	228,932	16% (60%)*
Taipei,China	1–4	172,689	6%
Thailand	1–15	983,398	22% (38%)*

PRC = People's Republic of China

Notes: * Adjusted share draws upon manufacturing employment information from labor force surveys. ** Adjusted share draws upon census based figure on self-employment in manufacturing. *** Numbers for India include employment in own-account manufacturing enterprises.

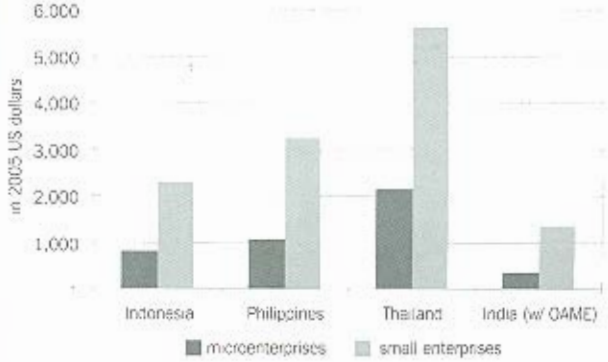
Sources: As in Box Table 3.1.1.

Thailand.[21] Assuming that the differences in these three countries results from noncoverage (or under coverage) of microenterprises in the enterprise survey/censuses, we can add the extra employment recorded in the labor force surveys to the employment in microenterprises in the enterprise surveys/censuses. The resulting adjusted employment shares in microenterprises turn out to be 60% for the Philippines and around 38% for Thailand. That in Malaysia remains relatively low, around 17%. Thus, the economies where manufacturing employment in microenterprises is relatively low includes not only higher income economies such as Taipei,China (only around 6% are employed in enterprises with less than five workers), but also Malaysia and the PRC.[22]

How productive are microenterprises?

By all accounts, the vast majority of microenterprises operate with traditional, low-productivity technologies and generate fairly meager earnings for their owners and employees. Consider Figure 3.3, which compares labor productivity as captured by the ratio of value added to number of workers across microenterprises and small enterprises (those with 5–49 workers) in Indonesia,

Figure 3.3 **Labor Productivity Across Microenterprises and Small Enterprises in Indonesia, Philippines, Thailand, and India**



OAME = Own-account manufacturing enterprise

Note: Microenterprises in Thailand are taken here to mean those that employ 1–15 workers while the small enterprises are those that employ 16–50 workers.

Source: As in Box Table 3.1.1.

21 Recall from column 6 of Box Table 3.1 that enterprise based employment figures are between 47% to 84% of labor force survey based employment figures in these three countries. This is because the coverage of the respective enterprise surveys and censuses either excludes informal enterprises by design (Malaysia and Thailand), or seems to do so in practice (Philippines).

22 In the case of the People's Republic of China, even if we add the 5.9 million workers recorded as self-employed in manufacturing to employment in enterprises with less than nine workers, we are left with an employment share of only 8% in microenterprises.

Philippines, Thailand and India. The numbers indicate that labor productivity in microenterprises is on average around 33% of small enterprises.

In this context, how should one view microenterprises? The fact that microenterprises are less productive than larger enterprises does not tell us about their prospects. Perhaps microenterprises are run by entrepreneurs who go on to expand, become more productive, and become significant employers. As de Mel, McKenzie, and Woodruff (2008a) note:

> "From a policy perspective, understanding who the [owners of microenterprises] are is critical given their weight in the labor force. If [microenterprises are] an incubator for larger firms, then policies should aim to help microentrepreneurs grow and generate employment. If, on the other hand, the owners of the smallest businesses are unlikely to grow to be employers, then policies aimed at job generation should focus instead on constraints to growth among those who are already employers above some threshold, and there is less reason to encourage growth of the smallest enterprises."

Who the micro-entrepreneurs are has been the subject of much debate in the policy and academic world. Thus, while scholars such as Peruvian economist Hernando de Soto point to them as capitalists in waiting held back by credit constraints, weak property rights, and burdensome regulation, a very different view comes from what other scholars call the ILO[23] view. This view grants that while some of the micro-entrepreneurs no doubt go on to grow their businesses significantly and become employers, the vast majority of them would gladly switch to stable wage employment if only the opportunity were available. Put differently, a preponderance of microenterprises (and self-employment) largely reflects the failure of economies to create enough productive employment.

Bringing together systematic evidence on which view is correct is not easy. But several recent studies appear to point to the ILO view as the more accurate one. For example, based on an examination of household surveys from 13 developing countries, Banerjee and Duflo (2007, pg. 21) are led to the following conclusion:[24]

> "While there are many petty entrepreneurs among the middle class, most of them do not seem to be capitalists in waiting. They run businesses, but, for the most part, only because they are still relatively poor and every little bit helps. If they could only find the right salaried job, they might be quite content to shut their business down."

A more direct examination of the nature of microenterprises comes from de Mel, McKenzie, and Woodruff (2008a), who examine the characteristics of own-account workers (that is, those running microenterprises), larger employers, and wage workers in Sri Lanka. As Box 3.2 describes in more detail, a large majority of micro-entrepreneurs in Sri Lanka do not seem to possess the abilities (cognitive, non-verbal reasoning, etc.) of larger employers. They look more like the average wage worker (that is, the ILO view seems to have more to it, at least in this case).

Certainly, more research is required on the nature and prospects of micro-entrepreneurs. However, to the extent that the vast majority of microenterprises are unlikely to expand and become employers, the focus of policies aimed at generating reasonably well paying jobs will have to be on relaxing the constraints to growth among larger enterprises. Indeed, further recent evidence that supports this view comes from the work of La Porta and Shleifer (2008), who analyze manufacturing sector enterprise-level data using the WBES supplemented by information on microenterprises and small firms belonging to the informal sector. They conclude that, in so far as the manufacturing sector is concerned, "the hope of economic development lies in the creation of large registered firms, run by educated managers and utilizing modern practices, including modern technology, marketing, and finance." In the next section we look at such larger enterprises.

3.2 Small, Medium, and Large Enterprises

We now examine how small, medium, and large enterprises are distributed across Asian countries, and how wages and productivity are distributed across these enterprises. As noted earlier, and subject to the limitations noted in Box 3.1, small enterprises are taken to be enterprises with 5–49 workers, medium-sized ones as those with 50–199 workers, and large enterprises as those with 200 or more workers.[25] It should be noted that these cut offs are fairly common in the literature, but do not necessarily conform to the cutoffs used by individual countries.

23 International Labour Organization.

24 Banerjee and Duflo define the middle class as those whose daily consumption per capita is between $2 and $4 or between $6 and $10 (at 1993 purchasing power parity [PPP]).

25 As discussed earlier, countries use different employment cut offs in reporting size-distribution data. By dropping the smallest size group, however, we alleviate comparability problems considerably. Thailand is the one problematic case, where the smallest size group pertains to 1–15 workers.

Box 3.2 **Identifying Microenterprise Owners**

There is a sharp difference in opinion over how to view self-employed, own-account workers. Hernando de Soto (1989) regards them as "capitalists-in-waiting", their entrepreneurial potential stymied by credit constraints, weak property rights, and heavy regulation. Viktor Tokman (2007), along with the International Labour Organization, believes these workers are the product of the "failure of the economic system to create enough productive employment", and that given the opportunity for regular salaried work, they may be more than willing to make the change and abandon their businesses.

Although this issue has yet to be fully resolved, de Mel, McKenzie and Woodruff (2008a) have made an important empirical attempt to systematically compare wage workers, own-account workers, and employers. They used data from a series of surveys in Sri Lanka between 2005 and 2007 that interviewed 618 own-account workers, 456 wage workers and 424 owners of enterprises with between 5 and 50 employees. Information on family background, measures of ability, attitudes toward risk, labor history, and measures from the literature on entrepreneurial psychology are collected from these surveys.

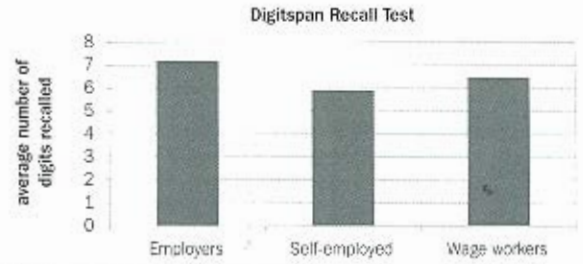
A recurring finding of this study is that own-account workers (or microentrepreneurs) look more like wage workers rather than owners of large enterprises (or entrepreneurs). For instance, de Mel, McKenzie and Woodruff (2008a) found that there was no palpable difference between wage workers and own-account workers across a span of ability tests (Box Figure 3.2.1).

Using other information from their survey, de Mel, McKenzie and Woodruff (2008a) found that parents of entrepreneurs have higher schooling than parents of wage workers who, in turn, cannot be distinguished from the schooling achievements of the parents of the own-account workers. Entrepreneurs are more motivated (important for running a business) and more tenacious (important for making the business grow) than own-account workers, according to tests devised by industrial psychologists. Furthermore, entrepreneurs are older, have significantly higher schooling, and had more advantageous childhood backgrounds than own-account workers.

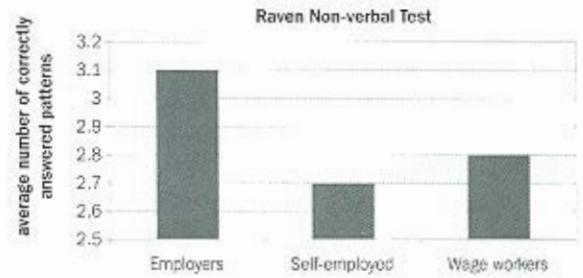
Based on the various characteristics observed across the different types of individuals, de Mel, McKenzie and Woodruff (2008a) found that roughly two-thirds of own-account workers in their sample are better classified as wage workers rather than entrepreneurs in so far as their characteristics relating to entrepreneurship and entrepreneurial ability are concerned.

Taken together, these findings suggest the need for a set of differentiated policies for the dissimilar types of own-account workers. To the extent that the more dynamic of these workers can be identified, policy should help them in the transition to becoming employers.

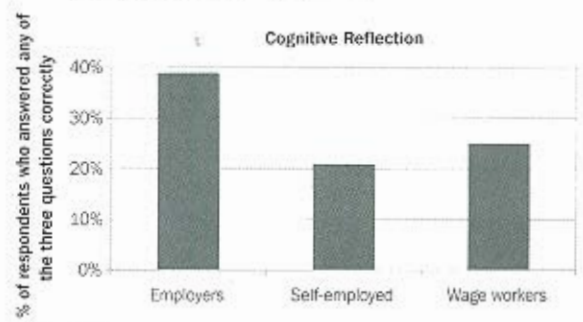
Box Figure 3.2.1 **Ability Measures**



Note: Respondents were shown a three digit number. The card showing the number was then taken away. Ten seconds later, respondents were asked to repeat the number as written on the card. Those responding correctly were shown a four digit number, and so forth up to 11 digits.



Note: For the Raven non-verbal reasoning test, 12 printed pages were provided, each of which contained one 3 x 3 pattern with one cell missing. Below the pattern were eight figures, one of which fit the pattern, and the other seven of which did not. The patterns become progressively more difficult from the first to the 12th page. Respondents were given five minutes to complete as many of the patterns as possible. They were instructed to skip as desired, but told that the patterns became progressively more difficult.



Note: The test asks, for example: "A bat and a ball cost Rs 1,100 in total. The bat costs Rs 1,000 more than the ball. How much does the ball cost?" There are a total of three questions such as these.

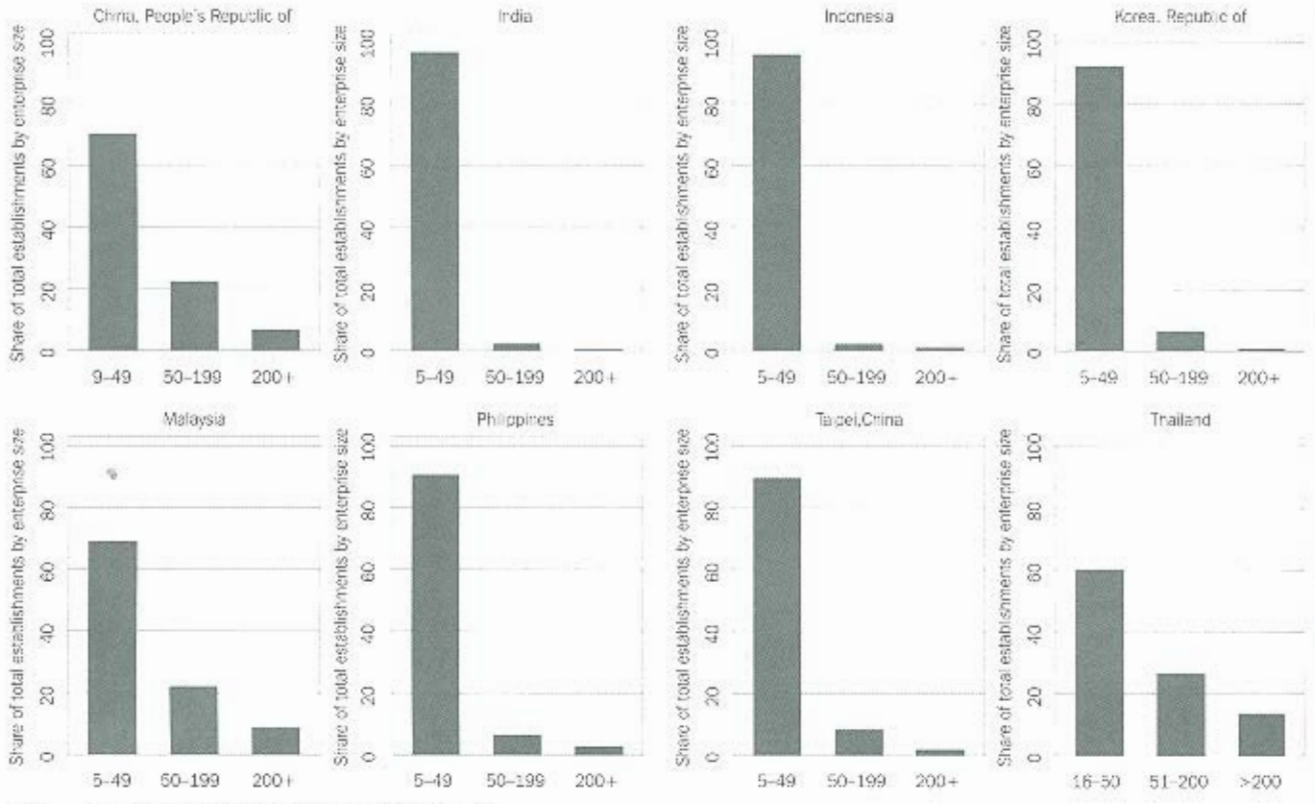
Source: de Mel, McKenzie, and Woodruff (2008a).

Figures 3.4 and 3.5 describe the distribution of number of enterprises and employment, respectively, across size groups once the smallest size category for each country is dropped from the original tabulations.[26] (See Box Table 3.1.1 for data sources.)

Focusing on Figure 3.5, three patterns of size distribution emerge. First, is India and Indonesia (and marginally the Philippines), in which the distribution of employment appears to be characterized by a relatively pronounced "missing middle". Second, are the PRC, Malaysia, and Thailand, in which the share of employment increases steadily with size, and enterprises with 200 workers or more clearly dominate. Finally, there is Korea and Taipei,China, where we see a relatively balanced distribution of employment across small, medium, and large enterprises. These three patterns correspond closely to those described by Mazumdar (1998 and 2009).

The distribution of employment across size groups matters because both productivity and wages tend to increase with firm size. Figure 3.6 confirms this for productivity differentials for every country where information on value added per worker is available. The productivity of small enterprises is only around 20–40% of large ones, with the differentials most pronounced in India, Indonesia, Philippines and Korea. As for the distribution of wages—Figure 3.7 describes average wages across small- and medium-sized enterprises relative to large enterprises—for every country average wages in small enterprises are lower than in medium-sized enterprises, which are in turn lower than wages in large enterprises. (This also appears to be the case in other production sectors of the economy. Box 3.3 describes data from Taipei,China, where detailed information on the size distribution of enterprises is available for a wide variety of production sectors.[27])

Figure 3.4. **Share of Total Establishments by Enterprise Size-Groups (%)**

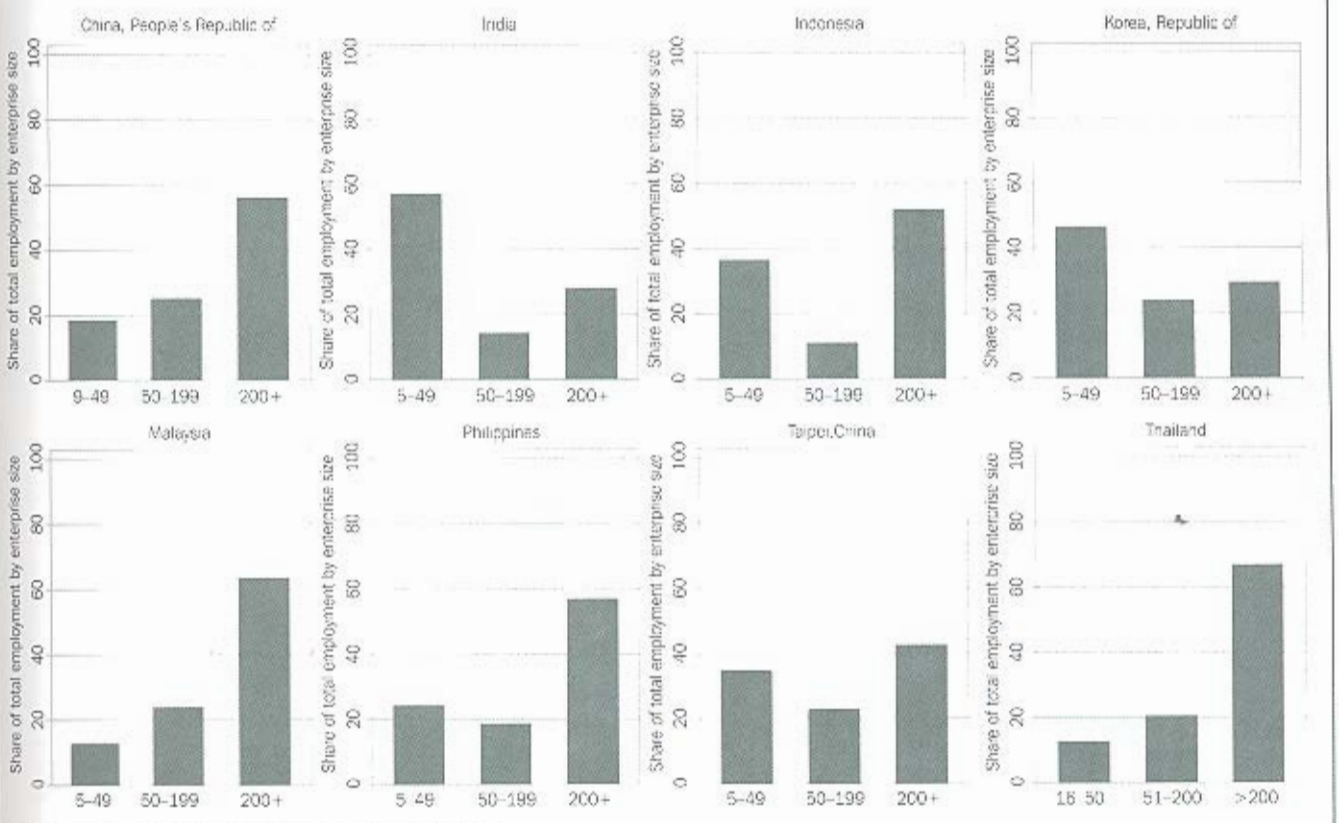


Note: Enterprise size is measured in terms of the number of workers.
Source: As in Box Table 3.1.1.

26 For India, we drop the own-account manufacturing enterprises. This hardly makes any qualitative difference to the analysis given that the vast majority of these enterprises operate with less than five workers.

27 Micro data from India's labor force surveys also reveal a close relationship between average wages and enterprise size for nonmanufacturing sectors (though in this case an effective comparison can only be made between the following enterprise size groups: 1–5 workers; 6–9 workers; 10–19 workers; and 20 workers or more).

Figure 3.5 **Share of Total Employment by Enterprise Size-Groups (%)**



Note: Enterprise size is measured in terms of the number of workers.
Source: As in Box Table 3.1.1.

Significantly, the differentials between average wages across the three size groups are fairly low in PRC, Malaysia, and Thailand. However, they are very large in India, in particular, and in Indonesia and Philippines. When combined with a large share of employment accounted for by small enterprises in India and Indonesia, the large wage differentials translate into very low wages for a large share of manufacturing sector workers. This can be seen more clearly in Table 3.2.

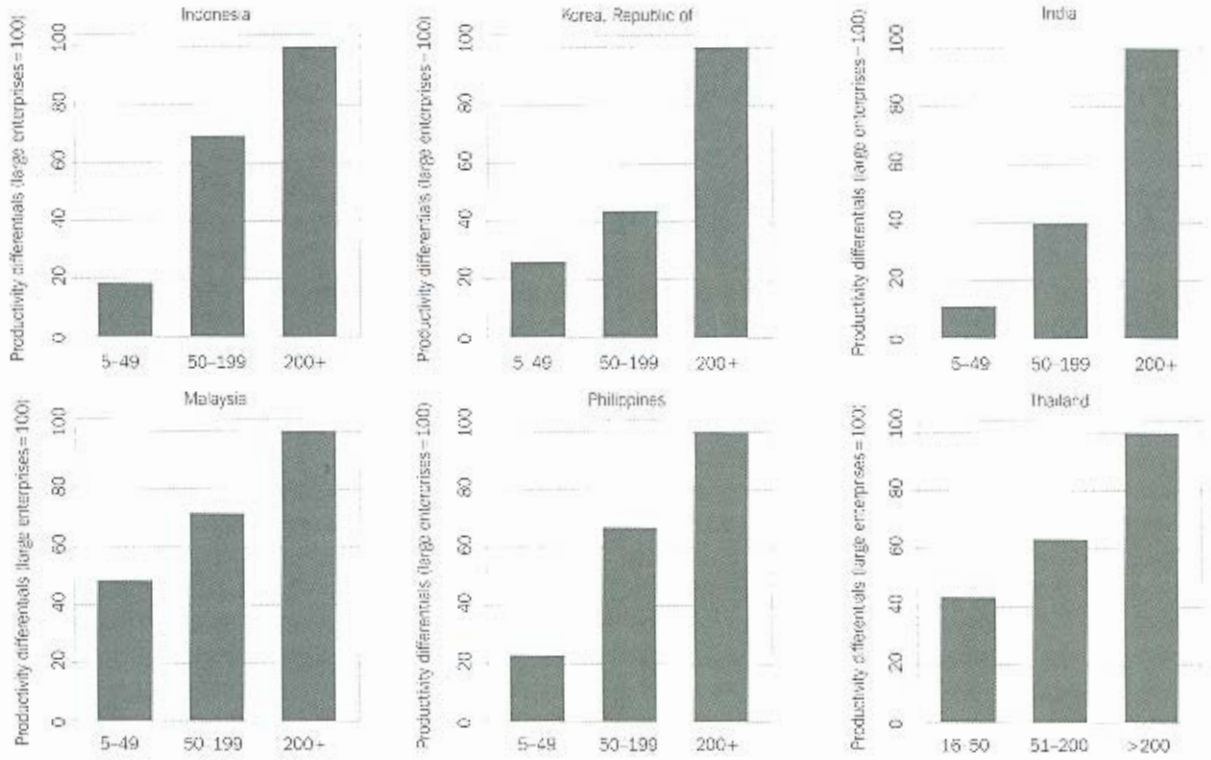
Table 3.2 **Average Annual Wages in 2005 US$ by Enterprise Size**

	Small	Medium	Large
Korea, Rep. of	17,230	22,272	34,560
Taipei,China	12,629	15,506	22,576
Malaysia	4,134	4,844	5,574
Thailand	1,159	1,452	1,629
China, People's Rep. of	1,144	1,315	1,898
Philippines	1,074	2,325	3,163
India	587	1,381	2,699
Indonesia	557	1,413	1,714

Note: Small: 5–49 workers for all countries except China (9–49 workers) and Thailand (16–50 workers); Medium: 50–199 workers for all countries except Thailand (51–200 workers); Large: 200 or more workers for all countries except Thailand (more than 200).
Source: As in Box Table 3.1.1.

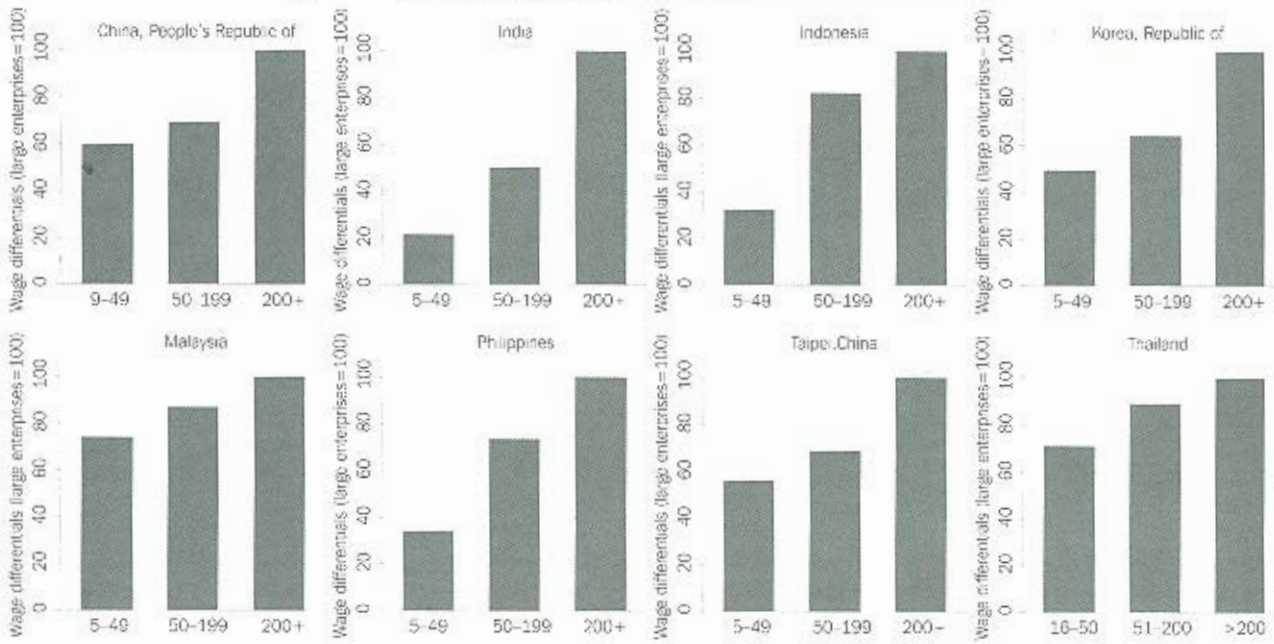
What exactly accounts for the size-wage differentials? The fact that larger firms tend to have higher labor productivity and that wages tend to track labor productivity has something to do with it. But it cannot be the whole story, especially if workers are free to move across enterprises and the locations they are based in. Aside from such segmentation of labor markets one has to look for other explanations. While numerous explanations have been put forward, these cover three broad categories: (i) bigger enterprises pay more (and provide more benefits) because they hire better quality workers, or they may simply be working their employees harder—that is, the higher wages at larger enterprises are compensation for higher quality of work and/or more work; (ii) a second set relies on regulatory features such as employment protection laws, collective bargaining coverage, and minimum-wage regulations that vary with size. This may be because the regulation in question applies to enterprises above certain thresholds, or because enforcement is stricter for larger enterprises; (iii) a final set relies on the superior productivity and/or profitability of big enterprises. In this set up, bigger enterprises may pay "efficiency wages" to

Figure 3.6 **Productivity (Value Added per Worker) Differentials by Enterprise Size-Groups (large enterprises = 100)**



Note: Enterprise size is measured in terms of the number of workers.
Source: As in Box Table 3.1.1.

Figure 3.7 **Wage Differentials by Enterprise Size-Groups (large enterprises = 100)**



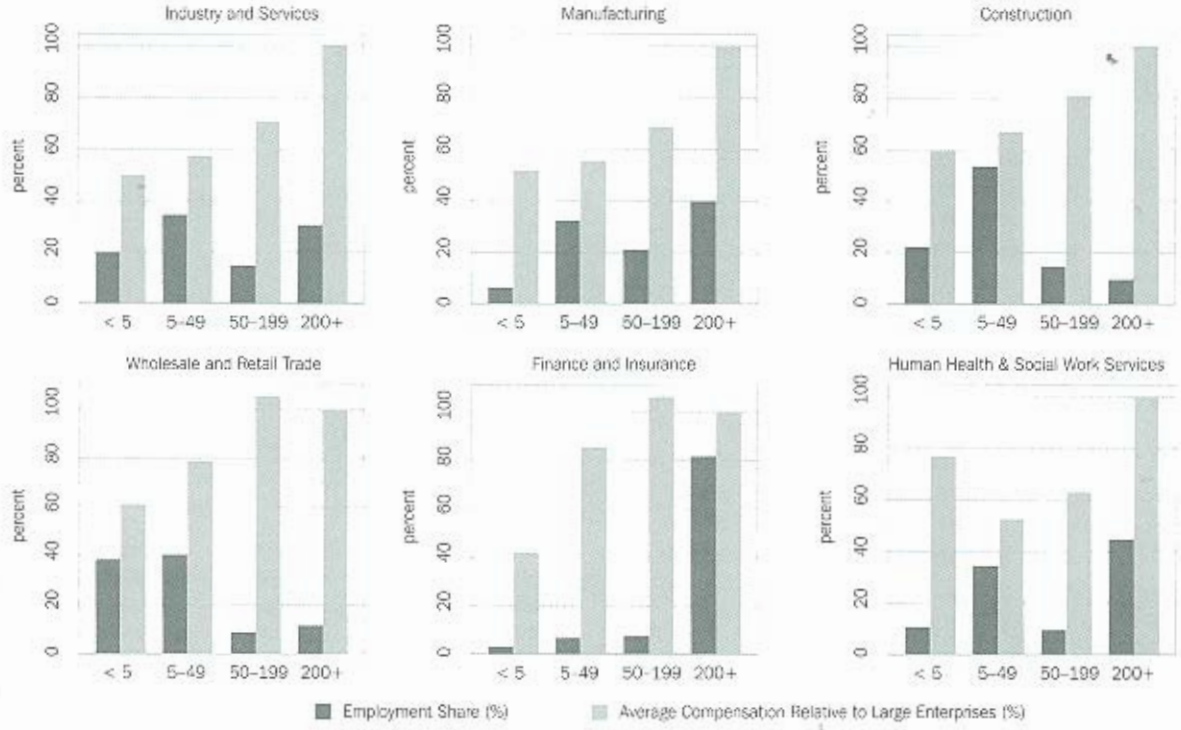
Note: Enterprise size is measured in terms of the number of workers.
Source: As in Box Table 3.1.1.

Box 3.3 **Size-Wage Relationship Across Industries in Taipei,China**

Box Figure 3.3.1 describes the distributions of employment and relative average wages across enterprises belonging to four different size groups (less than 5 workers, 5–49 workers, 50–199 workers, and 200 and more workers) and six different groups of production sectors. In addition to the group formed by combining the industry and services sectors, the distributions pertain to manufacturing and four other major employers. Focusing first on the dark green bars, which represent employment shares across the four enterprise size groups, it can be noted that the size structure of enterprises varies across sectors. In particular, while a substantial proportion of employment in the wholesale and retail trade services sector is accounted for by microenterprises and small enterprises, it is large enterprises that dominate in employment in the finance and insurance sector.

Turning next to the light green bars, which represent relative wages across the four enterprise size groups, we see the familiar pattern of average compensation tending to increase with enterprise size. However, the relationship in a number of sectors is not as consistent as it is in manufacturing. For example, average compensation in microenterprises is higher than in small- or medium-size enterprises in the human health and social work services sector. It is fairly likely that this is driven by occupations such as those of doctors operating private clinics. Similarly, in wholesale and retail trade services and finance and insurance the highest levels of average compensation are to be found in the medium-sized enterprises. Of course, the differentials between these compensation levels and those in the largest enterprises are not considerable (less than 10%).

Box Figure 3.3.1 **Employment Shares and Average Compensation by Enterprise Size-Groups**



Source: Directorate General of Budget, Accounting and Statistics.

deter shirking, or because of profit-sharing motives—that is, they pay more because they can easily afford to. The motive behind profit-sharing may have to do with accepted norms of fairness in society. It may also have to do with the fact that the bargaining power of workers over profits may be greater the more the number of workers. Of course, no one explanation rules out the other.

Despite many empirical attempts, the precise reasons for why larger firms pay higher wages are still under debate and remain difficult to pin down (Brown and Medoff 1989; Oi and Idson 1999). The key difficulty is with data. In particular, detailed data are required not only on workers and enterprises, but the information across workers and enterprises must be matched. Moreover, the data on workers should provide information not only on standard characteristics such as age, gender, and educational qualifications, but also on worker quality. While such data, and corresponding analysis of it, has begun to emerge for industrialized countries, data limitations are a more

serious constraint in developing Asia.[28] In the meantime, it is useful to note that labor force survey data from India and household survey data from the PRC—where surveys provide information not only on wage earnings and standard worker characteristics, but also on the size of enterprises that the workers are employed in—confirm that larger enterprises tend to pay higher wages on average, even after controlling for location, gender, age, and educational attainment.

3.3 Some Implications of the Pattern of Size Distribution

It is clear from the previous discussion that there is considerable diversity across developing Asia in the distribution of employment and average wages and productivity across firm size. Two welfare implications of the different patterns we see in the data include:

First, the size distribution can have implications for inequality within countries. This is probably clearest if we contrast the patterns we find in India and Indonesia with the other countries. As noted above, wage differentials between the smallest and largest groups are quite large in these two countries (21% of large firm wages for India and 32% in Indonesia). In contrast, these differentials have typically been smaller in the other economies (for example, wages of small firms in Korea and Taipei,China are 50% and 56% of wages of large firms, respectively). Moreover, the large percentage of employment accounted for by the smallest (and lowest paying) class of enterprises, along with a missing middle, amplifies the extent of inequality. For example, the distributions of employment and average wages reported above generate Gini coefficients of 0.44 in India, 0.32 in Korea, and 0.22 in Taipei,China.

Second, and perhaps more importantly, a pattern characterized by a large fraction of employment generated in small, low-productivity and low-wage enterprises not only has obvious adverse implications for poverty, it can also have adverse implications for growth prospects. There are two channels through which this may happen: the effect on the growth of markets for modern goods and services whereby a lack of jobs in the more productive and better paying enterprises limits domestic demand for modern goods and services and prevents the formation of a virtuous cycle of increasing labor demand, wages, and production; and the impact on skill formation in the labor market whereby the scope for on-the-job training—a crucial means by which workers acquire skills—is limited because of the prevalence of rudimentary and traditional technologies in small enterprises.

At the same time, it is crucial to point out that while the aggregated data we have examined above shows that higher average wages and productivity are a large firm phenomenon, this does not mean that small firms represent a drag on economic welfare. Small firms can be very productive. In fact, as recent research from industrialized countries shows—some of which is summarized in Box 3.4—small and medium enterprises can not only generate good jobs, they have a vital role to play in innovation, an area typically thought to be the near exclusive domain of large enterprises.

Indeed, the experience of Taipei,China and Korea, as captured by the aggregated statistics presented so far, can demonstrate this. As Table 3.3 reveals, labor productivity is typically higher on average in the small enterprises of these economies than even the large enterprises of many other countries in the region.

Table 3.3 **Productivity Measures (Value Added per Worker/Output per Worker) in 2005 US$ by Enterprise Size**

	Small	Medium	Large
Korea, Rep. of	54,405	90,629	207,315
Taipei,China *	22,227	30,649	78,732
China, People's Rep. of *	15,073	16,795	31,130
Malaysia	9,898	14,646	20,427
Thailand	5,651	8,265	13,057
Philippines	3,248	9,402	14,037
Indonesia	2,292	8,576	12,399
India	1,450	5,223	13,099

* used output per worker as productivity measure.

Note: Small: 5–49 workers for all countries except People's Republic of China (9–49 workers) and Thailand (16–50 workers); Medium: 50–199 workers for all countries except Thailand (51–200 workers); Large: 200 or more workers for all countries except Thailand (more than 200)

Source: As in Box Table 3.1.1.

28 In this context, it is worth noting that a recent study of nine OECD countries makes some progress on bringing together this type of data (Gibson and Stillman 2009). The results indicate a wage premium from working in large enterprises in all nine countries, but of varying importance. Introducing controls for basic characteristics of workers (for example, gender, marital status, location, and potential experience) reduces this wage premium significantly in some countries. But overall, the results suggest that bigger firms do pay higher wages given the same level of skills, leaving the study to lean towards explanations for the size—wage differentials that hinge on the capacity of workers in bigger firms to capture rents or because workers' productivity increases as the size of firms increases.

Box 3.4 **Efficiency and Innovation in US Manufacturing: the Role of SMEs**

A popular, though traditional, view of small firms is that they represent a burden on the economy. This is on account of the existence of economies of scale in production. For example, even though the standard definition of SMEs used in the United States (US) treats firms with less than 500 employees as small, several studies find that output levels of such firms do not meet "minimum efficient scale" (the lowest level of output where minimum average cost is attained) for a variety of manufacturing industries. In particular, "suboptimal" plants are said to account for around half of total manufacturing output as measured by value of shipments. Seen through this lens, public policy that shifts economic activity from smaller firms to larger ones is called for. Indeed, the MIT Commission on Industrial Policy recommended adapting economic policies used in Japan and Germany for targeting leading corporations.

But a more recent view on SMEs has emerged in the US. Especially since the early 1990s, researchers have carefully documented an important role for SMEs in the resurgence of job growth and innovative activities there. This is the result of a better understanding of the role of new firms in driving innovation, especially those that enter an industry not so much to produce the same thing as large incumbents, only at smaller scales, but rather to serve as 'agents of change'. A key process underlying this role involves individuals who work at incumbent firms and move on to launch their own firms based on an innovation of some sort. Issues, such as uncertainty about the expected value of the innovation and/or the appropriation of returns from it, lead some inventors to move out on their own. The connection between this and size comes from the startling finding that many new firms are quite small. Indeed, Audretsch (1995) reports that the mean size of more than 11,000 startups in US manufacturing was less than eight workers per firm. Moreover, while the minimum efficient scale varies across industries and even product classes within an industry, the observed size of most new firms would definitely put them producing at suboptimal scales of output. One reason new firms enter in the face of such disadvantages—even in capital-intensive industries where scale economies are particularly important—is an expectation that the prospects for growth are good. As one analyst has noted, simply imitating large incumbents is almost certainly doomed to failure.

Of course, not all new firms will succeed, and for these firms, exit is likely. Empirical studies seem to bear this out. Audretsch notes that the various empirical studies in the US find that: (i) both the birth and death rate of SMEs is greater than that of large enterprises; (ii) SMEs on average grow faster than large enterprises, and the same is true for younger firms; and (iii) SMEs register a net gain in employment that is greater than in large enterprises. Finally, while standard measures such as research and development expenditures, especially, and patents suggest that SMEs lag large enterprises in innovation, direct measurement of innovative activities through databases that capture the introduction of new products and processes indicate significant innovative activity among small enterprises. Indeed, in industries such as computers and process control instruments, small firms have been at the vanguard of innovation.

Source: Audretsch (2002).

4. Explaining Enterprise Size and its Distribution

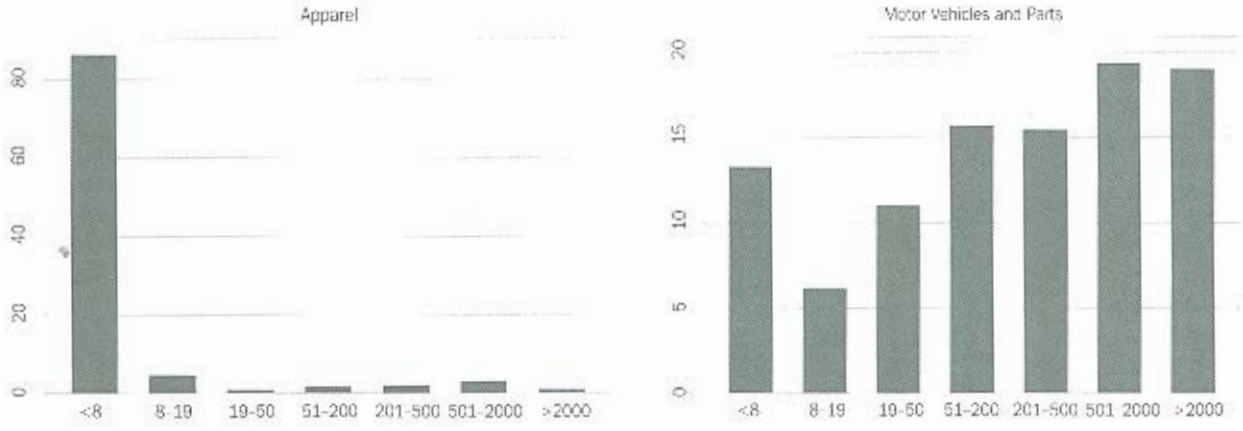
The foregoing discussion indicates that a large amount of nonagricultural employment in many developing Asian economies takes place in the context of small enterprises operating with low productivity and generating relatively low incomes for their owners and workers (especially when we include microenterprises). For purposes of public policy, two related questions are particularly relevant. First, is something keeping small enterprises from becoming larger? Second, how can smaller enterprises become more productive?

An examination of the factors that can explain enterprise size and its distribution are helpful in providing answers to both questions. There is considerable literature, theoretical and empirical, that deals with these factors.[29] We briefly go over some of it, paying special attention to those factors that pertain not only to the relative importance of SMEs in the overall distribution, but also the existence of a missing middle in some economies.

Production technology and industrial composition. Technology used in production is an important driver of enterprise size. To the extent that technology in a given industry is characterized by economies of scale—that is, the average cost of producing each unit of product falls as total output increases—we can expect larger plants and enterprises (as discussed in Box 3.4 previously). In general, the more capital (machines) required in a production process, the greater will be the scope for reaping scale economies and thus the larger the optimum size of enterprises. For example, automobile production requires far more capital per unit of labor than apparel production, and economies of scale are very important to the production process. As a result, the typical automobile plant will be much larger than an apparel plant. This can be seen quite clearly in Figure 4.1, which contrasts the distribution of employment across enterprise size groups in apparel and motor vehicles and parts in India. While there is a mass of employment in very small enterprises in apparel, the situation is very different in motor vehicles. Since total employment in apparel is over 12 times that in motor vehicles and parts (5 million versus 430,000 workers in 2005), this will certainly exert a natural influence on the distribution of employment across size groups in manufacturing as a whole.

Of course, the relationship between production technology and the optimum size of enterprises can be quite complex and one that has changed over time. Box 4.1 describes this in more detail. (Moreover, other factors matter, such as the nature and evolution of transaction costs, as will be made clearer below.)

Figure 4.1 **Distribution of Employment by Enterprise Size-Groups: Apparel vs. Motor Vehicles and Parts (%)**



Note: Enterprise size is measured in terms of number of workers.
Source: As in Box Table 3.1.1.

It is possible to use fairly different technologies in the production of broadly similar products. Thus, while apparel can be manufactured in small establishments where one or a few tailors work on basic sewing machines, production can also occur in large establishments using sophisticated machines (for example, machines for spreading and cutting cloth). Figure 4.2 allows a comparison of the distribution of employment across size groups in the PRC and India

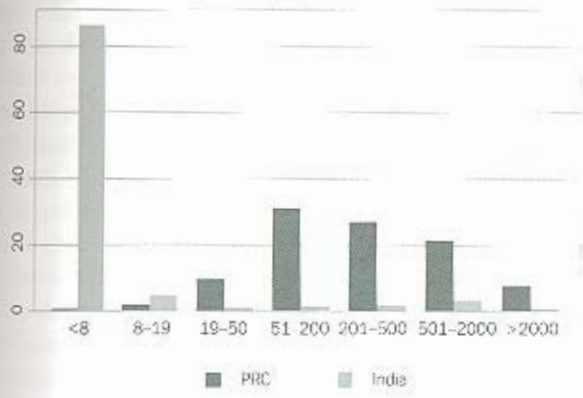
29 See, for example, the detailed survey of manufacturing firms in developing countries by Tybout (2000) in the Journal of Economic Literature. As regards the theoretical literature, an important contribution to neoclassical explanations of enterprise size is that of Lucas (1978), which relies on a differential distribution of entrepreneurial ability across the working population to explain the coexistence of small and large firms in the absence of market failures.

Box 4.1 **Production Technology and Optimum Plant Size**

Optimum plant size, which allows maximum exploitation of scale economies, has clearly increased with the development of mechanized techniques of production. But several developments in recent decades have gone against this trend. First, while optimum plant size continues to be large in heavy industries, and durables such as automobiles, newer industries based on information technology can have smaller optimum size as far as production technologies are concerned. Secondly, it is increasingly understood that the very large optimum size observed in some periods of manufacturing development in today's industrialized countries has been the result of the conscious choice of the production process rather than inherent in the production of the items concerned. In particular, the development of "Fordist" industries of mass production had large optimum size because they were based on "batch processes" employed in the organization of the factory. An argument advanced more frequently in the last few years is that small firms are better able to adapt to changing—and sometimes disruptive—economic circumstances. The 1970s and 1980s produced several shocks demanding a flexible response from industrial firms. According to some authors, traditional mass production units have been less successful in this regard than small establishments based on a modern version of the craft principle that "flexible tasks and machines augment the craftman's skills and ability to produce ever more varied products" (Schmitz 1982:4). The most influential work embodying these ideas is Piore and Sabel (1984). Their paradigm of successful "flexible adjustment" comes from the recent appearance in Italy, Germany, and Japan of a new type of industrial unit: flexible, small, and better able to respond to the challenges of the last two decades than the giant plants of the older industrialized countries, such as the United States.

Source: Mazumdar (1998).

Figure 4.2 **Distribution of Employment by Enterprise Size-Groups in Apparel: India and PRC (%)**



PRC = People's Republic of China
Source: As in Box Table 3.1.1.

for apparel products. Large enterprises account for much more of total employment in apparel in the PRC than in India.[30]

In summary, the size distribution of enterprises in an economy will depend to some extent on the industrial composition of the economy. Since lower income countries will tend to have a composition dominated by simpler to produce products like apparel and footwear, metal products, and furniture—low incomes on average will mean greater demand for these types of products—we can expect a tendency for a concentration of small enterprises in these countries. But the effects of broad industrial composition should not be exaggerated. This is because, we find, the size distribution within the same industry also shows significant variations by country and generally follows the pattern of the aggregate distribution (as in the case of apparel products across India and the PRC described above).

Product market segmentation. To the extent that differences in technology used drive the different distributions of enterprise size, the crucial question is what explains the diversity of technology used *within* countries. Product market segmentation is part of the story behind the co-existence of small and large firms. The larger the proportion of low-income consumers in a country, the greater will be the demand not only for simple items (for example, bicycles rather than cars), but also for relatively low-quality versions of products purchased by both high and low-income consumers (such as soap). The tighter the technology-size-quality relationship, the greater will be the economic distance between small firms producing low quality products with low technology and the larger firms using more advanced technology.

Infrastructure. Poor infrastructure reinforces the effects of product market segmentation. In particular, an underdeveloped transportation network means that there can exist many pockets of small and localized demand, especially in rural areas, which are satisfied by small-scale local production. Moreover, without (reliable) electricity it is hard to see how these enterprises can use anything close to modern methods of production.

Infrastructure deficiencies probably take their biggest toll on enterprises in South Asia. Based on the new round of WBES data (surveys carried out between 2003–2006),

30 A question that arises is why firms of different sizes seem to coexist in the same broad product line. One reason is to be found in the diversity in quality of the product. While there are certainly exceptions, it is generally the case that higher-quality products require greater mechanization and more tasks. Accordingly, the optimal size of the enterprise increases.

problems with electricity are the most commonly identified "major or severe" constraint on the operation and growth of firms in four out of 20 economies for which data is available. Of these, three are from South Asia, Bangladesh, India, and Sri Lanka, the fourth from Lao PDR.

Objective indicators, as opposed to perceptions of enterprise managers, also indicate that poor infrastructure takes a toll on enterprise growth (and therefore influences firm size). South Asian enterprises, for example, experience more days per year of power outages than in East Asia, as seen in Table 4.1. Even the cost of power in South Asia constrains firms, at $0.16 per kilowatt hour, nearly twice East Asia's $0.09 per kilowatt hour.

Table 4.1 **Power Outages**

	East and Southeast Asia	
	Average Number of Days (in the past year)	Average Number of Hours (duration)
small	6.17	4.31
medium	6.72	4.57
large	6.48	4.17
	South Asia	
	Average Number of Days (in the past year)	Average Number of Hours (duration)
small	109.80	4.57
medium	146.21	7.80
large	179.15	4.61

Notes: East and Southeast Asia includes Cambodia, People's Republic of China, Indonesia, Republic of Korea, Lao People's Democratic Republic, Malaysia, Philippines, Thailand, and Viet Nam; South Asia includes: Bangladesh, India, Pakistan, and Sri Lanka.
Source: Authors' using World Bank Enterprise Survey (WBES) database.

While large firms (200 or more workers), appear to experience more days without publicly provided power, they are better able to protect themselves with private generators. The survey results show that 88% of large enterprises in South Asia own or share a generator, compared with only 39% of small firms.

Credit constraints. Credit constraints are potentially one of the most important factors influencing firm size. In particular, they can be especially pernicious in reinforcing the effects of other constraints on firm size and growth. For example, the lack of finance can prolong the use of outdated technology, thereby trapping an entrepreneur in the production of a low-quality product and restricting his or her market to the low-end segment. Moreover, they may be especially important in explaining the missing-middle size distribution. This is because credit constraints are likely to be particularly binding for small and even medium-sized enterprises—groups that do not have sufficient resources of their own to fund their projects, nor the collateral to access bank credit. Given the importance of credit constraints, especially for small and medium-sized enterprises, we discuss this issue in much greater detail later in this chapter.

Coordination failures and learning-related externalities. As noted above, part of the reason for a size distribution characterized by many small firms has to do with industrial composition. In particular, the greater the importance of traditional products in total production, the more prevalent will be employment in small enterprises. As economies develop, they diversify into the production of new goods and services, which will often require larger enterprises than would the production of traditional products. In the context of this process, factors such as coordination failures and learning externalities can impede the process of diversification, or structural transformation. Coordination failures take place when the return to one investment depends on whether or not another has been made. The effects of poor quality infrastructure noted above, in fact, are one special case of a coordination failure. But there can be many others—something discussed in more detail later in this chapter. Learning externalities—which emerge due to the non-rival and non-excludable nature of much knowledge—can affect firm size through their tendency to lead to under investment in the generation of knowledge. This may take place through many different channels. For example, enterprises may decide not to invest in training workers because competitors may simply poach them: this may lead to under investment in training and keep firms from adopting more modern technologies and expanding. Hausmann and Rodrik (2003) stress a related but different mechanism: in moving away from the production of traditional goods, firms need to invest to learn which of the possible new goods and services would be most profitable in their local contexts. The problem is that once a "first mover" has made the requisite investments and zeroed in on a particularly profitable product line, others can join in without incurring the initial learning costs. Once again, the move from traditional to modern products can be stymied. Box 4.2 describes some consequences of the difficulties associated with learning what one is good at producing.

Transactions costs. The relevance of transactions costs—costs that arise during an economic change—to firm size is their influence on decisions about whether to carry out a set of tasks within the firm or to rely on the market. For example, should a manufacturer of cars also produce the brakes for its cars, or can it instead enter into an agreement with a manufacturer of car brakes to supply them? The decision will clearly have a bearing on the size of the firm. Indeed, the importance of large firms in Korean industry, employment, and exports relative to Taipei,China in the 1970s and 1980s has been attributed in part to the higher costs of market transactions in Korea compared to Taipei,China (Levy 1991). Box 4.3 describes Levy's detailed analysis of the size structure of the footwear industry in Korea and Taipei,China and his conclusion

Box 4.2 **Why Incentives for Self-Discovery Can Be Weak**

Inadequate incentives to invest in learning can be one reason firms fail to diversify into new, nontraditional activities. In their recent paper, Hausmann and Rodrik (2003) begin by noting the considerable uncertainty about the costs of operations associated with new activities. For example, while an entrepreneur in Bangladesh contemplating a new activity knows his or her comparative advantage would most probably lie in labor-intensive manufacturing, it is by no means immediately apparent which of thousands of potential products holds promise. This uncertainty is simply a reflection of the difficulty in mastering production of new goods or mastering more efficient production processes. As Box 7.2 suggests, gaining mastery can be a costly exercise.

Nevertheless, once a pioneering firm has mastered production of a new product or production process, domestic imitation is likely. Case studies indicate that the turnover of skilled workers and/or managers at the pioneering firm is probably one of the most important channels through which this happens.

To the extent that the diffusion of the relevant information does take place, the extra normal profits of the pioneering firm will be bid away. If this happens rapidly—as when diffusion is easy—the incentives to gain mastery over the new activity are diminished right from the start. In the language of economics, the pioneering firm generates an informational externality for which it is not compensated. In this way, incentives to invest in learning may be dampened. Thus, low-income countries may be producing too few high-productivity goods, and incomes are lower than otherwise. In this setting, policies that encourage entrepreneurship and investment in new activities ex-ante, but push out unproductive firms and sectors ex-post, may be able to foster industrial growth and transformation.

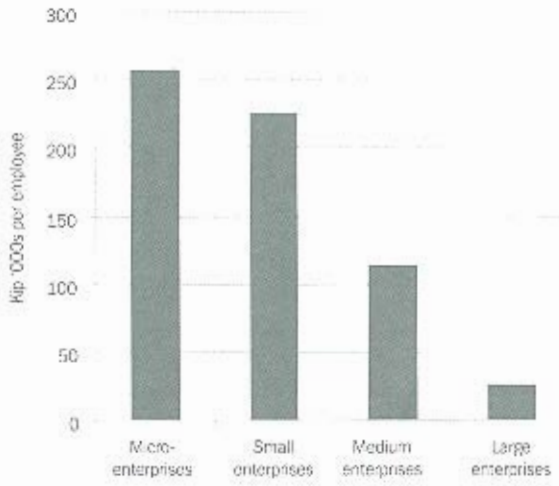
Source: Hausmann and Rodrik (2003).

that different transaction costs in the two economies in the 1970s seem to best explain why Korean footwear producers tended to be much larger than their counterparts in Taipei,China.

Regulations and economic policies. There are various ways, direct and indirect, in which business regulations and economic policies more generally can influence enterprise size and its distribution. To begin with, a number of regulations apply to enterprises beyond a certain threshold size. For example, many aspects of the labor code kick in once employment is above some preset level. Similarly, in many cases enterprises below a certain size are either exempt from paying tax or are in effect outside the purview of the tax system. In these cases, small enterprises may face incentives to remain small at the margin.

On the other hand, certain aspects of regulation may represent an extra burden for smaller enterprises as compared to larger enterprises because of their limited human and financial resources in complying with regulations (especially having a smaller revenue base over which to spread costs of compliance). This can be seen quite clearly in the ADB (2009c) study on Lao PDR, which notes that the burden of business regulatory costs falls disproportionately on small enterprises (Figure 4.3). On an employee basis, business compliance costs are much higher in smaller firms than medium and large-sized firms. This arises because of a fixed cost component in business compliance costs. The corresponding compliance cost per employee increased from Kip (KN) 27,214 for enterprises with 10 or more employees to KN 225,338 for enterprises with 4 to 10 workers and KN 258,442 for enterprises with employees between 1 and 4. This burden becomes a barrier to the formalization and growth of small enterprises.

Figure 4.3 **Business Compliance Costs** *



Notes: * Compliance costs per employee of the three main types of permission required: enterprise registration, operational permission and tax certificate. Microenterprises defined as businesses with number of employees between 1 and 4; small firms with number of employees between 5 and 9; medium-sized firms with number of employees between 10 and 99 and large firms with number of employees 100 or more.

Source: ADB (2009c).

Significantly, the *quality* of the legal system—in terms of the administration of justice and enforcement of legal verdicts—can also matter since, at a practical level, regulations matter most when they are administered and enforced. For example, a recent study from Mexico using data on the distribution of enterprise size finds that Mexican states with more effective legal systems have larger firms (Laeven and Woodruff 2008). Moreover, this result is particularly important for proprietorships, where risk is concentrated on a single owner, as opposed to corporations.

Box 4.3 **Transaction Costs and the Size of Firms: Evidence from the Republic of Korea and Taipei,China**

As is well known from comparisons of the development experience in Republic of Korea (Korea) and Taipei,China, in the 1970s and early 1980s large firms played an more important role in generating jobs in the manufacturing sector and exports in Korea. This is certainly true for the footwear industry, as may be seen from Box Figure 4.3.1, which contrasts the share of value added accounted for by enterprises/establishments of different size. The differences in size structure seem to have translated into a number of other differences as well, including a greater propensity for entrepreneurs in Taipei,China to set up new firms, engage much more often in subcontracting, produce a broader mix of footwear products, and rely more often on independent export traders.

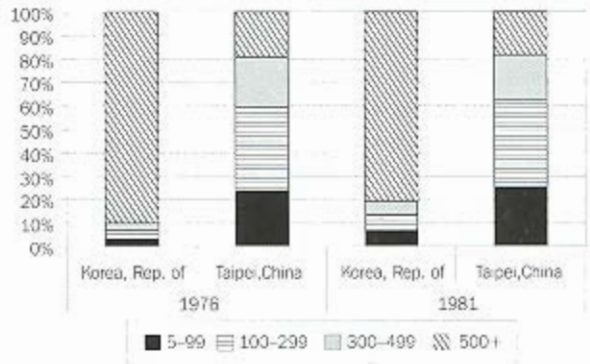
What explains the different role of large and small firms across these two economies? Since the footwear industry was very export-oriented in both cases—in 1984 90% of total footwear production was exported in Taipei,China, and around 70% in Korea—product market segmentation cannot be the explanation. Levy (1991) also rules out economies of scale associated with different product mixes. For example, he notes that the production techniques used in footwear 'lasting' across the two economies relied on assembly lines where efficiency gains through greater division of labor were pretty much exhausted once around 50 workers worked on a single line. Levy also notes that while Korea's industrial policies did provide benefits to large firms in industries such as shipbuilding and automobiles, there is no evidence of firms being targeted in the footwear industry.

According to Levy the greater reliance on small firms, subcontracting, and export traders in Taipei,China as compared to Korea, especially in the 1970s to early 1980s, reflects the different relative costs of undertaking market transactions versus hierarchical transactions. (As the relative cost of market transactions in Korea declined over the 1980s, smaller firms became progressively more important.)

Source: Levy (1991).

Levy argues that the reason for these differential relative costs is found in differences in the initial conditions across the two economies as they set out on a path of export-oriented industrialization. In particular, Taipei,China not only had a higher proportion of its economically active population engaged in commerce, it also had deeper roots in trading activities. Taipei,China also seems to have had an approach to governance that was more suspicious of centralized hierarchies. Levy points out that these differences provide a more compelling reason why large-scale hierarchies could operate better in Korea and why market-based transactions would be less costly in Taipei,China. More generally, the Korean experience seems to point to the fact that large firms were promoted as 'efficient institutional substitutes for transactionally costly markets'.

Box Figure 4.3.1 **Value Added in the Footwear Industry in the Republic of Korea and Taipei,China by Size of Enterprise, 1976 and 1981**



Note: Enterprise size is measured in terms of number of workers.
Source: Levy (1991).

More directly, particular aspects of industrial policy can be important in influencing enterprise size and its distribution. Perhaps the most famous example of this in the literature comes from India's policy, starting in the late-1960s, of "reserving" the production of a variety of industrial products for small enterprises by restricting the expansion of large firms already producing the reserved products and barring the entry of new large producers. The list of items reserved for "small-scale industries" covered 47 products in 1967 and expanded to over 1,045 products by the early 1990s (RGICS 2006). (Since 1997, the policy has undergone significant revision, with a steady decline in the number of reserved products. By October 2008, there were only 21 products reserved for small-scale enterprises.)

While it is obvious such a policy would have implications for the distribution of firm size in an industry, a host of other (less blunt) policies can also influence size distribution. And they can do so in ways which do not compromise as much on efficiency and incentives to grow among small enterprises, as the Indian policy of reservation seems to have done. Box 4.4 describes policies used to encourage small and medium enterprises in Korea. The policy intervention seems to have done a much better job generating dynamism among small enterprises than the Indian policy. For example, Kim and Nugent (1994) carried out a sample survey which showed that most SMEs began with fewer than 50 workers, but many had grown to more than 200 workers, an indication of the high level of success of the support policies (see Mazumdar 2003 for further details). Indeed, an important aspect of the Korean policy differentiating it from the small-scale reservation policy in India, is its emphasis on the *development* rather than the *protection* of small enterprises. Along with neighboring Japan, Korea defined the SME sector as enterprises with less than 300 workers. The support policies encouraged growth of small units within this limit. As our later

discussion on finance and technology-related issues will emphasize, there are clear limits to which very small firms can access finance or adopt new and more productive technologies. By contrast, the Indian policy of reserving certain industrial products for small enterprises defined thresholds in terms of the value of fixed assets in plant and equipment, translating into a far smaller number of workers. For example, using a recent enterprise survey and the corresponding asset limit (10 million rupees in 2000) used to define small-scale enterprises, average employment turns out to be 62 workers per firm.

Summing up, we have covered a number of factors that can influence enterprise size and its distribution. Of course, country context and circumstances will determine which ones are more relevant for any given country. The remainder of this chapter focuses on those factors that are widely believed to be particularly constraining for SMEs in virtually all developing countries and how policy interventions have tried to deal with them in developing Asia.

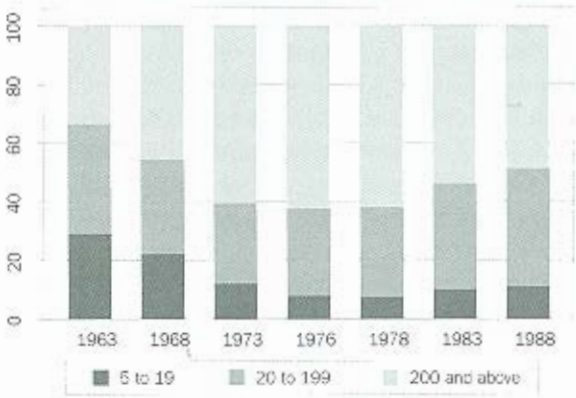
Box 4.4 **Fostering Small Enterprises in the Republic of Korea**

An important example of the direct impact of industrial policy on the size structure of manufacturing comes from two divergent phases of Korean industrialization. In the first phase, prior to the 1980s, Korean industrial policies favored the promotion of large firms. Large firms and conglomerates like the *chaebol* were favored with fiscal, financial, and tariff incentives. The tie-up between industry and banking interests helped the conglomerates enjoy subsidized credit facilities while the tie-up with the government tilted fiscal and trade incentives towards large firms. The result is to be seen in the spectacularly divergent trend in the size structure of manufacturing in Taipei,China and Korea. In the mid-1960s Taipei,China had a larger share of large (500+) units than Korea (35% against 26%). But by 1976 Korea's share of employment in large units had peaked at 45% while the share for Taipei,China was down to 26%. Abe and Kawakami (1997, pg.338) provide evidence to show that the difference in the evolution of the size structure of manufacturing in Taipei,China and Korea had little to do with the export experience of manufacturing in the two economies. Their summary of the evidence is that "both economies represent successful cases of export-oriented industrialization. But the export drive in Korea has been borne mainly by non-SMEs while in Taipei,China it has been carried out by the SMEs."

The Korean policy of favoring large-scale units shifted in the latter half of the 1970s, when the government embarked on a policy of encouraging SMEs—partly in response to a concern for escalating wage costs in large firms. The support schemes for the SMEs came through three major avenues: (i) specialized financial institutions and funds catering to the SMEs; (ii) government-supported venture capital companies that financed technologically based SMEs; and (iii) credit guarantee facilities.

The impact is seen in the dramatic change in size structure (Box Figure 4.4.1). Between 1976 and 1988 the share of employment in establishments employing 200 or more workers had shrunk from a little over 60% to around 50% while establishments with between 20 and 199 workers, especially, expanded their share of employment by more than 10 percentage points. Furthermore, this dramatic change in the size structure was achieved without any dramatic reduction in the productivity differential between small and large firms—which seems to have remained unchanged at around 1:3 (Mazumdar 2003).

Box Figure 4.4.1 **Manufacturing Establishment Size Distribution in the Republic of Korea**



Note: Establishment size is measured in terms of number of workers.
Source: Nugent (1996).

Source: Mazumdar (2003).

5. Assisting SMEs

Virtually all developing Asian countries assist SMEs in some way, including, among other things, through intervention in finance (encompassing not only efforts to improve SME access to finance, but also to lower the cost of finance) and the provision of various types of training for workers and entrepreneurs, technology extension services, marketing assistance, and business development services.

Several reasons explain the focus of special policies and programs on SMEs, over and above the simple fact that they account for a large share of total employment. Beck et al. (2005) suggest there are three: (i) SMEs are believed to be more labor-intensive than larger firms, and as a result, growth through an expansion of small and medium enterprises should generate more jobs than growth driven by an expansion of large enterprises; (ii) SMEs are believed to enhance competition and entrepreneurship—special assistance to SMEs can have positive spillover for the economy as a result of greater competition and entrepreneurship; and (iii) SMEs can be just as, or even more productive than larger firms, but credit constraints and various institutional failures that impinge on them especially severely hold them back. Since alleviating credit constraints and institutional failures takes time, special assistance can be a useful second-best approach, according to this argument.

But as Beck et al. (2005) point out, some of these views are contested. For example, while small enterprises may indeed create more jobs, they may also *destroy* many jobs. Studies examining the relationship between enterprise size and the *net* creation of jobs suggest that there is no simple and systematic relationship holding across countries and over time. For example, while the evidence described from Audretsch (2002) and reported in Box 3.4 indicates that SMEs were net creators of jobs in the United States, studies of other regions can show different results. Table 5.1 breaks down the total change in manufacturing employment over about 5 years in the contribution of small, medium, and large enterprises for Korea and the Philippines. While SMEs added significantly to employment growth relative to large enterprises in Korea the opposite was the case in the Philippines. In any case, the quality of jobs generated by small enterprises (as measured by average wages) may be low (see Sections 3.1 and 3.2).

As for SMEs enhancing competition and entrepreneurship, it is quite likely that there is something to this argument, but qualification is needed. In particular, as some analysts have argued, a distinction needs to be made between *subsistence* entrepreneurs and *transformative* entrepreneurs. As noted in Section 3, many entrepreneurs of the smallest enterprises may well be of the former type.

Table 5.1 **Decomposition of Employment Growth by Enterprise Size-Groups**

	Micro	Small	Medium	Large	Total	Period
Korea, Rep. of	n.a.	8.3%	2.7%	0.8%	11.6%	1999–2004
Philippines	-1.2%	-3.7%	-1.4%	1.6%	-4.7%	1998–2005

Note: Micro: Philippines (1–9 workers); Small: Republic of Korea (5–49 workers), Philippines (10–49 workers); Medium: Republic of Korea (50–199 workers), Philippines (50–199 workers); Large: Republic of Korea (200 and above workers), Philippines (200 and above workers); n.a. – not applicable.

Decomposition of employment growth is as follows:

$$\frac{\Delta E_{TOTAL}}{E_{TOTAL}} = \frac{\Delta E_{micro}}{E_{TOTAL}} + \frac{\Delta E_{small}}{E_{TOTAL}} + \frac{\Delta E_{medium}}{E_{TOTAL}} + \frac{\Delta E_{large}}{E_{TOTAL}}$$

Where:

E_{TOTAL} = Total manufacturing employment
E_{micro} = Employment in microenterprises
E_{small} = Employment in small enterprises
E_{medium} = Employment in medium enterprises
E_{large} = Employment in large enterprises
Δ = change

Sources: Authors' estimates based on Annual Survey of Philippine Business and Industry (Philippines) and Report on Mining and Manufacturing (Republic of Korea).

Nevertheless, the notion that SMEs are especially disadvantaged in certain areas is not easy to refute. It is interesting to note that of the many factors that constrain SMEs across countries (and even across regions within countries)—credit market imperfections that penalize small entrepreneurs more than larger ones, and technology-related issues (the use of outdated technology)—are highlighted just about everywhere. Table 5.2, which describes constraints deemed important in various developing Asian countries, illustrates this point well.

In the remainder of this chapter, we consider the finance- and technology-related constraints to SMEs, among other things, examining whether and how disadvantaged SMEs are in their access to finance and adoption of new technology, and the assistance governments have provided. But it is important, first, to acknowledge that our knowledge about the *effectiveness* of SME assistance—what types of programs and program designs are truly effective—is relatively weak. Given that this weakness spans the broad spectrum of SME interventions, and the imperative for improving the situation, we first discuss this issue in some detail.

Assessing SME Assistance

While individual assistance programs and country experiences vary considerably in their scope and design, many of the programs to support SMEs have common weaknesses. First, the programs can suffer from a multiplicity of objectives, some of which may be contradictory. In particular, there is often conflict between social and economic objectives.

Table 5.2 **Constraints Facing SMEs in Asian Developing Countries**

Country	Raw materials	Marketing	Finance	Energy *	Information	Technology & skill	Infrastructure	Tax	Inflation	Market environment **	Labour issues
Indonesia	√	√	√	√							
Philippines		√	√		√	√					
Viet Nam			√			√	√			√	
Cambodia			√	√		√				√	
Lao PDR	√		√					√	√		
Thailand	√	√	√			√					
Malaysia	√		√		√	√					
Brunei Darussalam		√	√		√	√					
PRC		√	√			√	√				
India		√	√				√			√	
Pakistan		√	√							√	√
Bangladesh			√	√		√				√	
Nepal		√	√			√				√	

PRC = People's Republic of China; Lao PDR = Lao People's Democratic Republic.

* includes electricity, ** includes regulations, restrictions, legal framework, law and order, and discriminatory policies in favor of large enterprises and multinational corporations.

Source: Tambunan (2008).

Second, often no single department controls or coordinates SME promotion policies. As recently as 2004 in Cambodia, for example, there were as many as 25 different ministries and organizations with their own SME promotion strategies and policies. Few officially coordinated their promotion activities or shared information, resulting in considerable duplication of data collection and often redundant strategies (Bailey 2008).[31]

Finally, and perhaps most importantly, SME programs have not been subject to rigorous evaluation. There are at least three important elements of evaluating SME programs (World Bank 2008): (i) an assessment of the cost effectiveness of the support; (ii) an assessment of the impact of the support program on intended beneficiaries; and (iii) a consideration of the 'general equilibrium' effects. While the third element is no doubt quite complicated, a reading of the relevant literature indicates that rigorous and credible evaluations of even the second element have typically been absent.

The impact of programs to support SMEs has often been measured by the inputs, for example, the amount spent on providing various services, the number of loans granted by guarantee or subsidized credit programs, the number of workers trained in education programs, and so on. But there have been few attempts to measure the impact of interventions on the ultimate targets—the SMEs. This partly reflects the difficulty of measuring those effects on businesses. Hallberg (2000) suggests that monitoring and evaluation should focus on (i) institutional performance, with indicators of outreach, cost-effectiveness, and financial sustainability; and (ii) on market development, with indicators for SME awareness of and willingness to pay for services, prices of services and the subsidies necessary, elasticities of demand and supply of services, and transaction costs and market structure.

The failure to assess the impact of interventions also reflects a lack of integration of evaluation into program design and a commensurate allocation of resources for evaluation. Evaluation must be built into SME program design and done in a manner that articulates the targets of the initiative and the causal relationships inherent in the design (Oldsman and Hallberg 2003).

The potential benefits and insights from rigorous evaluation are likely to be high. As argued by McKenzie (2009), this is strongly suggested by the recent experience of rigorous evaluations involving microenterprises, micro finance, rainfall insurance, and regulatory reform; it is worth going over some of these studies in a little more detail. Consider the work on microenterprises and the self-employed carried out in Sri Lanka by de Mel, McKenzie, and Woodruff (2008a, 2008b, 2009), some of which has already been described in Section 3. Through careful baseline surveys of micro-entrepreneurs that captured information on entrepreneur characteristics (including measures of cognitive ability and attitudes towards risk, and others) and the subsequent randomized provision of cash and equipment grants to a subset of sample micro-entrepreneurs, the authors have been able to shed light on several issues of importance to development practitioners and policymakers. First, the profitability of the average entrepreneur increases as a result of cash and equipment grants, challenging the view that microenterprises have no scope for growth.[32] Second, the impact on profitability of cash grants, which are cheaper and easier to administer, is the same as that of equipment grants. Finally, not all micro-entrepreneurs are equal. Indeed, only between one quarter to one third of microenterprise owners display

31 Fortunately, the creation of the SME Development Framework in Cambodia is providing a much sounder platform for assisting SMEs.

32 This result holds for male entrepreneurs.

ability, motivation, and ambition similar to that of owners of larger firms. In particular, while average incomes increased as a result of the grants, it seems unlikely that the average microenterprise owner has much employment creating potential.

Another recent study examines whether adding business training to a Peruvian group lending program for female micro-entrepreneurs improves outcomes for the entrepreneurs and the institution providing the credit (Karlan and Valdivia 2007). The methodology uses the randomized experiment approach and provides business training to a subset of the micro-entrepreneurs receiving credit. Contrary to the doubts of some practitioners regarding the value of such business training, the findings indicate that basic business training can lead to higher profits. This is true even when those receiving the training are experienced micro-entrepreneurs. Moreover, one of the findings runs contrary to the view that business development services should be rendered at market prices (or close to them). The returns to the business training provided in this study turn out to be larger for those participants who expressed least interest in the training prior to receiving it. In other words, when the value of services provided is unclear to entrepreneurs—especially likely to be the case for relatively inexperienced entrepreneurs—those for whom the impact may be greatest may be least likely to join if fees are involved.

Finally, recent evaluation studies on the provision of insurance to poor farmers provide several important policy lessons. A widely held view among economists and practitioners is that a reluctance to take up credit among farmers and micro-entrepreneurs may be due to the absence of an insurance market. Farmers subject to the risks of variation in rainfall may be particularly susceptible to this. From a policy perspective, the key question is whether offering rainfall insurance increases the uptake of credit by farmers. As it turns out, a common finding across the few studies that examine this issue is that there is low uptake of insurance products. What is particularly useful for policymakers is that the studies are able to suggest ways to increase uptake, including specific suggestions on the design of insurance contracts and the structure of payouts, bundling insurance products with loan products, and efforts at improving financial literacy.

Extending rigorous evaluation to SMEs is a natural next step. But clearly, cost is a key obstacle (Oldsman and Hallberg 2003). For example, while the provision of $100–$200 grants or business training to a few hundred micro-entrepreneurs as part of a randomized evaluation study is not hugely expensive, such amounts probably fall well short of what would be required for interventions intended to evaluate SMEs. Bloom et al. (forthcoming) are looking into whether better management practices improve the productivity of mid-sized firms in India (Box 5.1). Part of their research design involves randomized interventions for a subset of firms with on-site management consulting services provided by Accenture, a global management consulting, technology services, and outsourcing company. Consulting services do require investments by all parties. For instance, manufacturing firms are required to make their staff available to meet with supply chain or process consultants so that knowledge transfer can occur. These services do not come cheap. Nevertheless, the benefits of getting program and policy design for SME assistance right should pay off well, given the much larger impact SMEs can have on aggregate productivity and employment generation, as compared to microenterprises. Indeed, in areas such as SME lending policies, trade credit policies, management training, and sector specific technical assistance, programs ripe for rigorous evaluation have been identified (McKenzie 2009). What is required is a commitment by governments and donors that fund these programs.[33]

33 In the absence of a serious commitment by governments and donors, researchers will have to rely on available survey data and administrative data and exploit non-random methods for teasing out the impact of various programs or policies.

Box 5.1 **Management Intervention for Mid-sized Firms in Maharashtra, India**

If modern management practices improve firm productivity, why are they not yet universal? One meta-hypothesis is that modern management practices are technologies which reflect a body of knowledge and capabilities, and hence they diffuse slowly across firms and countries. Technologies diffuse slowly for several reasons, each of which offers a potential explanation for the relative lack of modern management practices in developing countries.[1] In an earlier joint LSE-McKinsey-Stanford survey of around 4,000 firms in Europe, Asia, and the US, Bloom et al (2007) found that management practices of almost 500 medium-sized Indian manufacturing firms were poor on average. For example, in many cases, Indian managers had little information on production processes, no system for continuous improvement, disjointed targets and ineffective incentive systems. All these factors could conceivably have major repercussions on productivity, profitability, and firm growth.

Research Design

The research design of this project is addressed to resolve some of the implications posed by the bad management practices in India and uses a randomized experiment involving mid-sized textile firms in the Indian state of Maharashtra and working in collaboration with the global management consulting firm Accenture. The survey frame is the population of about 1,000 firms in garments and textiles manufacturing in the Indian state of Maharashtra with from 100 to 5,000 employees.

Treatment group firms will receive intensive on-site management consulting services, provided by Accenture's Mumbai office, for five months designed to upgrade their core management practices around operations and human resources, while a control group will receive only a basic four-week management diagnostic. The intervention is focused on improving five distinct aspects of management practice in a prioritized and sequential manner. Key focus areas include quality control, supply chain management, inventory, production and human resources. Together with intensive high-frequency data collection on the most relevant aspects of operational and financial performance, this design facilitates two essential analyses:

- The comparison over time of the treatment group and the control group will allow estimation of the impact of improved management practices on firm performance;
- A systematic analysis of the participating firms' management practices, and in particular of the root causes of non-adoption of modern management practices, will help pinpoint the key reasons for the slow diffusion of the latter through emerging market economies.

1 First, firms may not be aware of the existence of a new technology or may not know how large the benefits of a new technology are. Second, firms may not know how to implement a new technology, which may require access to a local supplier of expertise and a costly period of learning-by-doing. Third, firms may need complementary inputs in order to use a technology profitably. Fourth, adopting a new technology may require large up-front expenditures, which may be difficult if firms are credit constrained and are not profitable enough to finance the investment from internal cash flow. Fifth, competitive pressures may drive technology adoption, so that firms in highly uncompetitive markets may face little or no pressure to adopt better technologies. Sixth, new technologies may be blocked by legal or regulatory factors. For example, it is possible that regulatory constraints on hiring and firing prevent firms from adopting modern performance-based human resources practices. Finally, it may simply be unprofitable for certain types of firms to adopt modern management practices, the above issues about the availability of complementary inputs aside. For example, sufficiently small firms may not benefit enough from implementing modern management practices in order to overcome the fixed costs of doing so.

Source: Aprajit Mahajan, Department of Economics, Stanford University.

6. SME Access to Finance

6.1 Are SMEs Credit Constrained?

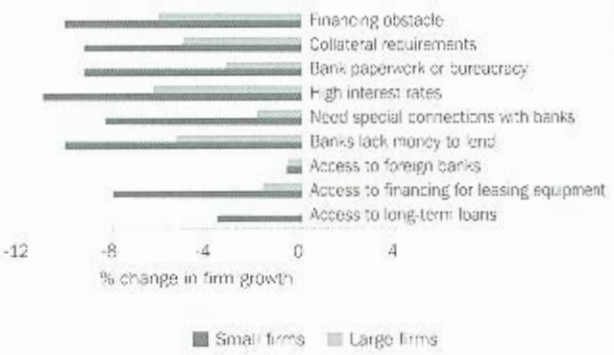
Theoretically, there are good reasons why the availability (and cost) of credit may be more adverse for smaller enterprises. First, the fixed costs associated with loan appraisal, supervision, and collection are not trivial. This implies that from the perspective of the lender, it is preferable to provide (larger amounts of) credit to a larger enterprise than (small amounts of) credit to many smaller enterprises. Second, smaller enterprises are less able to provide collateral against their loans. From the lender's perspective, the cost implications associated with the possible bankruptcy of the borrower rise accordingly, further diminishing incentives to lend to smaller enterprises.

As for the empirical evidence, Ayyagari, Demirgüç-Kunt, and Maksimovic (2006) point out that, worldwide, SMEs frequently tend to report financing as a major obstacle compared to large firms. In addition, financing constraints appear to hit the smaller firms harder than large ones. They show that given that an enterprise, large or small, complains about a particular aspect of finance, its growth is smaller on average if the enterprise size is small. Put differently, complaints about finance are associated with a 10 percentage point reduction in growth for small firms compared to an average decline of 6 percentage points for large ones (Beck, Demirgüç-Kunt and Maksimovic 2005 and Figure 6.1).[34] Moreover, the figure also tells us that even if we go into more detail on the cause of the financial obstacle, it is still true that small firms that report a specific cause (say, collateral requirements) will experience a larger average decline in growth compared to the average reduction in growth of large firms that complain of it.

Once we move away from analysis based on entrepreneur responses much of the evidence on the importance of credit constraints tends to be indirect. For example, a recent study using cross-industry and cross-country data finds that improvement in financial development (as captured by the ratio of private credit to GDP) is associated with faster growth of industries that are characterized by smaller firm size for 'technological' reasons (Beck, Demirgüç-Kunt, and Maksimovic 2005). The findings are consistent with the view that smaller firms are more credit constrained than larger firms and that financial development alleviates these constraints.

Moving to studies that examine data at the enterprise level, a commonly used approach is to examine the relationship between investment decisions of enterprises and close substitutes for credit (for example, cash flow, family wealth, and others). Evidence that an increase in one of these substitutes for credit increases investment is taken to be consistent with the existence of a credit constraint (since otherwise an increase in the substitute should have had no effect on the investment decision). Of course, the interpretation of such evidence is open to question. For example, an increase in cash flow may well be the result of a sudden increase in demand for an enterprise's product; to the extent that it signals a favorable environment for future sales, the enterprise would be expected to invest and expand capacity.

Figure 6.1 **Effect of Financing Constraints on Growth**



Source: Beck, Demirgüç-Kunt, and Maksimovic (2005) as reported in World Bank (2008) Figure 2.5 pg. 67.

Direct evidence on credit constraints that apply to enterprises is less common, especially once we move beyond microenterprises (see Box 6.1 for an innovative recent study involving a randomized experiment involving microenterprises in Sri Lanka).[35] An exception is a recent study that exploits changes to a directed credit program in India. Banerjee and Duflo (2004) track 249 firms that received credit from one of India's largest public-sector banks before and after changes made to eligibility requirements that allowed medium-sized firms to get subsidized credit (that is, credit provided at an interest rate that can be no more than 4% above the prime lending rate of banks). In particular, eligibility for the credit subsidy was extended in January 1998 to enterprises with total

34 Carlin, Schaffer and Seabright (2007) caution against hastily concluding that the relaxation of financial constraints on countries that report a high score would automatically produce a strong positive effect on output. It may well be that the high scores reflect poor quality of SME investment projects so that making finance available would produce at best only a negligible effect on output.

35 A firm can be said to be credit constrained when it cannot borrow as much as it would like to at the going market rate.

Box 6.1 **Are Microentrepreneurs Credit Constrained? Evidence from Sri Lanka**

In de Mel, McKenzie, and Woodruff (2008b) the authors used a randomized experiment involving microenterprises in Sri Lanka in order to present direct evidence of credit constraints. Over five consecutive quarters, the study tracked the revenues, expenses, profits, and assets of 408 enterprises, about half of which were randomly provided grants of between $100 and $200.[1] Comparing the profits of firms which received a grant with those that did not allowed the authors to measure the (marginal) returns to capital and compare these with market interest rates. Evidence that the returns to capital exceed market interest rates would be consistent with market failures involving markets for credit or insurance. The results indicate that the average firm receiving a grant sees its profits increasing substantially. In fact, the returns to capital are estimated at 5% per month on average or around 60% per year—much higher than the market interest rate of around 12–18% per annum. Additional analysis leads the authors to conclude that the staggering differences between estimated returns to capital and market interest rates is largely on account of failures in the credit market and not the insurance market—that is, enterprises under invest because they are unable to obtain credit and not because they are unable to insure against the uncertainty of return from investment.

1 203 firms were involved in retail—that is, typically small grocery stores. The remaining 205 enterprises were involved in sewing clothing, making lace products, making bamboo products and repairing of bicycles and making food products.

Source: de Mel, McKenzie and Woodruff (2008b).

investment in plant and machinery of 30 million rupees from 6.5 million rupees previously, and subsequently lowered to 10 million rupees in 2000.[36]

These changes in policy constitute a useful "natural" experiment with which to examine the issue of credit constraints among small enterprises. Banerjee and Duflo (2004) find that 93 newly eligible firms (that is, plant and machinery between 6.5 million rupees and 30 million rupees in 1998) demanded and received extra credit. By itself, this does not prove the existence of credit constraints among these firms since it would make sense to use the subsidized credit in order to repay more expensive credit obtained earlier at market rates. However, the study finds that the new credit was used to expand production among the 93 newly eligible firms. Both sales and production increased faster, without any significant changes to either for other enterprises. The opposite happened when a large subset of the 93 firms lost eligibility in 2000. Taken together, the evidence strongly suggests that firms were credit constrained.[37]

36 It may be noted that based on establishment level data from the 2000–01 Annual Survey of Industry, establishments with total investments in plant and machinery of 6.5 million rupees or less have on average of 33 workers. Those with 10 million rupees and 30 million rupees have on average 62 and 95 workers, respectively. Thus, defining small enterprises as those with less than 50 workers, the changes in eligibility would primarily have benefited medium-sized enterprises.

37 Indeed, there can be a flip-side to the under investment by those constrained by market imperfections: more than optimal investments by the unconstrained. For example, a study of two social groups operating in the knitted garment industry in Tirupur in south India, the Gounders (a small and wealthy agricultural community that has moved into garment production due to a shortage of agricultural opportunities) and "outsiders" (who have moved to Tirupur to exploit its recognized location as a center for garment exports), reveals that even though the outsiders are more productive, it is the locally well-connected Gounders who are able to invest more due to their access to local finance (Banerjee and Munshi 2004).

6.2 SME Access to Finance: Policy Responses to Credit Constraints

Policymakers have not waited for the results of rigorous empirical studies to intervene in credit markets on behalf of SMEs. That market failures in credit markets—due to asymmetric information and imperfect contract enforcement, for example—make it difficult for smaller enterprises to get external finance seems to have been widely accepted by development practitioners. Moreover, the sheer size of employment generated by smaller enterprises has meant that many governments have felt compelled to provide some sort of financial assistance to smaller enterprises.

Table 6.1 lists some programs put in place by governments to assist SMEs with finance. Since external financing through debt holds more promise for smaller enterprises, this is where the focus has mostly been. In addition to directed credit programs that aim to ensure either a certain quantity of credit goes to smaller enterprises and/or credit is provided to these enterprises at subsidized rates, governments have tried to help SMEs access finance through loan guarantees, credit lines, and rediscount facilities, among other things.

Recent literature provides guidance on how governments should approach the issue of access to finance for SMEs.[38] First, while directed credit programs and government ownership of banking have been associated with some success in improving particular types of outcomes for small enterprises and entrepreneurs, the overall record seems poor, with much scope for improvement. For example, while banks in the Philippines are required by law to allocate 8% of their loan portfolios to SMEs and appear to be doing so, Aldaba (2008) notes

38 The main sources for this discussion include ADB (2006), World Bank (2008), and Inter-American Development Bank (2005).

Table 6.1 **Various Programs Assisting SMEs with Finance in Selected Economies**

		Program	Features
South Asia	Bangladesh	Small Enterprise Fund (SEF)	- Provide refinance facilities to scheduled banks and financing institutions that lend to the SME sector.
	India	Priority Sector Lending Policy	- Earmarked 40% of net bank credit of public and private sector banks for the priority sector, which include SMEs.
			- Earmarked 32% of net bank credit of foreign banks for the priority sectors, of which 10% is allocated to SMEs .
		Credit Guarantee Fund Scheme for Micro and Small Enterprises	- Collateral-free credit facility to new and existing micro and small enterprises for loans up to Rs 5 million per borrowing unit.
			- Guarantee cover is up to 75% of the credit sanctioned.
	Pakistan	Establishment of SME Bank	- Provide Smart Loan facility, asset finance, running finance, leasing.
	Sri Lanka	Low Cost Credit Negotiation program	- Financial support to operate micro finance schemes with partnership of the financial institution.
Southeast Asia	Indonesia	Credit for People's Business	- Provides up to Rp 500 million per borrower at maximum 16% per annum.
	Malaysia	Small and Medium Industries Development Corporation Matching Grants	- For business startups, product and process improvements, certification and quality management system, development and promotion of halal products, market development, advertisement and promotion.
	Philippines	Mandatory Allocation of Credit Resources to Small Enterprises	- Banks are required to set aside at least 8% and at least 2% for small and medium enterprises respectively, of their total loan portfolio.
		SME Unified Lending Opportunities for National Growth	- Simplified and standardized lending procedures and guidelines, e.g., loan purpose, fee structures, interest rates, application forms, financial ratios,and other lending parameters, for evaluating the loan applications of SMEs.
			- Provision of short term loans payable in one year, and long term loans that are payable up to five years.
		Various guarantee and financial facilities	- SME GUIDE (Guarantee Incubation for DTI Endorsed Enterprises) is a P100 million direct lending facility.
			- Small Enterprise Financing Facility finances up to a maximum of 90% of the project cost, with the accredited financial institutions co-financing at least the remaining 10%.
	Singapore	Start-up Enterprise Development Scheme	- For innovative Singapore-based start-ups, SPRING will invest a matching dollar for every dollar an investor puts into the business, up to a maximum of $300,000.
		Micro Loan Programme	- For businesses with less than 10 employees, this programme provides loans of up to $50,000 to fund daily business operations.
		Enterprise Investment Incentive Scheme	- Start-ups can attract more investments as investors can deduct up to $3 million worth of losses against their taxable income.
	Thailand	Financial promotion programs	- Establishment of the Small and Medium Enterprise Development Bank of Thailand and the Small Business Credit Guarantee Corporation in 2000.
		Capacity Building Fund	- Provides financing for consulting services, expansion into export markets and application for intellectual property rights.
		Various loans programs of SME Bank	- Food Safety Loans, One Tambon One Product Loans and other fast track loans.
	China, People's Republic of	Innovation Fund (1999) and SME Development (2004)	- Provision of direct loans to SMEs.
		Technological Innovation Fund	- Provision of funding for technology for SMEs.

Source: Authors' compilation based on sources mentioned in the references.

anecdotal evidence that much of the funds did not actually go to SMEs but to larger enterprises that deliberately understate their assets to get classified as SMEs.

Moreover, even when directed credit programs seem to have helped the intended beneficiaries, they seem to have done so at considerable cost. For example, a regulation operating between 1977 and 1990 in India and aimed at spreading bank branches in rural areas—mandating that commercial banks could open a new branch in a location that already had bank branches on the condition that it open four in locations without any branches—has been shown to have led not only to an increase in bank branches in rural areas, but to be associated with rural poverty reduction, largely through an increase in nonagricultural activities (Burgess and Pande 2005). However, commercial banks have been found to incur large losses on account of subsidized interest rates and losses on loans, strongly

suggesting that the long-term viability of the program was questionable and that the blunt nature of the interventions has impeded the development of a credit culture.

A similar situation exists for government-owned banks—institutions that can be expected to pay more attention to smaller enterprises. Here, the literature has picked up on two very different issues. First, the incentive structures for loan officers have sometimes made them excessively reluctant to lend to smaller enterprises. Second, at the same time, the political subversion of directed credit programs has often been a serious issue. Evidence for this comes from various recent studies. For example, Khwaja and Mian (2005) find that government-owned banks in Pakistan are more likely than private banks to lend to firms whose directors or executives have political affiliation. They are also less likely to collect on the loans. Similarly, in India, Cole (2008) finds that government-owned banks lend more in election years and target this lending to constituencies that are deemed "close". Dinc (2005), in an analysis of 36 countries, provides cross-country evidence of the increase in lending from government-owned banking and political influence.

It should be noted that a simple switch from government ownership to private ownership alone should not be expected to change too much. Indeed, it has been argued that perhaps the only certain, major change with a switch to private ownership of banks is a reduction in the overstaffing that characterizes many government banks (and state-owned enterprises, more generally). Similarly, the move from domestic ownership to foreign ownership does not automatically improve the financial system, especially as far as smaller enterprises are concerned. Indeed, a study of 80,000 bank loans in Pakistan between 1996 and 2002 indicates that foreign-owned banks were much less likely to lend to small firms than was the case for domestic-owned banks (Mian 2006). Foreign banks also stayed away from small and medium-sized cities. This seems to be true even for foreign banks that had been operating in Pakistan for a considerable period of time.

Instead, and this is a second key point made by the recent literature, while market failures present a compelling rationale for governments to intervene in finance, governments should work with commercial forces to correct, rather than exacerbate, existing market failures. Moreover, one of the most important roles of the government may not involve direct provision of finance. Instead, it is to strengthen the institutional underpinnings of financial transactions. Certainly, this requires improvements in the legal and regulatory infrastructure, as has been pointed out by many analysts for quite some time now. But very crucially, it also requires improvements in the information infrastructure that underpins the efficient operation of financial systems (ADB 2006 and World Bank 2008).[39] To see this broad point more clearly, it is useful to go over some specific issues, several of which pertain specifically to SME finance.

Creditor rights. As the set of laws and institutions that protect lenders from nonpayment (of interest and/or principal), these are one of the most important underpinnings of a formal financial system. Without creditor rights, the market for credit can be expected to remain underdeveloped. In other words, opportunities for both borrowing as well as lending would dwindle. Strengthening creditor rights helps potential borrowers.

This can be seen from a recent study evaluating efforts to improve creditor rights in India. In particular, while laws protecting creditor rights exist, inefficiencies in the judicial system have led to long delays that in effect weaken creditor rights.[40] In 1993, the Government of India passed a national act that allowed the establishment of Debt Recovery Tribunals, a quasi-legal institution for processing legal suits brought by banks against defaulting borrowers for loans that are late on repayment of Rs1 million or more. What was the effect? Using loan-level records collected from a large private-sector bank with national presence in India, Visaria (2009) shows that establishment of a tribunal increased the likelihood that installments were paid on time for precisely the category of loans that were to be dealt with by the tribunal. Of course, this does not indicate how the strengthening of creditor rights in this case helps potential borrowers. Another finding of Visaria's sheds light on this issue. In particular, it turns out that interest rates on new loans tend to be one or two percentage points lower than those on comparable older loans. In other words, strengthening creditor rights has improved repayment behavior, and by lowering the risk of default, allowed banks to provide cheaper credit.[41]

Collateral. It is well known that the use of collateral in credit contracts helps in dealing with various sources of market imperfection in financial transactions. In addition to decreasing the incentives of borrowers to default, and increasing the incentives to devote effort toward success

39 Fortunately, improvements in the information infrastructure appear able to take faster root than the more complex improvements in legal and regulatory infrastructure.

40 Visaria notes that in 1985, 40% of cases concerning asset liquidation had been pending for more than eight years.

41 It should be noted that how the strengthening of creditor rights affects different types of firms—small versus large, for example—may not be equal, a point raised recently by Lilenfeld-Toal, Mookherjee, and Visaria (2009). In particular, the theoretical result in favor of strengthening creditor rights may redistribute the allocation of credit in favor of larger enterprises when the supply of credit is inelastic. In fact, work in progress by these authors indicates that this is what happened with the Indian Debt Recovery Tribunals.

of the project, it also decreases bankruptcy costs for banks. But for collateral to play this role not only do property rights need to be well defined, creditor rights are also required. An asset with unclear property rights is unlikely to be accepted as collateral. Similarly, if creditor rights are weak so that banks have difficulty executing the collateral in case of loan default, collateral has less value.

Credit registries and credit scoring. Collateral is useful when a borrower has a collateralizable asset. While many medium-sized enterprises may have such assets, many small enterprises may not. Indeed, as noted earlier, it is precisely the lack of such assets that contributes to the situation where many small enterprises are underserved by the formal banking system. Unfortunately, solutions like social collateral and group lending—solutions which underpin the apparent success of microfinance—will not work for the larger loan size associated with small enterprises. One solution to this problem is to improve information of the risk-related characteristics of owners of small enterprises looking for loans. In particular, reductions in the cost of obtaining credit history information on owners of small enterprises can alleviate credit constraints. Credit registries allow this. By providing banks the credit history of loan applicants, the cost of collecting information can go down. Moreover, the more informative credit registries are, the less the incentives of loan recipients to default on their loans. In this way, governments trying to improve access to finance for small enterprises can consider working with existing institutions, public and private, to build larger and more accurate credit registries.

Well-designed credit registries also enable the use of low-cost automated credit scoring technologies that can further help small enterprises access finance. Khwaja and Klinger (2009) note that SME lending in the US boomed in the early 1990s when banks instituted low-cost automated credit scoring for small-business loans. Of course, the process of building deep and rich individual credit histories takes time. In the meantime, there are potential solutions and tools that work in a similar manner to a credit score. Box 6.2 describes one such solution.

Credit guarantee schemes. Credit guarantee schemes typically arise when well capitalized guarantors have privileged information and/or leverage over a borrower as compared to lenders. For example, a group of small enterprises may be suppliers to a large enterprise, but cannot get credit for working capital from lenders on account of insufficient collateral. In such cases, it may be possible for the large enterprise to guarantee the loan made to the suppliers. The large enterprise has better knowledge than the lender about the small enterprises and, as an important client, also has leverage over them.

Given their potential for overcoming the lack of collateral among SMEs, many governments have supported credit guarantee schemes. While governments

Box 6.2 **Using Psychometric Testing to Screen SME Borrowers**

In developing countries, microfinance institutions (MFIs) have been trying to move up-market, while banks and venture capitalists have been trying to move down-market to invest in SMEs. The challenge facing MFIs is that social collateral and group lending do not work for larger risk finance, while for venture capitalists, the due diligence process entails significant time and cost that make smaller investments in SMEs unviable.

And as already discussed for banks, having an experienced officer evaluate a business plan and build up cash flow estimates is expensive given the paucity of collateral and deep credit histories. Because the SME segment represents a larger number of smaller loans, it is only viable if the transaction costs of screening applicants are low.

One solution proposed by the Entrepreneurial Finance Lab at Harvard University's Center for International Development is to use psychometrics to evaluate the credit worthiness of entrepreneurs in a low-cost, automated, and reliable way. Research strongly suggests that two characteristics of entrepreneurs, their *ability* and *honesty*, are critical in determining their creditworthiness. While ability is all about whether a person can invest profitably, honesty determines whether the person would pay back if they were able to do so. The venture capitalist approach uses careful but costly due diligence to measure these characteristics directly, while banks use rougher, indirect proxies such as past history of repayment and current wealth.

There is an increasing body of research that has uncovered systematic associations between entrepreneurial success and attributes measured through psychometric instruments, such as personality and intelligence tests. Successful entrepreneurs consistently score higher on certain aptitude tests and have particular personality traits and cognitive styles that can be measured. Even in cases when test-takers try to "game" the test to appear more honest and entrepreneurial, the predictive power remains.

SMEs currently locked out of the financial system for a lack of collateral and credit history could be financed using such psychometric screening. The challenge now is to pilot psychometric tests in the field to validate effectiveness in different settings—both across countries and types of businesses.[1] Success could help unleash tremendous growth potential.

1 This is the task of the Center for International Development's new 'Entrepreneurial Finance Lab' at Harvard University <www.cid.harvard.edu/efl>.

Source: Khwaja and Klinger (2009).

will not have the privileged information and/or leverage of the large enterprise, as suggested above, that market failures may be shutting out SMEs from credit markets, and disappointment with the track record of many direct and directed lending programs, has typically been reason enough for government support. As noted in World Bank (2008), however, the costs and benefits of public support for credit guarantee schemes have not been rigorously evaluated. On the cost side, credit guarantee schemes do not require too much upfront cash commitment by the government. But the liabilities of the credit guarantee are contingent on whether or not, and how many, SMEs default on their loans. As for the social benefits, this depends on how much *additional* lending is provided to SMEs *because* of the guarantees provided.

What is clear is that design issues are critical, as with any other scheme. ADB (2006) provides a comprehensive discussion of these: first, government support for credit guarantee schemes is warranted when there is evidence that financial institutions will make additional loans if 60–80% of the loan amounts are guaranteed. The key point is that banks must be willing to absorb some lending risk. By providing only a partial guarantee, moral hazard on the part of banks can be alleviated. Second, banks and business associations should both share in the ownership of the credit guarantee organizations, rather than the government fully owning and operating them. Moreover, for schemes in operation for 10 years or more, banks and businesses must strive to reach majority ownership of the credit guarantee organization. Third, the operation of a credit guarantee organization can play a useful role in strengthening credit registry systems.

Training and incentive systems. The difficulties inherent in lending to SMEs cannot be wished away. Left on their own, SMEs are likely to continue facing difficulties getting credit from the banking system. Nevertheless, there are approaches and technologies for risk assessment and loan management that may alleviate constraints on lending. The main reason private enterprises under-provide training also applies to banks: training and experimenting with different approaches is costly. And once bank personnel have been trained, it is easy for them to take their new skills over to a competitor. Alternatively, once a new approach has proven successful, competitors can easily adopt it. The result is diminished incentives to train staff in the first place and/or invest much in new approaches. Subsidization of training and mechanisms for banks to experiment with new approaches is one solution.

The above is also an issue for public sector banks. Indeed, even when a key guiding principle for public-sector banks is to not neglect SMEs, actual lending practices may also work to leave SMEs seriously underserved. As a careful study of bank financing in India shows, loan officers in public-sector banks face incentives that make them much more concerned about making bad loans (and therefore risking charges of corruption) than finding profitable opportunities (Banerjee, Cole, and Duflo 2003). The study finds loan officers to be quite indifferent to profits or prospective borrowers, something which they argue is consistent with the rules that the public-sector loan officers work with rules "which do not pay even lip service to the need to identify profitable borrowers". Such incentives are particularly likely to be harmful for SMEs rather than large enterprises. The solution would appear to be to make lending rules more responsive to current profits and projections of future profits. Of course, this is easier said than done. But as we will see more clearly in the next section on technology, experimentation and discovery are part and parcel of the process of building technological capability. The public sector has an important role to play in partnering with the private sector in this experimentation and discovery.

7. Technology and Innovation

Firms are central players in the process of structural transformation—that is, the process through which an economy engaged in the production of traditional, low-productivity goods and services moves to producing a more diverse set of modern, high-productivity goods and services.[42] After all, it is in firms where production takes place and decisions are made to modify production processes, improve product quality, produce a new product, and apply new marketing methods and tap new markets. These decisions are deeply interconnected with issues of technological capability and the incentives to invest in innovative effort.

In this section, we begin by describing the different ways Asian enterprises are innovating, taking a broad view of what constitutes innovation, as seen in Box 7.1. Noting that many SMEs are especially likely to be characterized by the use of traditional technologies, limited technical skills, and lack of information about markets and technology, we then discuss different ways governments have tried to help SMEs move from engagement in traditional, low productivity activities to more modern and higher productivity ones, and conclude with two promising approaches.

Box 7.1 **Types of Innovation**

OECD (2005) defines four sub-components of innovation:

1. Product innovation: this involves the introduction of a good or service that is new or substantially improved.
2. Process innovation: the introduction of a new or significantly improved production or delivery method.
3. Marketing innovation: the implementation of a new marketing method involving significant changes in product design or packaging, product promotion, or pricing.
4. Organizational innovation: the creation or alteration of business practices, workplace organization, or external relations.

Source: OECD (2005).

7.1 Innovation Across Enterprises in Developing Asia

While expenditures on research and development (R&D) and patenting activities provide useful information on firms' efforts at innovation in industrialized countries, they do much less so on firms in developing countries. This does not mean firms in developing countries do not innovate. Even if we leave aside enterprises in the newly industrialized economies of Korea, Singapore, and Taipei,China, R&D by large corporations in some lower income Asian countries are certainly on the rise, especially in sectors such as pharmaceuticals, machinery, and transportation equipment. However, for the most part, they do not innovate in the same way that firms in industrialized countries do. Crucially, developing country firms are not pushing the frontiers of technology outwards or making original inventions. Rather, their innovations lie in introducing new products and processes nationally or even sub-nationally.

Innovating is not a trivial exercise for these enterprises. A key lesson from case studies in developing countries is the difficulty firms face to adopt what are standard technologies in the industrialized countries (Lall 1987, Amsden 1989, Evenson and Westphal 1995). These show that the standard assumption used in many economic models, whereby enterprises have full information on technical alternatives (or more formally, that alternative production functions are common knowledge among firms) is a strong one. Box 7.2, based on Lall (2001), describes some important features of technology and technological learning in developing countries.

Box 7.2 **Technological Learning in Developing Countries**

On the basis of many firm level studies carried out by scholars (including himself), Lall provides a useful discussion of important features of technology and technological learning in developing countries, including:

1. Firms do not have full information on technical alternatives. They often function with imperfect knowledge of the technologies they are using.
2. Firms have to make conscious and significant efforts to understand the technologies they are using (the "know-how"). Even more effort is required to understand the "know-why". Moreover, there is no uniform, predictable learning curve for a given technology.
3. The learning process is highly specific to the technology and industry in question. For example, some technologies may be more embodied in equipment. Others may have greater tacit elements.
4. Technological learning involves more than formal research and development. In fact, for many developing country enterprises, building technological capabilities at the level of the shop floor, maintenance of machinery, inventory control, and other things, are more relevant capabilities.
5. The process of technological learning is ridden with externalities and interlinkages. It is driven by links with suppliers of inputs or capital goods, competitors, customers, consultants, and technology suppliers. Interactions with firms in unrelated industries, technology institutes, extension services, universities, business associations, and training institutions are also important.

Source: Lall (2001) pg.14–16.

42 For a detailed discussion of structural transformation, conceptual as well as empirical, and key issues in the Asian context, see ADB (2007).

With these conceptual issues in mind, we now turn to an examination of how enterprises in Asia innovate, whether firm size affects the propensity to innovate, and whether exporters are more inclined to innovate than non-exporters, using the WBES dataset. Because the WBES dataset does not currently include microenterprises and unregistered enterprises across the range of developing Asian countries covered, the discussion here is based on small, medium, and large enterprises in the formal sector. Box 7.3 looks at innovation (or the lack of it) in microenterprises and small informal sector enterprises.

Table 7.1, using the WBES database, describes the proportion of developing Asian manufacturing enterprises that undertook different forms of innovation. Consistent with the findings of Ayyagari, Demirgüç-Kunt and

Table 7.1 **Asian Enterprises that Undertook Innovation (%)**

	East and Southeast Asia			South Asia		
	Small	Medium	Large	Small	Medium	Large
Developed a major new product line	32.4%	45.6%	56.9%	36.2%	49.3%	60.8%
Upgraded an existing product line	53.4%	63.3%	72.2%	58.3%	70.9%	75.4%
Introduced new technology that has substantially changed the way that the main product is produced	27.0%	41.3%	54.3%	12.9%	25.9%	37.3%

Notes: East and Southeast Asia includes Cambodia, People's Republic of China, Indonesia, Republic of Korea, Lao PDR, Malaysia, Philippines, Thailand, and Viet Nam; South Asia includes: Bangladesh, India, Pakistan, and Sri Lanka.
Source: Authors' estimates using World Bank Enterprise Survey database.

Box 7.3 **Innovation in Micro and Small Enterprises**

Hard data on innovation in microenterprises and enterprises in the informal sector more generally are hard to come by. Nevertheless, existing data seem to confirm the casual observation that the vast majority of these enterprises are not very active in upgrading technology and innovating. For example, according to results from the third census of "Small-scale Industry" undertaken in India over 2001–02, 85% of registered, or formal, enterprises did not take any initiative to upgrade technology (NCEUS 2009). Unregistered enterprises (that is, belonging to the informal sector) can be expected to show even less technological dynamism. The scale at which these enterprises operate and the costs associated with adopting new production technologies give us some sense of the challenge an informal sector entrepreneur faces to upgrade production technology. NCEUS 2007 (quoted in NCEUS 2009) points out that the average investment in plant and machinery of an enterprise, as reported by the third census data, is around Rs147,000. It estimates that for an enterprise set up about 10 years ago at a cost of Rs200,000, the cost of upgrading its production process can often be around Rs1,000,000 or more. Difficulties in obtaining finance would be enough to dissuade even the more enterprising entrepreneur from upgrading his technology.

A more in-depth look at innovation in microenterprises comes from the recent work of de Mel, McKenzie, and Woodruff (2009) based on a survey of around 2,865 micro-, small-, and medium-sized enterprises from Sri Lanka. Of these, 43% had no employees other than the owner, while 34% had between one and four workers; 33% of the enterprises belong to the manufacturing sector, while 35% were involved in retail; and only 2% of firms exported and only one-third were legally registered.

Box Table 7.3.1 describes the incidence of innovation across firm size over a three-year period; as can be seen, this increases steadily. Thus while around a quarter of enterprises without any workers undertook at least one of four types of innovation (that is, a product, process, marketing, or organizational innovation), almost 59% of enterprises with 25 workers or more did so. Marketing innovation was the most common type, followed by product, organizational, and process innovation, generally in that order. Not surprisingly, the product innovations rarely involved the introduction of a product new to Sri Lanka. This is especially so for the smaller enterprises. For example, only 1.7% of the product innovations reported by enterprises without any workers turn out to involve a product that is new for Sri Lanka. This can be contrasted with almost 29% for the largest category of enterprises (25 workers or more).

Box Table 7.3.1 **Incidence of Innovation and Whether Firm Introduced New Product in Sri Lanka (%)**

	Number of workers (excluding owner)					
Type of Innovation	0	1–4	5–9	10–24	25+	All
Any Innovation	25.5	38.3	43.5	48.0	58.5	34.9
Product	13.4	19.5	19.0	26.9	35.2	18.0
Process	3.0	7.7	8.6	12.9	18.3	6.6
Marketing	18.8	29.3	34.9	32.8	49.3	26.6
Organizational	4.0	9.9	18.7	22.8	38.0	10.6
Introduced new products to Sri Lanka	1.7	12.5	3.7	16.7	28.6	11.1

Source: de Mel, McKenzie, and Woodruff (2009)

The de Mel, McKenzie, and Woodruff (2009) study also examined the role played by the characteristics of the entrepreneur in undertaking innovative activities. Using a variety of approaches, they measure various aspects of ability and personality—attitude toward risk seeking, optimism, willingness to juggle tasks, and tenacity. Ability is measured using not only information on educational attainment, but also through digit span recalls and scores on Raven progressive nonverbal reasoning tests. [1]

Controlling for firm characteristics (including firm size), the authors find higher-ability entrepreneurs to be more likely to innovate. Additionally, more optimistic entrepreneurs are also more likely to introduce some type of innovation. A particularly interesting aspect of the results is that entrepreneur characteristics have a larger effect on the probability of innovating, the smaller the enterprise.

1 In a digit span recall test a respondent is shown numbers on a card (for example, a four-digit number) and asked to repeat it after a given time (for example 10 seconds). The Raven progressive nonverbal reasoning test involves pattern recognition. de Mel, McKenzie, and Woodruff (2009) note that the digit span recall test is a proxy for short-term cognitive processing power whereas the Raven test is more a measure of abstract logical thinking.

Source: National Commission for Enterprises in the Unorganised Sector (2009); de Mel, McKenzie, and Woodruff (2009).

Maksimovic (2007) using a larger set of countries, large enterprises in Asia are more innovative than SMEs. More than half of the surveyed large firms either developed or upgraded a new product line or introduced new technology that changed the way their products were produced.

That large enterprises undertake innovative activities more often is not surprising. For example, at least since Schumpeter (1947), it has been argued that a positive relationship exists between size and innovative activities.[43] There are several reasons for this. First, the usual difficulties faced by smaller firms in accessing finance are exacerbated when it comes to investing in risky projects (which innovative activities essentially are). Second, larger enterprises have a greater volume of output over which to spread the fixed costs of such investments. Finally, it is quite likely there are scale economies in innovative activities.

At the same time, while SMEs generally are at a disadvantage when it comes to innovation relative to larger firms, it is useful to distinguish more dynamic SMEs from the others. SMEs which are connected to international markets presumably may innovate more since the pressure to develop higher quality products and to streamline costs is more intense. As Lall (2001) puts it, "[f]acing world competition is an effective stimulus to building technological capabilities, and close contact with export markets is an excellent, partly free, source of technological information". Figure 7.1 shows us that there is some variation in innovation between exporting and non-exporting SMEs, and that the difference is more pronounced for South Asia, a region with more protected domestic markets.

There are several ways in which enterprises acquire new technology to improve production and marketing, as seen in Table 7.2.

The most important source of technological innovation, for SMEs as well as large firms, comes from new machinery or equipment. Also of considerable importance are those innovations developed or adapted within the establishment, especially in South Asia, where about one fifth of surveyed small firms report this as an important source (though as Box 7.3 has pointed out, these innovations may be relatively minor when viewed not from the perspective of the enterprise but more broadly).

Enterprises innovate either to lower production costs or to create demand for their products. At the same time, the pressure to innovate likewise stems from the interlinkage and spillover from suppliers of inputs or capital goods, competitors, the government, customers, consultants and other technology suppliers. The relative importance of these different influences varies by firm size. Table 7.3 shows that domestic competition drives a third of East and Southeast Asian enterprises to reduce production costs.[44] The influence is strongest for SMEs: 45% of SMEs report domestic competition as a main influence in cost reduction compared to 29% for large enterprises. Large enterprises, on the other hand, due to their greater ability to integrate with international markets and the closer similarity of their products to international products and specifications, also report foreign competition as a major influence. Apart from competition from firms, customers also provide sufficient motivation for enterprises to be more efficient, especially in small enterprises. More than one-third of small enterprises say their customers compel them to lower production costs.

Table 7.2 **Most Important Sources of Technological Innovation for Asia (% of enterprises)**

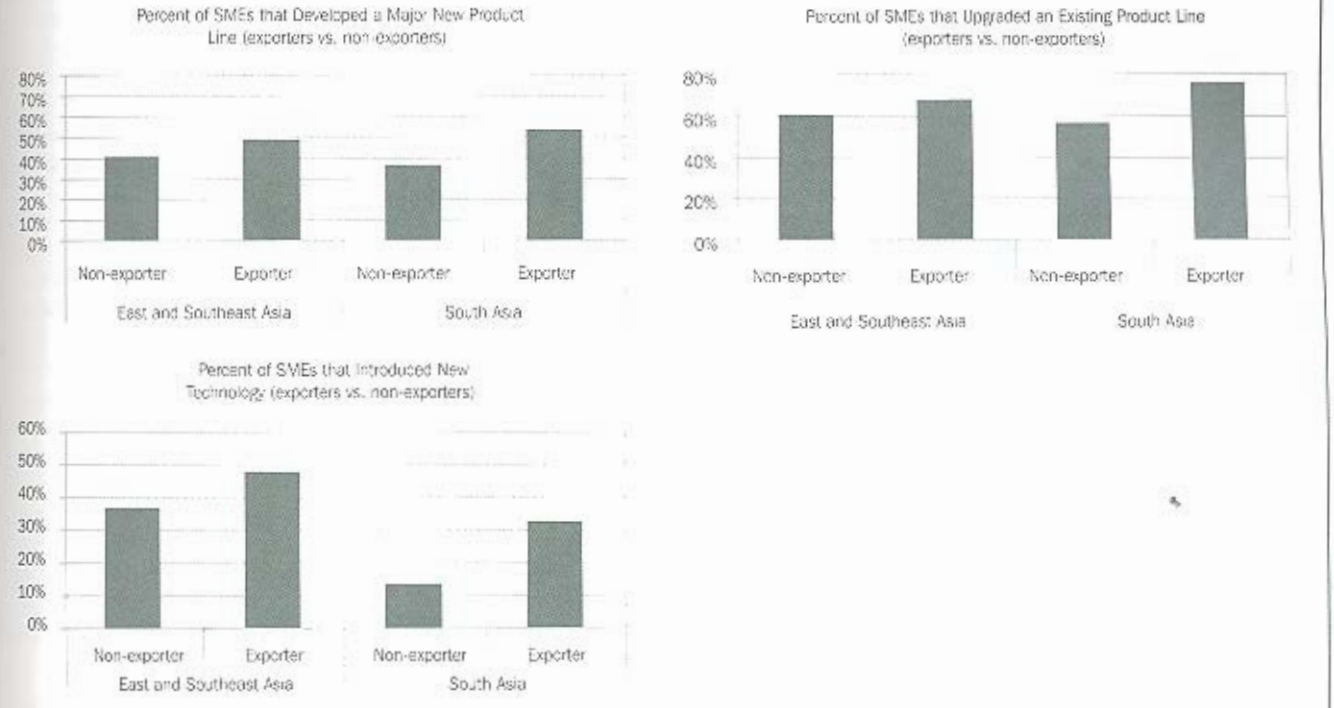
	East and Southeast Asia				South Asia			
	Small	Medium	Large	All	Small	Medium	Large	All
Embodied in new machinery or equipment	48	49	46	47	26	36	50	36
By hiring key personnel	11	8	8	9	13	15	14	14
Licensing or turnkey operations from international sources	1	2	3	2	2	2	2	2
Licensing or turnkey operations from domestic sources	1	1	1	1	5	3	1	3
Developed or adapted within the establishment locally	13	11	9	11	21	15	7	15
Transferred from parent company	2	6	12	7	2	2	3	2
Developed in cooperation with client firms	11	11	11	11	13	14	11	13
Developed with equipment or machinery supplier	6	7	7	7	1	3	4	3
From a business or industry association	2	3	2	2	5	1	2	3
Trade fairs and/or study tours	2	1	0	1	8	7	4	7
Consultants	2	1	1	1	3	2	2	3
From universities, public institutions	0	1	0	0	0	0	0	0

Notes: East and Southeast Asia includes Cambodia, People's Republic of China, Indonesia, Republic of Korea, Lao PDR, Malaysia, Philippines, Thailand, and Viet Nam; South Asia includes: Bangladesh, India, Pakistan, and Sri Lanka.
Source: Authors' estimates using World Bank Enterprise Survey database.

43 There are other views, of course. See, for example, the work of Audretsch discussed in Box 3.4 in Section 3.

44 Data pertaining to this issue were not available for South Asian countries.

Figure 7.1 **Innovation in Exporting and Non-Exporting SMEs**



Notes: East and Southeast Asia includes Cambodia, People's Republic of China, Indonesia, Republic of Korea, Lao PDR, Malaysia, Philippines, Thailand, and Viet Nam; South Asia includes: Bangladesh, India, Pakistan, and Sri Lanka

Source: Authors' estimates using World Bank Enterprise Survey (WBES) database.

Table 7.3 **Main Influence to Reduce Production Cost (% enterprises answering yes)**

East and Southeast Asia	Small	Medium	Large	All
Domestic competitors	45	45	29	37
Foreign competitors	9	17	31	21
Customers	36	24	21	26
Shareholders	3	4	6	5
Creditors	1	4	3	3
Government or government agencies	6	6	10	8

Notes: East and Southeast Asia includes Cambodia, People's Republic of China, Indonesia, Republic of Korea, Lao PDR, Malaysia, Philippines, Thailand, and Viet Nam.

Source: Authors' estimates using World Bank Enterprise Survey (WBES) database.

Table 7.4 **Main Influence to Develop New Products (% enterprises answering yes)**

East and Southeast Asia	Small	Medium	Large	All
Domestic competitors	41	44	22	33
Foreign competitors	7	18	31	21
Customers	47	32	39	40
Shareholders	1	4	5	4
Creditors	2	2	2	2
Government or government agencies	1	0	2	1

Notes: East and Southeast Asia includes Cambodia, People's Republic of China, Indonesia, Republic of Korea, Lao PDR, Malaysia, Philippines, Thailand, and Viet Nam.

Source: Authors' estimates using World Bank Enterprise Survey (WBES) database.

Customers also exert heavy influence on enterprises to develop new products (Table 7.4). Demand from markets and customers is an integral part of building innovative capacity for several reasons: (i) the sophistication of buyers, the development of marketing channels and the competition it generates influence product development, quality management, and marketing skills; and (ii) the size and extent of the market induces the proliferation of activities that can be undertaken. Larger markets mean that the opportunity to develop scale-intensive enterprises is greater and these enterprises can possess the resources to make innovation possible (Lall 2001).

In closing, it is worth noting that regulations can play an important role, positive and negative, in influencing the incentives to adopt new technologies. This can be seen in Box 7.4, which describes an assessment of the Indian apparel industry and the complex mix of factors that appear to have dampened the incentives to adopt process innovations.

Box 7.4 **Choice of Production Methods, Scale, and Regulations in the Apparel Industry in India**

With relatively low capital and skill requirements, apparel is an industry well-suited to the early stages of industrialization. The manufacturing process used in apparel can be broken down into five sequential steps: (i) garment design; (ii) production planning; (iii) preassembly; (iv) assembly; and (v) finishing.

There are two principal methods employed for undertaking these steps in so far as the production of more typical apparel products is concerned (that is, outside the production of high-value added, high fashion products). The "make through" method relies on one operator who understands all of the processes involved in manufacturing to undertake all five steps. This is the standard method used by tailors in India. The assembly line is diametrically opposite, relying intensively on the division of labor. Each individual worker focuses on a narrowly defined task. It allows for a dramatic increase in labor productivity and quality of finished products, especially when operators work with specialized machinery. Significantly, the assembly-line method requires a much lower level of skills among operators than the make through method.[1] However, what it does require is excellent organizational ability among supervisors and at higher levels.[2]

Benchmarking exercises reveal very large gaps in the productivity of Indian apparel producers relative to international standards. McKinsey's case study attributes almost 60% of the differential in productivity between Indian and US producers to the very large reliance in India on the make through method, with one master tailor and 3–4 workers working on a similar number of sewing machines at its base. In contrast, apparel factories in the People's Republic of China and Sri Lanka often have hundreds and thousands of employees working with specialized machinery. One example of such machinery is a spreading machine—a machine that spreads cloth flat and evenly. In contrast, manual spreading of cloth can result in stretching of the fabric and ultimately contributes to distortions in the size of the final fabric.

But at the scale at which Indian tailors operate, there's simply no incentive for them to adopt the specialized machinery. How then do tailors survive despite their obvious disadvantages on the productivity front? First, tailors are able to compete on the basis of their low fixed costs, virtually zero inventory costs (typically consumers provide the fabric) and their low wages. Second, a host of regulations prevent competition from assembly-line manufacturers, especially large-scale ones. These regulations have encompassed not only the reservations for small-scale industry that have until recently prevented large-scale producers from serving the domestic market,[3] but also high import duties on specialized textile machinery, and obstacles to large-size retail stores (where margins are typically lower as compared to small traditional stores). In addition, land zoning codes and certain elements of India's labor regulations are widely believed to have created disadvantages for large-scale production.

1 See Braverman (1998) for a detailed discussion of the de-skilling associated with assembly-line methods of production. While the division of labor at the heart of assembly-line methods of production is usually discussed in terms of improved efficiency in production, Braverman argues that the popularity of the division of labor is on account of its adverse effects on the bargaining power of workers.

2 A third method, common in developed countries, is the modular approach to production. This consists of grouping various tasks and assigning them to a module—that is, a team of 5–30 persons. The workers are trained in the different tasks and can therefore move across them. This method requires considerable cross-training across tasks and is used for producing high value added, high fashion products.

3 The McKinsey case study points out that reservations for small-scale industry imply that firms are encouraged to operate with fixed assets below $200,000. A basic 500 machine factory—the minimum size required to function effectively—requires a minimum investment of $700,000.

Source: McKinsey Global Institute (2001); National Manufacturing Competitiveness Council (2009).

7.2 Assisting SMEs with Technology and Learning

Limited technological capability and lack of information on markets and products are important constraints on SME dynamism. In addition to their attempts at improving SMEs access to finance, it is not surprising to find that governments have put in place a variety of programs and services to help SMEs improve their knowledge about and access to promising technologies, production methods, and markets (including export markets). As seen in Table 7.5, a snapshot of some of the programs put in place in Asian developing countries, governments have done this by subsidizing and often providing a variety of technology extension services, training to workers and entrepreneurs, and testing facilities and tool rooms and hosting trade fairs and the like to give enterprises access to new markets and buyers. In some cases, governments have also subsidized the development of low-cost production technologies for use by smaller enterprises. An example is a recent public-private partnership based effort in India to develop a shuttleless loom for smaller enterprises in the textile weaving industry.[45]

Box 7.5 outlines measures for SME support in Singapore as provided by SPRING Singapore, a

45 The textile industry has four main production processes: spinning, weaving, wet processing, and stitching. The weaving activity uses two main technologies for looms: shuttle looms and shuttleless looms. While shuttle looms are typically much cheaper, they are also more inefficient. Additionally, they produce relatively lower quality fabrics than shuttleless looms. To increase the penetration of shuttleless looms in the weaving activities of textile enterprises, the South India Textile Research Association (SITRA), one of the four textile research associations sponsored by the textile industry and supported by India's Ministry of Textiles has developed models of looms that are cheaper compared to imported shuttleless looms that achieve greater efficiency than the traditional looms. Imported shuttleless looms, although more efficient, definitely cost more than the SITRA looms—with brand new ones costing more than five times more. To encourage adoption of this technology, the SITRA loom is included in the list of looms that will be eligible under the Ministry of Textile's Technology Upgradation Funds Scheme whereby buyers of these looms are eligible for an upfront capital subsidy (Senthilkumar, Kadirvel, and Ramasamy 2002; Gurumurthy 2002).

Table 7.5 **Technology Programs, Extension Services and Training, and Business Links**

Technology Development and Transfer			
		Program	**Features**
South Asia	Bangladesh	Various government support on technology and capacity building	- Expert consultation meeting, technology development and transfer, assistance in meeting compliances (ISO certifications, etc.), technical support for issuing "Voluntary Product Certificates".
	India	National Manufacturing Competitiveness Programme	- Addresses the technology, marketing and skill upgrading needs of the sector, mainly in the public-private partnership mode.
			- Lean Manufacturing Technologies — systematically identifying and eliminating waste throughout the entire business cycle.
		Technology Mission	- Promoting new and appropriate technologies for SMEs, assessing present levels of technology and their forecasting, setting up technology information centres/data banks and an IT portal for information dissemination, carrying out detailed technology audits.
	Sri Lanka	Techology Improvement program	- New technical service centers (Vidatha) common service centers, as well as the science and technology centers have already setup at the very remote areas in the country.
Southeast Asia	Malaysia	Third Industrial Master Plan	- Introduction of technology foresight programmes to be implemented by Small and Medium Industries Development Corporation together with technology based institutions.
	Philippines	SME Development Plan 2003-2004	- Product clinics and advisory services for standards conformity, alternative uses of indigenous raw materials, training to sustain quality of raw material inputs, strengthening sharing of facilities.
	Singapore	Technology Innovation Programme	- One-stop centres offering technology consultancy and practical, downstream technology platforms.
		Local Enterprise Technical Assistance Scheme	- Provides up to 50% funding support to hire external experts to improve management and operations.
		Intellectual Property Management Programme	- Provides up to 50% funding support to manage intellectual property system more effectively for the development of new products, processes, ideas and business models.
	Thailand	Network for Promoting Innovation to Commercialization Project	- Various supports for upgrading technology.
East Asia	Korea, Republic of	Various policies on technology	- 380 billion won worth of technology initiatives on innovation and industry-academia research partnerships.
			- Reinforcement of industry-academia-research institute networks, commercialization of developed technology and establishment of digital infrastructure.
	PRC	The Outline of National Medium and Long-term Plan for Sci-Tech Development	- 500 technology incubators.
	Taipei,China	Heavenly Dragons 8-Steps Project	- Industry-academia links.
			- Information service portals, implementation of Information and Communications Technology, talent cultivation, accumulation of knowledge, online sales and supply chain management.

Table 7.5 continued on next page

Box 7.5 **SME Support for Technology in Singapore**

Established in 2002, SPRING Singapore has developed a comprehensive range of programs to help enterprises overcome barriers and advance. While assisting SMEs with access to finance is an important function of SPRING Singapore, the agency also helps enterprises enhance technological and marketing capabilities.

To do this, the agency has introduced a range of schemes to incentivize and facilitate development in areas such as branding, management systems, service standards, design, human resource, intellectual property, technology infrastructure, and productivity. The Local Enterprise Association Development program, for instance, is the result of an agreement between the government and 14 industry associations to commit over S$65 million for industry capability development projects. To build soft skills, SPRING Singapore partnered with local educational institutions to create the Management Development Program in 2007, aimed at sending leaders and managers of SMEs back to business school. Scholarship programs have also been launched to groom future business leaders. SPRING Singapore also acts as a national standards and conformance body to help lower technical barriers to trade, provide quality assurance for products and services, and promote industry use of Singaporean and international standards.

Knowledge is another important driver of SME performance. Recognizing this, SPRING Singapore provides various information services such as publications and online portals. EnterpriseOne, for example, is a one-stop web platform where enterprises can obtain industry updates, research reports, workshops and access to business information resources. To supplement the website, key business chambers and associations were encouraged to establish Enterprise Development Centers in order to provide a network of business advisory and information services for enterprises.

To help enterprises expand overseas, International Enterprise (IE) Singapore was established to offer services to facilitate exporting, business capabilities development, finding overseas partners, and entering new markets. The agency works through a network of Overseas Centers, Honorary Business Representatives and Business Advisors in over 30 locations throughout the world. These representatives provide market intelligence and on-the-ground business facilitation services to Singaporean enterprises. IE Singapore also runs training programs and an advisory online portal to familiarize companies with potential international markets.

Source: Hank Lim, Singapore Institute of International Affairs.

Table 7.5 **Technology Programs, Extension Services and Training, and Business Links** *(continued)*

		Worker Training and Development		Entrepreneur Training and Development	
		Program	**Features**	**Program**	**Features**
South Asia	Bangladesh	Cluster based skill development program	- Provides training to upgrade skill in the following businesses: (a) bakery and confectionery food preparation and marketing (b) leather products production and marketing (c) bamboo products production and marketing (d) fashion design and dress making (e) ikebana (flower decoration) and others	Entrepreneurship development and management leadership	- Provides training to entrepreneurs in the following areas: (a) entrepreneurship development (b) new business creation (c) developing competitive business plan (d) market promotion and market development (e) preparation of project profile and project appraisals etc.
	India	Development institutes, regional testing centres, field testing stations, toolrooms, product-cum-process development centers	- Conduct long term, short term, trade/field specific and industry specific tailor-made courses as well as vocationals training programmes.	Package for promotion of SMEs	- Specialized training for 50,000 entrepreneurs.
Southeast Asia	Malaysia	Skills Upgrading Programme	- Tailor-made courses as well as vocationals training programmes for skills upgrading.	Technopreneur Management Support Scheme	- Provides technical advisory services in relation to standards and certification.
	Philippines	SME Development Plan 2003–2004	- Streamlining of training programs and standardizing fees and promotion; deployment of SME business counselors; review of academic curricula to promote entrepreneurship.	SME Development Plan 2004–2010	- SME counseling and advisory Program, IT appreciation and application courses, establishment of SME industry centers to provide extensive management capacity building services to SMEs.
	Thailand	Skill and Capacity Development	- Provides training courses arranged by governmental offices and network institutes, for example, the Department of Industrial Promotion, training institutes and universities.	Entrepreneur development programs	- Consulting services, workshops etc.
East Asia	Korea, Republic of	SME Training Center	- Provides low cost quality training services for SME employees. Trainings focus on production technology, IT/automation, quality assurance and digital technology.	Biz Start-up Policies and Services	- Business incubator and other start-up courses for entrepreneurs.
	China, People's Republic of	SME Galaxy Training Program	- Offers training on business administration, safe production, industrial policies, etc.	Various start-up services	- Entrepreneurship mentoring and training.
	Taipei,China	Various training programs	- Setting up northern, central, and southern SME research and training centers that combine the resources of schools and training institutes, management and consultant seed personnel training work to raise management capacity of owners and employees.	Various training programs	- Management courses that meet the needs of local industries.

Table 7.5 continued on next page

government agency entrusted to encourage innovations among enterprises and foster a competitive SME sector. Box 7.6 describes the network of technology support institutions that have kept SMEs in Taipei,China—where SMEs have an important role in a variety of manufacturing industries, including bicycles, machine tools, computer peripherals and even application-specific integrated circuits—among the world's leaders in the manufacture of high-tech products.

Rigorous evaluation of these government initiatives to help enterprises improve technological capabilities and adopt new technologies seems to be even rarer than evaluations of finance-related initiatives. Nevertheless, a reading of descriptive analysis and case studies—combined with an examination of aggregate performance indicators on growth of output, productivity, and exports (as well as the diversification into a greater range of products)—suggests strongly that government initiatives in the NIEs, especially Korea, Singapore, and Taipei,China, have been successful relative to similar initiatives elsewhere in the region (for example, in India).

A greater appreciation of the importance of adopting new technologies, breaking into new markets, and simply better design of assistance probably go a long way to explaining this. As has been noted in Section 4, from the late 1970s and especially 1980s, there was a gradual move in Korean industrial development policy towards supporting SMEs. At first glance, some of the measures bear some similarity to initiatives adopted in India to assist small enterprises. For example, Korea's 1975 Subcontracting Promotion Act disallowed large firms to expand production facilities for designated products while encouraging them to transfer their facilities to SMEs. However, rather than just stop there, an important part of the Korean policy was to ensure that SMEs had the incentives as well as the capabilities to produce the products efficiently. SME

Table 7.5 **Technology Programs, Extension Services and Training, and Business Links** *(continued)*

		Buyer-Seller/Market Linkages/Export Promotion Programs	
		Program	**Features**
South Asia	India	Government Stores Purchase Programme	(i) Issue of tender sets free of cost; (ii) exemption from payment of earnest money deposit; (iii) waiver of security deposit up to the monetary limit for which the unit is registered; and (iv) price preference up to 15% over the quotation of large-scale units.
		Export Promotion Programs	(i) Products of SME exporters are displayed in international exhibitions and the expenditure incurred is reimbursed by the government; (ii) training for SMEs on latest packaging standards for exports, techniques, etc.
	Sri Lanka	Business Development Service Centre	Enhance marketing opportunities for SMEs, promote business incubator and sells centers, conduct exhibitions, and trade fair programs, create link between development service providers that are, chambers of commerce, advertising organization, export development boards and SMEs associations.
Southeast Asia	Indonesia	Various promotional tools	Development of promotion tools, trading board, exhibition.
	Philippines	Export assistance network	Trade facilitation office serving existing and potential exporters, offering real and immediate services in export trade information dissemination, export procedures and documentation, buyer linkages etc.
		Establishment of Philippine trade centers	Serves as permanent exhibit sites of the country's export products.
	Thailand	Board of Investment Unit for Industrial Linkage Development (BUILD)	Organizes meetings and factory tours of registered suppliers and assemblers, organizes subcontracting exhibitions, and facilitating local suppliers to display their products and international exhibitions by providing financial support to potential suppliers.
		Office of Small and Medium Enterprise Promotion promotional programs	Bilateral cooperation agreement to promote projects, such as, franchising, mulberry paper, handicraft, bio-diesel, and tourism.
	Singapore	Government Electronic Business (GeBIZ)	Provides access to the procurement opportunities of 120 government agencies.
		Singapore Business Federation Global Sourcing Hub	Online B2B business portal provides instant access to global opportunities; streamline and automate sourcing processes, and gain access to wider supplier and buyer communities.
		Export Technical Assistance Centre	Helps to understand and comply with the standards and technical regulations for food and electrical/electronic exports.
East Asia	Korea, Republic of	Various promotion programs	Trade missions to overseas exhibitions.
			Dispatch SME employees to overseas markets to become trade professionals.
	PRC	Various export promotion programs	Fund for SME International Market Development, China International SME Fair.
	Taipei,China	Various promotion and business linkage programs	Integrate the resources of local governmental SME service centers, local chambers of commerce and other relevant agencies, honorary SME guidance personnel (enterprise service volunteers) to build up a comprehensive SME service mechanisms.

PRC = People's Republic of China
Source: Authors' compilation based on sources mentioned in the references.

Box 7.6 **SME Technology Support Institutions in Taipei,China**

Taipei,China has an impressive set of programs to support SMEs. In 1981, the government set up the Medium and Small Business Administration to support SME development and coordinate the several agencies that provided them assistance. Management and technology assistance was provided by the China Productivity Center (CPC), the Industrial Technology Research Institute (ITRI) and a number of industrial technology centers (for metal industry, textiles, biotechnology, food, and information). Financial assistance was provided by various agencies, including the Small and Medium Business Credit Guarantee Fund and the Small Business Integrated Assistance Center.

The Joint Services Center of the Ministry of Economic Affairs provides information on SME assistance. The government covers 50–70% of consultation fees for consultancy services for SMEs. The Medium and Small Business Administration has a fund for SME promotion of NT$10 billion. The "Center-Satellite Factory Promotion Program" of the Ministry of Economic Affairs integrates smaller factories around a principal one. This program involves vendor assistance and productivity raising efforts, and a rational sharing of tasks between participating enterprises. By 1989 there were 60 networks with 1,186 satellite factories in operation, mainly in electronics.

For providing research and development support, ITRI handles contract research work considered too risky for the private sector; the contracts have financial support from the government. The Institute for the Information Industry, complements ITRI's work on hardware by developing and introducing software technology. Taipei,China's Handicraft Promotion Center supports handicraft producers, particularly small ones with export potential. The Program for the Promotion of Technology Transfer maintains close contact with foreign corporations that have developed leading-edge technologies in order to facilitate the transfer of those technologies to Taipei,China.

The CPC is known for its efforts to promote automation to improve precision and quality; it sends out teams of engineers to visit plants throughout the country and demonstrate the best means of automation and solve relevant technical problems. Over the years the CPC has visited over 1,000 plants and made over 4,000 suggestions for improvement. It also carried out more than 500 research projects on improving production efficiency and linked enterprises to research centers to solve more complex technical problems.

Source: Lall (2001).

subcontractors were required to submit plans for facility modernization to the Ministry of Trade and Industry and, once these plans were approved, the SMEs could qualify for preferential long-term credit and technical assistance (Kim 2004). Put differently, this was not the blanket protection for the small enterprises provided in India.

Similarly, and as already noted earlier, a focus on exports seems to have ensured discipline in at least some of the assistance provided. Thus, when in 1983 the government developed a program to identify and assist 1,000 promising SMEs per year, the selection of the enterprises included as a criteria the potential for exports (Kim 2004). Finally, there was a concerted effort in fostering technology related partnerships between SMEs and universities and the private sector. One such program is the Industry/University/Research Institute Consortium for Technology Development, which created a matching fund system aimed at using the staff and research facilities of universities and research institutes.

Of course, it is unlikely that all of the government assistance in the NIEs was successful (or even equally successful). A serious, though largely qualitative study on the impact of government assistance programs for SMEs has been made by Kim and Nugent (1999) through a survey of 122 mostly exporting SMEs across four different subsectors in manufacturing, sheds useful light on this. Although data was not collected on the cost of different programs, the perceptions of enterprises on the usefulness of different assistance programs was obtained. The results suggest international trade fairs and access to information on technical and other standards in foreign markets were particularly useful for enterprises. In addition, networks of university professors and industrial consultants were important sources of technical support. Overall, the analysis suggests that assistance that met the following design principles and characteristics was deemed to be more useful by SMEs: a system for SMEs to provide feedback on the assistance (and a mechanism whereby that feedback would result in corrective actions); competent personnel in agencies providing assistance; and assistance that was not too general in nature.

Of course, quite apart from the direct assistance that governments provided to SMEs in the NIEs, an educated workforce has helped smaller enterprises make the transition to new activities and production methods relatively easily. For example, even while training in specific skills—for example, the capability to use a specific production technology—is best done outside the primary and secondary school system (for example, within individual enterprises through on-the-job training), broad-based access to general education has provided workers with the essential literacy and numeracy, along with the socialization valued in the modern workplace (by inculcating attitudes such as punctuality, for example), that seems to have made workers more *trainable*. At the same time, these economies have undertaken a range of training programs since the 1970s. For example, in 1976, Korea introduced the Basic Law for Vocational Training requiring private firms with 150 or more employees to conduct in-house training for a portion of its employees, or to pay a training levy equivalent to no less than 6% of its wage bill. This levy was used to promote vocational training via government-sponsored vocational training schools. Singapore, too, has been an early adopter of such programs. For example, the Vocational and Industrial Training Board, set up in 1979 and financed with a levy of 1% on wages, subsidized efforts to upgrade the skills and expertise of employees or retraining of retrenched workers.[46]

The various programs, very often working with the private sector, have delivered on providing a well-skilled workforce in these economies. SMEs have been the major beneficiaries since they lack the resources to carry out extensive training themselves. Indeed, the contrast with economies in South Asia is stark. As a recent study from India points out, export-oriented SME employers (and thus the dynamic SMEs policy should encourage)—in labor-intensive industries as diverse as apparel, leather, sports goods, and bicycles—view the lack of workers who have the skills to handle the specific machines these industries deal with as a major constraint on their operations (Das and Kalita 2009). While the skills can be acquired through on-the-job training, the enterprises feel unable to provide these on cost and time considerations. Moreover, the possibility that once trained, a worker could be easily hired by a competitor no doubt serves as an added disincentive. In this context, deficiencies in the system of vocational and technical education in India seem to be truly constraining. As a recent report points out, the system of providing technical education and training is extremely lopsided in that it is heavily biased against producing trained technicians (National Commission for Enterprises in the Unorganized Sector 2009). The report points out that in ideal circumstances, the ratio of college educated engineers to diploma engineers to technicians should be 1:3:15. However, the structure of technical education and training in India is such that it annually produces 400,000 college educated engineers, 250,000 diploma educated engineers, and only 600,000 formally trained technicians, for a ratio of just 1:0.6:1.5.

46 See Felipe and Hasan (2006) for more details on similar programs in the region.

7.3 Assisting SMEs through Links with Large Enterprises and Cluster-based Development

We end this section with a discussion of two approaches, which are receiving considerable attention in policy circles, for instilling technological dynamism in SMEs.

Fostering Links between SMEs and Large Enterprises

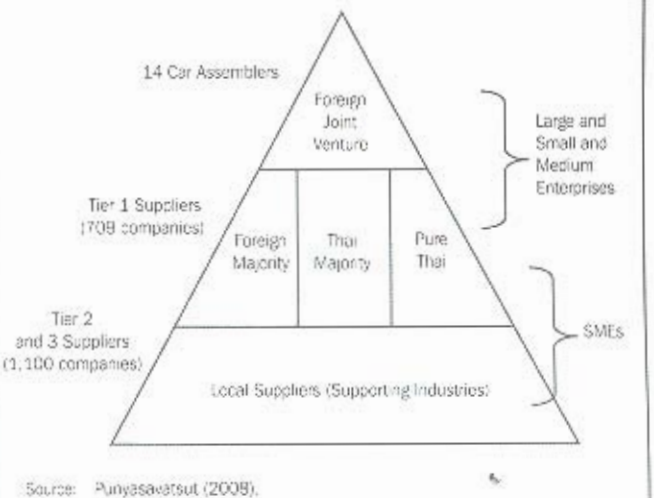
As noted above, size often confers a variety of advantages when it comes to the ability to adopt new technologies and seek out and enter new markets. For SMEs, establishing links with large enterprises through supplier and subcontracting relationships can represent an important way to derive the benefits of the superior access to markets and technology of larger enterprises.

SMEs generally fit into value chains as peripheral suppliers to one or more links in the chain, usually as second- or third-tier suppliers.[47] Their importance varies by country and industry. In Japan, SMEs have played an important role in supplying parts and components to large enterprises through long-term subcontracting relationships, especially in the machinery and automobile industries. Typically, the top tier consists of large enterprises, such as assemblers of electric appliances and automobiles and manufacturers of complete components. The second tier is occupied by medium and large enterprises that assemble components and supply these to large enterprises in the first tier. In turn, the enterprises in the second tier procure parts from the third tier—typically SMEs. Finally, tiny and small enterprises make up the fourth tier. In the case of Toyota, Uchikawa (2009) notes that while more than 30,000 enterprises have an indirect link with it, it has direct transactions with hundreds of enterprises.

Something very similar has happened in some countries in developing Asia. In the Thai automobile industry, for example, 709 first-tier suppliers and 1,100 second-tier suppliers have served a value chain with 14 car assemblers at the top (Figure 7.2).

The scope for SME-large firm links has expanded in certain industries as a result of a process of *fragmentation* of production in some industrialized countries and the associated creation of global production and distribution networks. As illustrated by Figure 7.3, fragmentation has

Figure 7.2 **Structure of Subcontracting in the Thai Automobile Industry**



Source: Punyasavatsut (2008).

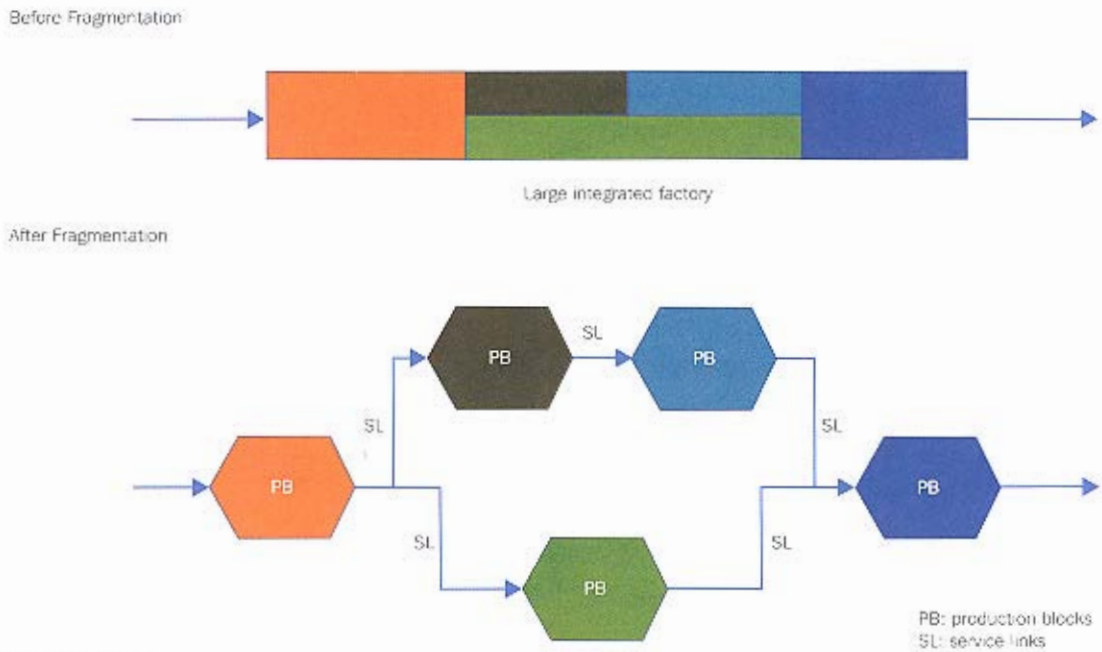
involved the parceling of some production processes that were carried out in large establishments to typically smaller enterprises in lower-income countries. This process gained momentum beginning in the 1990s in East and Southeast Asia.

Some fragmentation of production also seems to have happened locally (that is, large domestic enterprises developing their own value chains and interlinkages with SMEs through arm's length supplier or subcontracting relationships). In any case, the existence of supply links between small and large enterprises does not require a process of fragmentation. It can simply be the way production is structured from the outset. The exact scope of subcontracting or supplier relationships between small and large enterprises is very difficult to work out because of data issues. But in Thailand the Annual Industrial Survey reports subcontracting costs (including resale of finished goods) in business operations. Subcontracting cost shares among the top-ten manufacturing subsectors were around 18–49% of total production cost in 2006 (Punyasavatsut 2008). While it is not clear how much the subcontracting costs reflect sales by SMEs to large firms, they are by no means trivial and suggest the potential importance of fostering links between SMEs and large enterprises.

While it is widely believed that subcontracting has led to higher productivity and technological dynamism for the SMEs engaged in it—large enterprises have incentives to provide training and assistance to SMEs in upgrading their production capabilities, among other things—hard evidence is difficult to come by, even in Japan (Kimura 2002). Nevertheless, its prevalence in the industrial structures of Japan, and even Korea and Taipei,China,

47 A value chain refers to the integration of various organizations, resources, and knowledge streams involved in the creation and delivery of value to end customers. For any given industry, the value chain represents the different stages of processing of inputs to generate either intermediate or final output for sale to customers. Each stage involves the addition of value in the form of goods and or services.

Figure 7.3 **Fragmentation of Production**



Source: Kimura (2007).

three successful industrializers, has led analysts to argue in favor of measures to help SMEs engage in subcontracting relationships in production value chains. Outside Japan and the NIEs, Thailand, in particular, has taken major steps to help SMEs in this area (Box 7.7).

Help for SMEs to enter value chains must be preceded by a careful market analysis that examines the number and types of businesses involved in an existing value chain, the role SMEs play in that chain, and the barriers and constraints SMEs face in becoming part it. Only then can specific activities—such as the provision of subsidized training and technical assistance for potential SME subcontractors—be considered and designed.

Moreover, the interest and commitment of (typically larger) enterprises up the value chain to entering into relationships with smaller enterprises needs to be

Box 7.7 **Fostering Large Firm-Small Firm Links in Thailand**

Thailand has at least two major government agencies, the Bureau of Supporting Industries Development (BSID) and the Board of Investment (BOI) helping smaller firms establish links with larger firms. (The term "supporting industries" refers to a wide range of production activities that provide goods and services for other industries.) BSID activities have focused on industries such as auto parts, parts for electrical and electronic appliances and machinery, and mold and die and casting products. The BSID has provided technical assistance and training for enterprises in these industries, supported the design and development of prototype products (for example, electronic systems for heat treatment of steel), and promoted subcontracting through organization of the "Buyers Village" meant to bring representatives of different enterprises together.

The BOI, meanwhile, in 1992 established a special purpose agency, BUILD, to directly help build links between local parts suppliers and large assemblers, especially multinational corporations (not only located in Thailand, but also in other countries). Its main activities have included programs which bring together vendors and customers, for example, by organizing meetings and factory tours of registered suppliers and assemblers, organizing subcontracting exhibitions, and helping local suppliers to display their products at international exhibitions by providing financial support to potential suppliers. It has also supported a database of enterprises—ASEAN supporting industry database—that can enable manufacturers abroad to come up with short lists of enterprises that can serve as contractors for outsourcing activities. As of August 2007, 20,198 companies had listed in the database (13,534 of them suppliers in Thailand).

Among other agencies, the government has set up independent institutes (the Thailand Automotive Institute, Electrical and Electronics Institute, Food Institute, Textile Institute, and SME Development Institute) that provide testing facilities for parts and raw materials, and consultation and training facilities for enterprises.

Source: Punyasavatsut (2008).

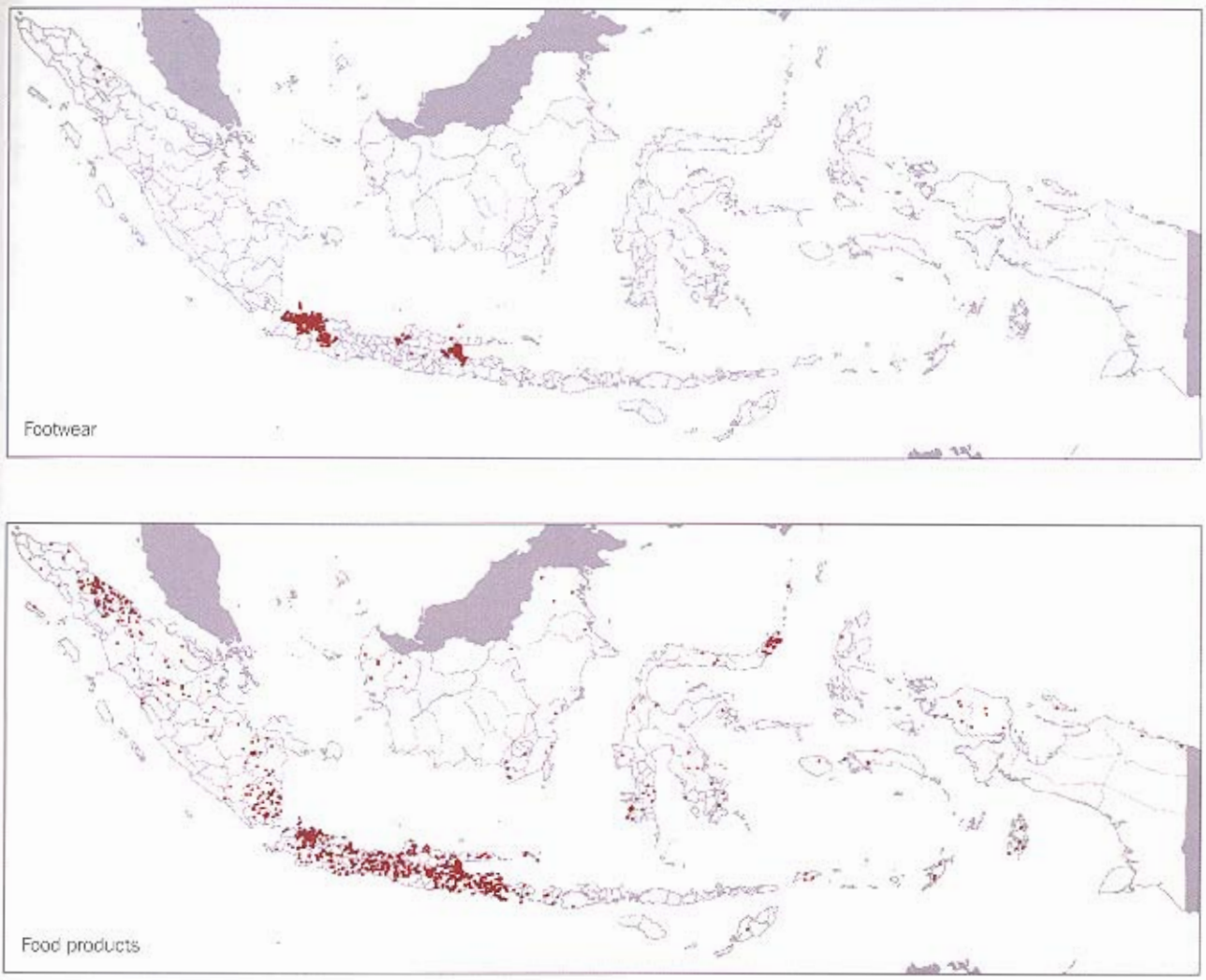
ascertained. For example, the long-run viability of subcontracting relationships once the subsidized inputs end (such as training for SME subcontractors) needs to be looked into. Similarly, there is a risk that large contracting companies may take advantage of their dominant position in the market to set unfair prices or to delay paying SMEs. State-driven measures are needed to control such practices and unfair competition.

Clusters

The term clusters is used to refer to a geographic and sectoral concentration of enterprises. The enterprises produce and sell a range of related or complementary products and, as a result, are faced with common challenges and opportunities (ADB 2006). Clusters are often also located close to equipment and raw material suppliers, independent component producers, and subcontractors and final goods producers. Suppliers of key business services are also present, as are buyers and their agents. Figure 7.4 gives some sense of the geographical and sectoral concentration of enterprises. The upper panel describes the location of formal manufacturers of footwear in Indonesia by district, while the lower panel is for food products. Quite clearly, while the production of formal footwear is very concentrated geographically, food production is much more widely dispersed.

Many analysts believe clusters hold considerable potential for instilling dynamism in small enterprises. Clusters can allow small firms to escape the straitjacket imposed by a lack of economies of scale and benefit from a variety of spillover benefits, including access to a wider pool of relatively specialized labor and opportunities

Figure 7.4 **Distribution of Manufacturing Employment in Footwear and Food Products, Indonesia, 1996**



Source: Deichmann et al (2005).

to learn about potentially profitable product lines and technologies. Indeed, a number of governments in the region are using assistance to clusters as a chief method to instill dynamism.

To gauge the potential, it is useful to examine what gives rise to clusters; the reasons vary. In Japan, based on a review of the history of 14 industrial clusters, Yamawaki (2002) notes several different factors that played key roles across different clusters. These include the catalytic role played by the emergence of a large enterprise (for example, the general machinery cluster that emerged around Komatsu Corporation, a large producer of construction machinery), the presence of public research in a standards testing facility (for example, the establishment of a public technology center in Hyogo in 1894) and the availability of a pool of workers (for example, the emergence of an apparel cluster in Gifu helped by an abundance of part-time female labor).

Based on a survey of small enterprises in various clusters, Yamawaki (2002) points out that for many small firms, being part of a cluster has helped them to specialize, to absorb new technologies, and facilitate their procurement of inputs. Additionally, the local government provision of public testing facilities and research and technology development centers to the cluster has also been helpful.

Being part of a cluster also seems to have helped SMEs in Indonesia. Berry, Rodriguez, and Sandee (2002) find that clustering, along with subcontracting relationships with foreign firms, has played an important role in helping many SMEs become successful exporters of furniture (rattan and wood) and garments by not only helping them establish links with foreign buyers, but also introducing them to a variety of process and product innovations. In contrast, small enterprises outside clusters have not been as successful in either entering export markets or diversifying their product lines.

Similarly, Zhejiang Province in the eastern coastal part of the PRC is considered to have one of the most vibrant SME industrial clusters in the PRC. Its growth was fueled by the clustering of SMEs in the area into specialized industrial zones (Lim 2009). Indeed, it is argued that many small towns in the PRC depend on township enterprises for their economic growth. Such enterprises are expected to generate more employment opportunities for the rural surplus labor force. A small town's development must be supported by its industry and such support can come from SME cluster enterprises in the secondary and tertiary industry.

Of course, the simple fact of clustering does not by itself suggest dynamism for its constituent enterprises. Table 7.6, drawn from Das (2008), shows some basic characteristics of different types of clusters in India. It is clear that the vast majority of clusters consist of microenterprises engaged in the production of traditional products, probably catering to low-income consumers. Average wage levels are low and the growth potential of these clusters is also deemed low.

Table 7.6 **Clusters in India**

	Microenterprise Clusters	Traditional Manufacturing Clusters	High-tech Clusters
Number of clusters	6,000	388	about 20
Average wage levels	Low	Medium	High
Growth rate (2002–07)	Negative or marginally positive	Positive (10–15%)	Positive (20–30%)

Source: Das (2008, pg. 87).

Indeed, it is probably the case that many enterprise agglomerations of SMEs represent embryonic clusters that lack dynamism. As noted in ADB (2006), information does not flow easily in these clusters and the various actors are not aware of their own ownership of the cluster. Not surprisingly, entrepreneurs in these underperforming clusters have limited "corporative" presence among local authorities and policymakers.

In contrast, well-developed clusters are those in which there is a close collaboration between firms, often based on a common social-cultural identity that facilitates trust. Crucially, this collaboration coexists with competition between firms. Additionally, the cluster should be well linked with local authorities and the policymaking apparatus.

Having business links with large enterprises in the form of sub-contracting and/or the presence of at least one firm as the leading or anchor firm and acting as the driving factor are also considered important for a well-developed cluster.

In Indonesia, for example, the metal industry clusters in Ceper (Central Java) and in Pasuruan (East Java) generally meet the above criteria and are considered successful industrial clusters for SMEs. By contrast, many other SME clusters in Indonesia are simply called clusters because they are located in the same location and do not successfully provide inter-firm cooperation to generate agglomeration and sub-subcontracting or other business links with large enterprises.

UNIDO provides some design principles for strengthening SME-focused cluster programs. Key elements of design include:

- Work with an existing cluster and network of SMEs. Trying to set up a cluster or network from scratch is unlikely to succeed.
- Concentrate interventions on groups of enterprises and not individual enterprises.
- Focus attention on strengthening institutions and developing instruments that facilitate an interface between enterprises and markets. The objective of better interface must be to help improve the access of enterprises to new markets, fashion trends, product development and technical know-how.
- Support institutions that can provide technical training, technology support, and market information.
- Support mechanisms by which enterprises can work with local levels of government.
- Encourage links with large firms.
- Ensure interventions do not crowd out private initiative

While it is still too early to say how recent initiatives at developing clusters along the above principles will work out, these principles do hold promise. Moreover, their success has implications not only for small firm dynamism, but also for urban development more generally. This point is highlighted in Box 7.8, which describes ADB's recent study on "City Cluster Economic Development in South Asia".

Box 7.8 **A Framework to Induce Functional Industry-Clusters**

By 2030, more than 55% of Asians will reside in urban areas. Towns and cities are sprawling into surrounding areas, forming agglomerated urban-regions, or clustered cities, calling for a development approach that accounts for both rural and urban development in a regional economic context.

The City Cluster Economic Development (CCED) initiative, started by the Asian Development Bank (ADB), attempts to do that. It combines the business cluster concept, discussed in this section, with urban development, and transforms the concept into a practice. It attempts to activate industrial-clusters by supporting their need for growth through research and development centers, vocational skills training, marketing (software infrastructure), as well as water supply, waste management, electricity, information technology, roads, transportation, and logistics (hardware infrastructure).

Research conducted for the CCED initiative measured and compared attributes of competitiveness for more than 30 cities/towns across each of three South Asian countries (India, Bangladesh, and Sri Lanka), identifying, mapping and analyzing sectoral and spatial changes in urban industry and economic activities. The three capital regions were further assessed for their strengths and weaknesses relating to key factors that drive urban development. Three competitive industries that have formed spatial clusters, but have yet to be activated as dynamic functional clusters, were identified:

Competitive Industry	Delhi, India	Dhaka, Bangladesh	Colombo, Sri Lanka
1	General metal engineering industry	Building construction materials industry	Apparel industry
2	Auto component industry	Tannery industry	Rubber industry
3	Ready-made garment industry	Food processing industry	IT industry

Source: Choe and Roberts (forthcoming).

Commonly, these industry clusters require several critical areas for support: research and development, skills training, knowledge sharing, building enabling environments, and improvement of basic urban infrastructure.

To help jump-start the industry-clusters, the CCED initiative calls for continued engagement with these selected industries, involving private sector participation.

The strengths of the approach used by the CCED initiative are that it:

- helps identify spatial clusters of industries that are competitive but still at a dormant stage or involve environmental improvements and waste management, such as the tannery industry in Dhaka;
- enables ADB to more strategically invest in critical infrastructure and capacity building needs to support sustainable local economic development;
- provides improved economic data on cities that will improve economic and financial planning of a country's development strategy;
- allows policy makers to make informed decisions on 'where to invest first' and 'what to invest in' so as to maximize its economic impact with limited resources.

Ultimately, the CCED initiative is intended to provide more job and income opportunities, covering not only urban areas but also the rural hinterland.

8. Lessons from the New Literature on Structural Transformation

Following the discussion on policies for encouraging technological dynamism among SMEs, we end with a more general discussion on policies that promote structural transformation—that is, the process through which an economy engaged in traditional production activities moves to more diverse, modern, and high-productivity activities. Fostering an environment that promotes entrepreneurship and investment in new activities is critical. While government failures—due to macroeconomic mismanagement, burdensome regulations, weak/corrupt administration, and others—penalize entrepreneurship and innovation, market failures due to learning externalities and coordination failures can be rife in developing countries. There is considerable direct evidence of these types of market failures in the development and adoption of new technologies in agriculture (for example, the classic study of Foster and Rosensweig (1995) on the influence of learning externalities on the adoption of high-yielding crop varieties in Indian agriculture). While comparable evidence outside of agriculture is more scarce, discussions of the development of new activities in industry and services are clearly aware of the phenomena.

For example, efforts to promote the tourism sector in Lao PDR and Nepal recognize that high-end hotels in locations of natural beauty could be highly profitable, but only if there is a sufficiently developed transportation network that can bring in tourists from major cities. Moreover, ensuring the increase in tourism is sustainable requires additional investment. Similar remarks would apply to the development of a modern food processing industry—a labor-intensive manufacturing sector with strong and direct links with the agriculture sector holding considerable promise for generating more productive and remunerative job opportunities for workers in rural areas—in low income developing countries. Many factors can hold back the emergence of this industry. Farmers may be cultivating traditional varieties of fruit and vegetables unsuitable for processing; there may be a lack of infrastructure for postharvest preservation and quality control and testing; modern storage facilities encompassing cold-storage facilities, silos, and warehouses may be absent; and air-conditioned transport may not be available. Coordination failures can seriously impede the growth of a sector in which there are so many inputs and players, since no actor working alone would find it worth his or her while to make the required investments. Coordination of investment across different activities in sectors is required.

How should policy tackle the various market failures that hold back investment in new activities? Traditionally, government action to deal with these market failures has come under the rubric of "industrial policy" (for example, through the use of selective tax incentives and subsidies for particular sectors and/or firms). But the efficacy of such policies is the subject of voluminous debate in the economics literature. While scholars such as Alice Amsden and Robert Wade have pointed to the instrumental importance of interventions by governments in Korea and Taipei,China in developing industrial capabilities in new activities to the success of these economies, others such as Jagdish Bhagwati, Anne Krueger, and Ian Little have been highly skeptical. Still others accept that such interventions were effective in the NIEs of East Asia, but point to the apparent failure of similar interventions in other parts of the developing world, and argue that the success of interventions in the NIEs was based on circumstances unique to them.

This is not the place to go over these debates, but the following points are important to note (Rodrik 2007 and 2008): first, most countries practice some sort of industrial policy in the sense that they use various policy instruments to stimulate specific economic activities and promote structural change. (By no means do the activities being promoted have to lie within manufacturing. They can well be in agriculture or services.) Indeed, many of the efforts that we have discussed above—ranging from assistance to SMEs in accessing finance to public support for helping SMEs improve their links with larger and more dynamic firms—can be viewed as elements of industrial policy. Other types of policy intervention—such as the creation of special economic zones, export facilitation, and promotion of foreign investment—are also examples of industrial policy. Put differently, governments *already* choose—indeed, Hausmann and Rodrik (2006) argue that governments are 'doomed to choose'.

Second, and partly as a result, rather than get into a debate on whether or not such policies should be used, a more fruitful debate would center on the design of these policies. In particular, criticism of industrial policies typically focuses on two issues: informational constraints on what sectors or activities suffer most from market imperfections and are therefore worth providing assistance to, and the possibility that industrial policies will be captured by special-interests. These concerns are valid. But this is precisely where policy design comes in. Put differently, a rather narrow view of industrial policy would be to see it as governments picking winners and implementing subsidy and tax schemes. Instead, an alternative view is of industrial policy as a collaboration between the private

sector and the government with the aim of uncovering the most significant obstacles to restructuring, and determining what interventions are most likely to remove them (Rodrik 2007). Among other things, this collaboration requires an ongoing and in-depth dialogue. Box 8.1 describes an agency set up by India's government to provide a forum for this, and its recent analysis and recommendations for India's textile and garment industry.

Rodrik (2007) provides general "design principles" that could have a high pay-off. A few words on some of these seems pertinent. First, public support and incentives should be provided only for activities and not broadly defined sectors. Moreover, the activities in question should be new ones, including products that are new to the local economy or new technologies for existing products. They should also have the potential to crowd-in other, complementary investments or generate informational or technological spillovers. Certainly, choosing which activities that appear to be good candidates to support is not easy. But there are approaches and tools that are promising. Box 8.2 describes the concept of the 'product space' and its use as a tool for thinking about which types of activities have this potential.

Box 8.1 **India's Textile and Garment Industry: An Assessment of India's National Manufacturing Competitiveness Council**

The textiles and garments industry contributed almost 2% to India's gross domestic product and around 12% to manufacturing value added in 2006–07. It is also a very large employer. In recent years, it has accounted for 20% of employment in organized manufacturing and around 34% of employment in unorganized manufacturing. The industry is also a large exporter. Around 36% of its output was exported in 2005–06.

While the industry's performance has improved in recent years, it still falls well short of the performance of major producers and exporters of textiles and garments. In particular, India's exports were a quarter of the PRC's in 2000, a ratio which fell to less than 14% in 2006.

Where does India's industry fall short? Crosscutting issues such as India's legendary problems with power supply are part of the story. However, there are a number of issues specific to the industry. A supply-chain analysis commissioned by the National Manufacturing Competitiveness Council (NMCC) indicates that key bottlenecks appear in the second and third stages of the value chain. These are the weaving and knitting stages (Box Figure 8.1.1) whereby yarn converted into "grey cloth" and the subsequent stage which involves processing of grey cloth (through bleaching, dying, printing, and others things) into processed fabric.

A large part of the problem in both areas has to do with the use of outdated technology—for example, a shortage of shuttleless looms and other modern equipment for weaving and knitting. Similarly, the poor quality of local dyes hampers the ability of garment manufacturers to work with high-quality fabrics. The low quality of processed fabric that results has led manufacturers who cater to export markets and the higher end of the local market to increasingly turn to imported fabrics. This happens despite India being among the largest producers of cotton –a key input into yarn—in the world.

While the government has established a technology upgradation fund (TUF)—a scheme whereby interest costs on loans used to upgrade technology, through, for example, the purchase of specified types of machinery and equipment, to be reimbursed once an application has been made by the enterprise—the use of these by the weaving and processing segment, in particular, has been low. Discussions with selected enterprises suggest that this happens because weaving and processing enterprises have difficulty obtaining loans from banks in the first place. This, of course, leads to the question of why this is so. Our earlier discussion on the difficulties small firms face in raising finance is relevant here. As it turns out, the weaving and knitting industry is characterized by a large number of small units. Moreover, many of these operate informally—that is, without formal registrations—thereby not having the appropriate documentation to obtain bank loans.

There are, of course, other issues such as the centralized and apparently cumbersome approval process whereby the Small Industries Development Bank of India (SIDBI)—a government bank serving microenterprises and SMEs—disburses money to the TUF scheme. For example, an analysis of disbursement patterns revealed that there can be a delay of up to two years in the distribution of funds.

While decentralization of disbursement process used by SIDBI—something which has been recommended by the NMCC—should help, the fundamental problem seems to be the low scale of operations. Government policies have not helped in this regard. For example, enterprises with a turnover of 40 million rupees or less get 100% excise exemption for the next year. The problem with policies such as this is that it discourages consolidation in the industry and perpetuates small-scale operations.

One of the ways in which the problem of outdated technology could be addressed is through the development of production technologies that are more efficient and yet affordable for small enterprises. However, increasing the scale of operations is a must. The Ministry of Textiles has launched the Scheme for Integrated Textile Parks in 2005. These parks are based on a private public partnership model and require a minimum of five entrepreneurs to form a cluster. The parks would incorporate facilities for spinning, sizing, texturing, weaving, processing, and production of apparel. By starting facilities from scratch, it is hoped that modern technology and appropriate scale can be incorporated throughout the supply-chain.

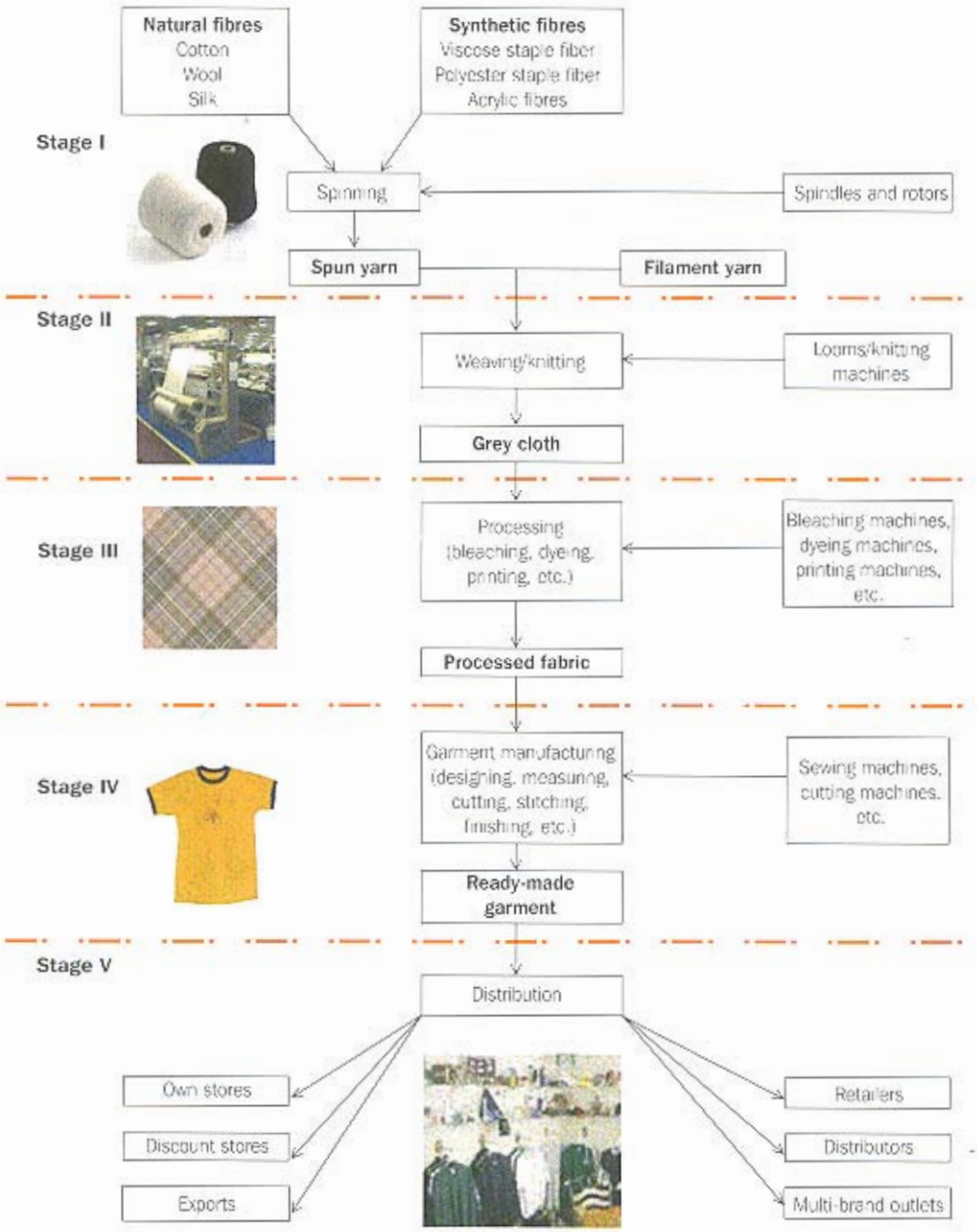
It remains to be seen how these parks perform and what impact they have on enterprises outside the parks. In the meantime, it may be noted that one major challenge holding back the progress of these parks has to do with getting the statutory clearances for land use and environment related regulations.

Box 8.1 continued on next page

Second, agencies that implement industrial policy must be competent, have good communication with the private sector, and be monitored by the highest level of leadership possible. Moreover, the definition of the private sector must be an inclusive one. In particular, the private sector should not be represented just by the few in charge of a country's largest enterprises. It must have broader representation than that—for example, bringing representatives of SMEs into the public-private dialogue.

Box 8.1 continued from previous page

Box Figure 8.1.1 **The Textiles and Garment Production Value Chain**



Source: CRISIL (2009) for the National Manufacturing Competitiveness Council.

Box 8.2 **Product Space: A Guide for Decision-Making on Structural Transformation**

As noted in the text, public support and incentives aimed at encouraging structural transformation should be provided for new activities—either new to the local economy or new technologies for producing existing products. But which activities would these be? Some sense of which types of products hold promise is needed since numerous production activities exist, each one requiring a large set of relatively specific inputs and capabilities. While many inputs are supplied by the market, some crucial ones are not. The conventional view is that such inputs are few and very broad: a system of property rights and contract enforcement, a good general-purpose business environment, infrastructure, and enforcement. The role of government and public policy is then to provide these broad inputs.

If the conventional view is wrong, however, and capabilities and inputs are specific to particular activities, and if some of these are underprovided by the market policy makers hoping to encourage structural transformation are 'doomed to choose' across activities.

Which types of activities are relevant for a given country? Discussions with the private sector are vital, as is a careful examination of international markets and what other countries are doing. In addition to the usual tools for international benchmarking, Hausmann and Klinger (2006) have introduced the concept of the 'product space'. The product space is a graphical representation of exports depicting how related pairs of products are (Box Figure 8.2.1). Relatedness of a pair of products is measured through the probability that the countries of the world export both products. In the figure, a circle represents products (with size proportional to world trade).

A key feature of the product space is that it has dense parts and it has sparsely populated parts. The dense part of the product space is where products are highly interconnected. If a country produces products in this region, it is easy for firms to move to producing many other products in the neighborhood. Otherwise it is difficult. In addition, countries whose exports lie in the dense industrial 'core' (i.e., encompassing machinery, vehicles, etc.) grow faster.

The product space and related concepts are currently being used in various settings as a guide for decision making. For example, a recent ADB-Department for International Development (DFID)-ILO study on Nepal has used it to point out that jute production, one of the activities that policy documents in the country have suggested be provided assistance, has low 'strategic value' in that fostering a more vibrant jute industry is unlikely to build capabilities or inputs that will allow Nepalese firms to diversify to other activities (ADB 2009d).

An even more detailed exercise is being carried out by an ADB study for Pakistan (Felipe 2009). The study notes that while Pakistan's export structure has become less concentrated over time, textiles and related products continue to constitute the top exports. While these exports are tightly connected to each other in the product space, they are poorly connected to the rest of the space, especially the 'industrial core' which is associated with rapid structural transformation and high-growth. Moreover, a measure of the sophistication of Pakistan's exports reveals that it remains low compared to countries in developing Asia.

There are three strategies Pakistani firms can use to diversify their production, especially into more sophisticated products: produce more and better of the same products; produce nearby products; and produce products farther away. The first entails improving productivity and quality in existing sectors (such as textiles). The second entails firms diversifying into related products such as garments, shoes, and agro-processed goods. The last entails developing the capabilities and inputs required to produce products that lie in the industrial core even though products here lie farther away in the product space compared to Pakistan's current exports. While the costs and risks associated with the third strategy are higher, potential payoffs are also higher and therefore worth a strategic bet. Indeed, for a large country such as Pakistan, Felipe (2009) points out that it makes sense to consider a mix of all three strategies.

The policies and interventions needed for implementing the strategies will obviously be different. For example, in textiles the quality of locally grown cotton can constrain the move to more sophisticated textiles; freer imports may be part of the solution. On the other hand, a strategic bet on activities in the electronics industry would require more work; a closer examination of the workings of industrial parks and efforts at attracting foreign direct investment would probably be required. Crucially, strengthening the nature of the public-private dialogue and careful monitoring and evaluation of chosen interventions will be key across all three strategies.

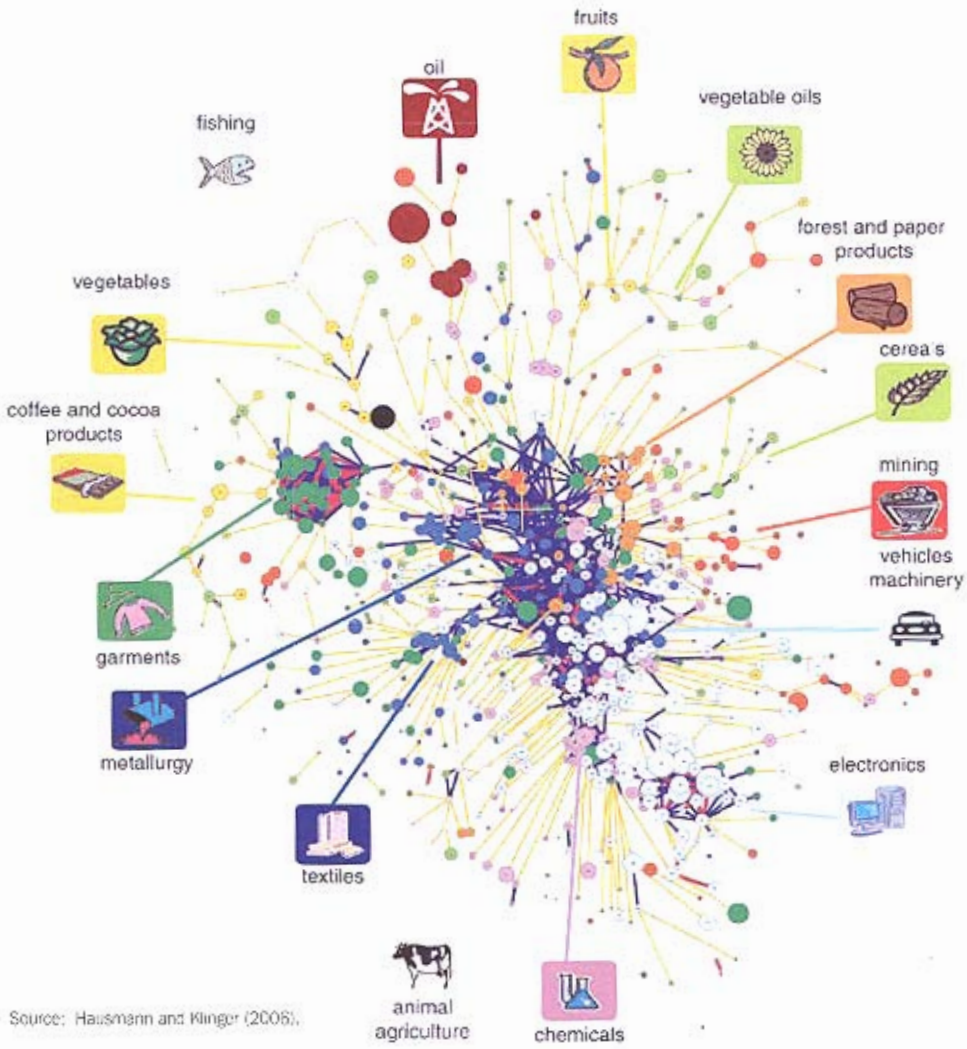
Box 8.2 continued on next page

Third, to make sure that public support is not abused or wasted, clear benchmarks for success and failure must be adopted, and monitoring and evaluation systems must be built into the programs. Public support should not be indefinite. The use of sunset clauses to phase out support could help in this regard. Indeed, one should expect at least some efforts to be unsuccessful when experimenting with new activities. The key point is in knowing when to call it "quits" when an activity is not working out.

In conclusion, these design principles are very much in line with those suggested for public support programs for SMEs (for example, in the use of cluster based development discussed previously). Additionally, while implementing these design principles is not easy—among other things, it can involves fighting vested interests—a potential for large payoffs would seem to make it worthwhile to make a concerted attempt to do so. Finally, adopting a more experimental mindset, and a commitment to rigorous

Box 8.2 continued from previous page

Box Figure 8.2.1 **The Product Space**



Source: Hausmann and Klinger (2006).

Sources: ADB (2009d), Felipe (2009), and Hausmann and Klinger (2006).

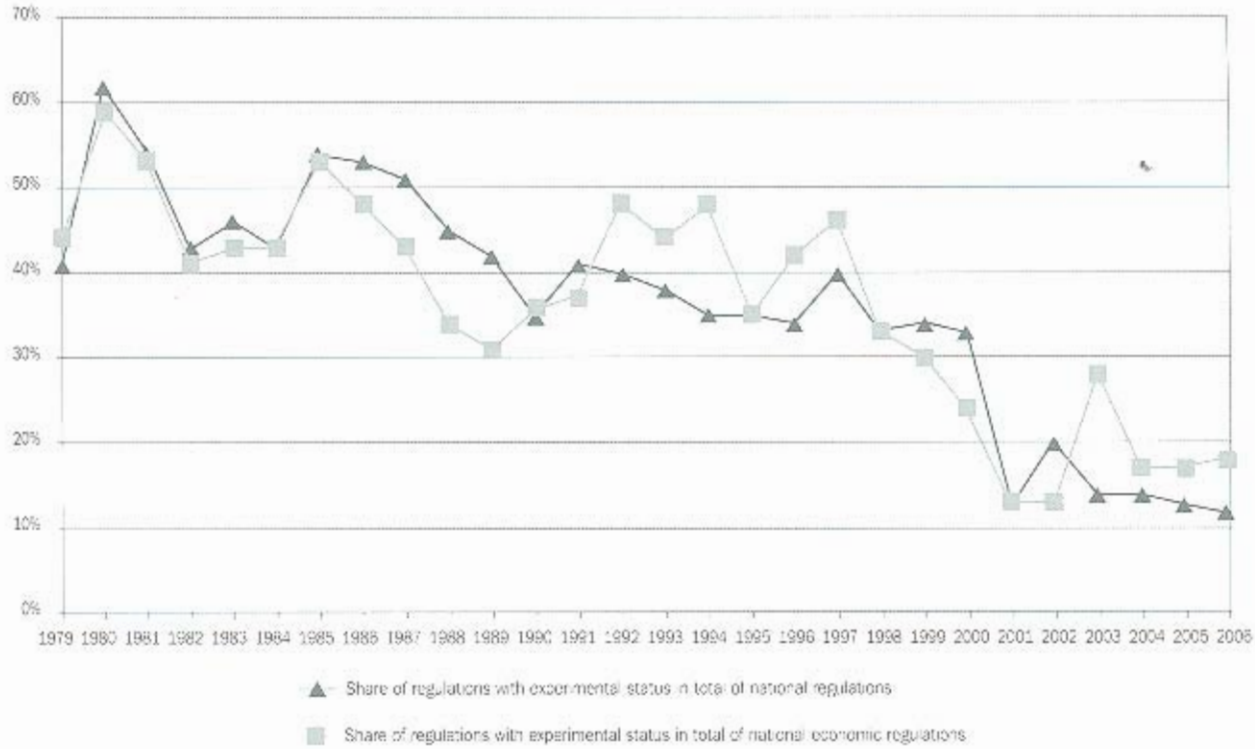
monitoring and evaluation would help in coming up with the specifics of policies and programs to help enterprises in structural transformation. As we have seen in the earlier sections, while there appears to be many commonalities in the type of assistance governments have provided SMEs, final outcomes seemed to have differed quite a bit across countries. Although some of the differences in outcomes can be explained relatively easily, others are more difficult to understand. Put differently, there is always uncertainty regarding the ultimate effects of a particular program. This underscores the importance of having in place robust monitoring and evaluation systems.

Indeed, an experimental mindset coupled with a system of monitoring and evaluation have characterized PRC policy-making over the course of its economic reforms of the last three to four decades (Ravallion 2008). Many elements of these reforms, introduced initially as experiments, have been very successful. In particular, the experiments have included the household responsibility system and dual track pricing that were essential components of the rural reforms credited with dramatic reductions in poverty. Crucially, policymakers were informed of these through the workings of credible

research institutes using objective field research methods to see what was happening on the ground (Ravallion 2008). More generally, the PRC's experiments with reform have also included township and village enterprises and special economic zones. Indeed, as Figure 8.1 shows, as much as half or more of all national regulations in the early to mid-1980s were experimental (Heilmann 2008 and Rodrik 2008).

While it may be true that the PRC's political economy has given it conditions under which this type of experimentation has been possible and successful, there seems to be little reason why policymakers in other economies should not approach policymaking and program design with more of an experimental mindset and greater adherence to rigorous monitoring and evaluation than seems to have been the case.

Figure 8.1 **Policy Experimentation in the People's Republic of China**



Source: Heilmann (2008).

9. Concluding Remarks

The Special Chapter has assessed the actual and expected impacts of the current global economic crisis on workers and enterprises in Asia, including SMEs. It has also discussed how to foster greater dynamism in SMEs once the crisis is over.

The chapter's analysis suggests considerable diversity in how the crisis is affecting different sectors, enterprises, and workers across the region. Particularly hard-hit have been manufacturers of exported goods in East, Southeast, and South Asian economies, especially those engaged in the production of apparel, textiles, and footwear; electrical and non-electrical machinery; and road vehicles and components, among others. But other sectors have also been hurt as aggregate demand has slowed, with obvious adverse impacts for their workers.

Thus, while recent labor force survey data clearly indicate that declines in manufacturing employment are a common phenomena across most of the countries that track employment on a quarterly basis, employment in sectors such as construction and wholesale and/or retail trade services have also suffered. At another level, reductions in remittances have either already started taking a toll on economies—such as in Central Asia—or are expected to do so. To the extent that remittances have been a useful source for recipients to fund small businesses and start-ups, an adverse effect on these smaller enterprises can also be expected.

Efforts by governments to help their economies cope seem to be working, for example, through fiscal stimulus, loose monetary policy, and various efforts to assist enterprises. However, the crisis also provides an opportunity to think about longer-term issues. First, while a squeeze in available finance has by all accounts affected SMEs more than large enterprises, leading many governments in the region to step up efforts to improve their access to finance, the challenge of improving SME access to finance has no quick solutions. As this chapter has noted, improving SME access to finance requires building up an appropriate regulatory infrastructure. It also requires stronger informational infrastructure for the efficient functioning of financial markets. Both of these, especially the first, take time and sustained effort.

Second, while the global economy will no doubt recover from the current crisis, a return to a fast-growing developing Asia will require some rebalancing of growth toward domestic demand in the region as a whole. As argued in this chapter, fostering dynamism among Asian enterprises, especially SMEs will be important to this effort.

Defining SMEs as enterprises with less than 200 workers, manufacturing statistics from the region reveal that they can employ anywhere from around 50% to 90% of total employment, and are even more important outside manufacturing. It is precisely because SMEs employ so many of Asia's workers that their productivity and the earnings and wages they generate become crucial in determining living standards for many Asians. Put differently, a dynamic SME sector is crucial to a vibrant middle class.

Public policy has an important role to play. This chapter argues that the design of public policy needs to be based on a clear understanding of the different types of enterprises in the region, how they are linked with one another, and their potential for growth.

In this context, the chapter notes that while microenterprises (enterprises with less than five workers and typically operating in the informal sector) can account for as much as a third or more of total nonagricultural employment, not all microenterprises represent nascent entrepreneurship. Indeed, many microentrepreneurs may be running their businesses because of a lack of stable wage employment elsewhere.

This is not to suggest that policy should neglect microentrepreneurs. First, assisting microenterprises can be an important way of alleviating poverty and hardship. Second, research shows that there are microentrepreneurs who can expand their businesses. In the context of policies aimed at generating good jobs and growth, it is important to figure out how to help such entrepreneurs expand their businesses.

Nevertheless, the big gains may well come from understanding how public policy can help other enterprises, especially SMEs, grow and become more productive. The list of factors that constrain the growth of smaller enterprises include difficulties in accessing finance, weakness in infrastructure (particularly transportation and electricity supply), and regulations that are especially costly for small enterprises or which take away the incentives for smaller firms to grow (for example by reserving production of certain products for small enterprises). At the same time, market failures—caused by learning externalities, for example—can lead to underinvestment in the adoption of new technologies and hold back diversification into new product lines and markets.

The challenge for public policy is then twofold. First, it involves understanding from a country-specific perspective which factors constrain the growth and diversification of SMEs. Second, it involves understanding how to design and implement interventions that effectively help SMEs grow and diversify.

In this context, the chapter has presented some design principles policymakers should adhere to when contemplating specific interventions. Crucial among them is the need for close collaboration between the private sector and government, with the aim of uncovering obstacles to enterprise growth and diversification and determining the specific interventions that would best remove them. Significantly, this collaboration should not be one that includes only large and well-connected firms representing the private sector. SMEs must be included also. Additionally, there will always be some uncertainty about how interventions will play out. It is therefore essential that interventions be undertaken alongside rigorous monitoring and evaluation efforts.

More generally, adopting more of an experimental mindset toward policies, combined with a commitment to rigorous evaluation, would greatly help in finding policies and programs to encourage greater dynamism among Asian enterprises, especially SMEs, and thereby offer better prospects for their workers.

References

Abe, M. and M. Kawakami. 1997. "A distributive comparison of enterprise size in (the Republic of) Korea and [Taipei,China]." Developing Economies 35(4): 382-400. December. Available: http://www.ide.go.jp/English/Publish/Periodicals/De/pdf/97_04_03.pdf.

Ahmed, M.U. ed. 2009. SME Foundation Annual Report 2008-2009. Dhaka: Small and Medium Enterprise Foundation. Available at http://www.smef.org.bd/others/sme_pub.php.

Aldaba, R. 2008. "SMEs in the Philippine Manufacturing Industry and Globalization: Meeting Development Challenges." In *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5, edited by Hank Lim. Chiba, Japan: Institute of Developing Economies (IDE)-Japan External Trade Organization (JETRO).

Amsden, A. 1989. Asia's Next Giant: South Korea and Late Industrialization. New York: Oxford University Press.

Asian Development Bank (ADB). 2005a. *Key Indicators 2005: Labor Markets in Asia: Promoting Full, Productive, and Decent Employment*. Manila.

_____. 2005b. *Asian Development Outlook 2005 Promoting competition for long-term development*. Manila

_____. 2006. *Best Practice Notes on Small- and Medium-Sized Enterprises Support*. Manila.

_____. 2007. *Asian Development Outlook 2007*. Hong Kong, China.

_____. 2009a. *Asia Economic Monitor*. Manila.

_____. 2009b. *Asian Development Outlook 2009*. Manila.

_____. 2009c. *Lao PDR: Options for a Regulatory Review Program and an Office of Best Regulatory Practice*. Manila.

_____. 2009d. *Nepal Critical Development Constraints*. A joint study by ADB, DFID, and ILO.

Audretsch, D. 1995. *Innovation and Industry Evolution*. Cambridge, Massachusetts: MIT Press.

_____. 2002. "The Dynamic Role of Small Firms: Evidence from the U.S." In *Small Firm Dynamism in East Asia*, Volume 18(1-3), edited by Farrukh Iqbal and Shujiro Urata. The Netherlands: Kluwer Academic Publishers.

Ayyagari, M., A. Demirgüç-Kunt and V. Maksimovic. 2006. "How Important are Financing Constraints? The Role of Finance in the Business Environment." World Bank Policy Research Working Paper No. 3820. World Bank, Washington, D.C.

_____. 2007. "Firm Innovation in Emerging Markets." Policy Research Working Paper No. 4157. World Bank, Washington, DC.

Bailey, P. 2008. "Cambodian Small and Medium sized Enterprises: Constraints, Policies and Proposals for their Development." In *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5, edited by Hank Lim. Chiba, Japan: Institute of Developing Economies (IDE)-JETRO.

Banerjee, A., S. Cole, and E. Duflo. 2003. "Bank Financing in India." Available at http://www.imf.org/external/np/apd/seminars/2003/newdelhi/banerjee.pdf.

Banerjee, A. V. and E. Duflo. 2004. "Growth Theory through the Lens of Development Economics." MIT Department of Economics Working Paper No. 05-01. Cambridge, MA. Available at SSRN: http://ssrn.com/abstract=651483

_____. 2007. "What is Middle Class About the Middle Classes Around the World?". MIT Department of Economics Working Paper No. 07-29. December.

Banerjee, A. and K. Munshi. 2004. "How Efficiently Is Capital Allocated? Evidence from the Knitted Garment Industry in Tirupur ." *The Review of Economics Studies* 71(1): 19-42. January.

Beck, T., A. Demirgüc-Kunt, L. Laeven, and R. Levine. 2005. "Finance, Firm Size and Growth." Policy Research Working Paper 3485, World Bank, Washington, DC. January.

Beck, T., A. Demirgüç-Kunt and V. Maksimovic. 2005. "Financial and Legal Constraints to Growth: Does Firm Size Matter?" *The Journal of Finance* 60(1): 137-177. February.

Berry, A., E. Rodriguez and H. Sandee. 2002. "Firm and Group Dynamics in the Small and Medium Enterprise Sector in Indonesia." In *Small Firm Dynamism in East Asia*. Volume 18(1-3), edited by Farrukh Iqbal and Shujiro Urata. Netherlands: Kluwer Academic Publishers.

Betcherman, G. and R. Islam, eds. 2001. *East Asian Labor Markets and the Economic Crisis: Impacts, Responses, and Lessons*. Washington, DC: The World Bank and the International Labour Organization.

Bhavan, N. 2009. "Best Practices on SME Development and Management in India." A paper presented at the Regional Workshop on SME Development and Regional Economic Integration held in Tokyo from 22-26 September 2008. http://www.adbi.org/files/2008.09.23.cpp.paper.india.sme.dev.mngt.pdf.

Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and Roberts, J. 2009. "Management as a technology: evidence from Indian firms", Stanford University mimeo.

Bloom, N., S. Dorgan, J. Dowdy and J. Van Reenen. 2007. "Management Practice and Productivity: Why they matter." Available at http://www.stanford.edu/~nbloom/ManagementReport.pdf.

BPS-Statistics Indonesia. Avaialabe at www.bps.go.id.

_____. Indonesia- Economic Census 2006.

_____. 2007 SAKERNAS survey.

Braverman, H. 1998. *Labor and Monopoly Capital. The Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.

Brazier, R. and E. Rodriguez. 2002. *Indonesia: small business through the economic crisis*. Jakarta: The Asia Foundation.

Brown, C., and J. Medoff. 1989. "The Employer Size-Wage Effect." *Journal of Political Economy* 97(5): 1027-1059.

Burgess, R. and R. Pande. 2005. "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment." *American Economic Review* 95(3): 780-795. June.

Carlin, W., M. Schaffer and P. Seabright. 2007. "Where Are the Real Bottlenecks? Evidence from 20,000 Firms in 60 Countries about the Shadow Costs of Constraints to Firm Performance." IZA DP No. 3059, Institute for the Study of Labor (IZA), Bonn, Germany. September.

CEIC Data Company Ltd. CEIC Database. Available at http://www.ceicdata.com.

Census and Statistics Department, Hong Kong, China. Available at http://www.censtatd.gov.hk/.

Choe, K.A. and B. Roberts. Forthcoming. "City Cluster Economic Development in South Asia: A Framework Approach." ADB Urban Development Series. ADB, Manila.

Cole, S. 2008. "Fixing Market Failures or Fixing Elections? Agricultural Credit in India." Harvard Business School Working Paper No. 09-001. Harvard University, Cambridge, MA. 5 July. Available at http://www.hbs.edu/research/pdf/09-001.pdf.

CRISIL. 2009. "Enhancing Competitiveness of Indian Manufacturing Industry: Assistance in Policy Making." Final Report submitted to the National Manufacturing Competitiveness Council. March. Available at http://nmcc.nic.in/pdf/CRISIL_March2009.pdf.

Das, K. 2008. "SMEs in India: Issues and Possibilities in Times of Globalisation." In *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5, edited by Hank Lim. Chiba, Japan: Institute of Developing Economies (IDE)-JETRO.

_____. 2008. "Fostering Competitive Clusters in Asia: Towards an Inclusive Policy Perspective." V.R.F Series No. 437. Institute of Development Economies, Japan External Trade Organization, Chiba, Japan.

Das, D. K. and G. Kalita. 2009. "Do Labor Intensive Industries Generate Employment? Evidence from firm level survey in India." Working Paper No. 237. Indian Council for Research on International Economic Relations, New Delhi, India. June.

Deichmann, U., K. Kaiser, S.V. Lall, and Z. Shalizi. 2005. "Agglomeration, Transport, and Regional Development in Indonesia." World Bank Policy Research Working Paper 3477. World Bank, Washington, DC.

de Mel, S., D. McKenzie and C. Woodruff. 2008a. "Who Are the Microenterprise Owners? Evidence from Sri Lanka on Tokman v. de Soto." Policy Research Working Paper No. 4635. World Bank, Washington, DC.

_____. 2008b. "Returns to Capital in Microenterprises: Evidence from a Field Experiment." *Quarterly*

Journal of Economics 123(4): 1329-1372. November.

_____. 2009. "Innovative Firms or Innovative Owners? Determinants of Innovation in Micro, Small, and Medium Enterprises." Policy Research Working Paper No. 4934. World Bank, Washington, DC.

de Soto, H. 1989. *The Other Path: The Invisible Revolution in the Third World*. New York: Harper and Row.

Department of Statistics, Malaysia. Available at http://www.statistics.gov.my/eng/.

_____. Annual Survey of Manufacturing Industries 2005

Dinc, S. 2005. "Politicians and banks: political influences on government-owned banks in emerging countries." *Journal of Financial Economics* 77 (2005): 453–479.

Directorate-General of Budget, Accounting and Statistics. Taipei,China. Available at http://eng.dgbas.gov.tw.

Dwor-Frécaut, D., F. Colaço, and M. Hallward-Driemeier. 2000. *Asian corporate recovery*. Washington, DC: The World Bank.

Entrepreneurial Finance Lab at Harvard University's Center for International Development Available: www.cid.harvard.edu/efl.

Evenson, R. E., and L. E. Westphal. 1995. "Technological Change and Technology Strategy." In *Handbook of Development Economics, Volume III*, edited by Jere Behrman, and T.N. Srinivasan. Amsterdam: North Holland.

Felipe, J. 2003. "Is Export-Led Growth Passé? Implications for Developing Asia." Economics and Research Department Working Paper Series No. 48. ADB, Manila.

_____. 2009. *Inclusive Growth, Full Employment and Structural Change: Implications and Policies for Developing Asia*. London: Anthem Press.

Felipe, J., and R. Hasan, eds. 2006. *Labor Markets in Asia: Issues and Perspectives*. London: Palgrave Macmillan.

Foster, A. D. and M. R. Rosenzweig.1995. "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture." *Journal of Political Economy* 103(6): 1176-1209.

General Statistocs Office of Viet Nam. Available at http://www.gso.gov.vn.

Gibson, J. and S. Stillman. 2009. "Why Do Big Firms Pay Higher Wages? Evidence from an International Database." *Review of Economics and Statistics* 91(1): 213-218. February.

Gregory, G., C. Harvie, and H.H. Lee. 2002. "Korean SMEs in the wake of the financial crisis: strategies, constraints, and performance in a global economy." Working Paper Series 02-12. Department of Economics, University of Wollongong. Available at http://www.uow.edu.au/content/groups/public/@web/@commerce/@econ/ documents/doc/uow012131.pdf.

Gurumurthy, G. 2002. "IEW unveils low-cost shuttle-less loom ." Hindi Business Line, March 29. Available at http://www.hinduonnet.com/businessline/2002/05/29/stories/2002052901501700.htm.

Hall, C., and C. Harvie. 2003. "A comparison of the performance of SMEs in Korea and Taiwan: policy implications for turbulent times." Working Paper Series 03-05. Faculty of Commerce, University of Wollongong.

Hallberg, K.A. 2000. "Market-oriented strategy for small and medium scale enterprises." IFC Discussion Paper 40. International Finance Corporation, Washington, D.C.

Hausmann, R. and B. Klinger. 2006. "Structural Transformation and Patterns of Comparative Advantage in the Product Space". CID Working Paper No. 128. Harvard University, Cambridge, MA. August.

Hausmann, R. and D. Rodrik. 2003. "Economic Development as Self-Discovery." Journal of Development Economics 72(2, Decemener): 603-633.

_____. 2006. "Doomed to Choose: Industrial Policy as Predicament". CID Working Paper. Center for International Development at Harvard University, September 9.

Heilmann, S. 2008. "Policy Experimentation in China's Economic Rise." *Journal Studies in Comparative International Development* 43(1): 1-26. March.

Homecillo, L., D. Maligalig and R. Hasan. Forthcoming. "Enterprises Statistics in Developing Asia."

Inter-American Development Bank(IADB). 2005. "Chapter 14 Access to Financing for Small and Medium Enterprises." In *IPES 2005 Unlocking Credit: The Quest for Deep and Stable Bank Lending*. Available: http://www.iadb.org/res/ipes/2005/docs/chapter14eng.pdf?bcsi_scan_D4A612CF62FE9576=oQYC+TaicPxCogCeA05CfCAAAAAsru0eandbcsi_scan_filename=chapter14eng.pdf.

International Labour Organization. LABORSTA On-line Statistics. Available at http://laborsta.ilo.org/

International Monetary Fund. 2009a. *World Economic Outlook*.

_____. 2009b. *Regional Economic Outlook: Asia and Pacific Global Crisis: The Asian Context*

Jacobsson, S. and G. Alam. 1994. *Liberalisation and Industrial Development in the Third World: A*

Comparison of the Indian and South Korean Engineering Industries. New Delhi: Sage Publications.

Karlan, D. and M. Valdivia. 2007. "Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions." CGD Working Paper 107. Center for Global Development, Washington, DC. Available at http://www.cgdev.org/content/publications/detail/12331.

Khwaja, A. and B. Klinger. 2009. "Entrepreneurial Finance Lab." Mimeo, Center for International Development, Harvard University.

Khwaja, A.I. and A. Mian. 2005. "Do Lenders Favor Politically Connected Firms? Rent Provision in Emerging Financial Market." *The Quarterly Journal of Economics* 120(4): 1371-1411.

Kim, C.K. 2004. "Developing on SME Development Policy for Indonesia: Drawing on the Korean Experience." UNSFIR Working Paper. United Nations Support Facility for Indonesia Recovery. July.

Kim, L. and J. B. Nugent. 1994. "The Republic of Korea's Small and Medium-Size Enterprises and their Support systems." Policy Research Working Paper No. 1404. World Bank, Washington D.C.

_____. 1999. "Korean SMEs and their Support Systems." In *Fulfilling the Export Potential of Small and Medium Firms*, edited by Brian Levy, Albert Berry and Jeffrey B. Nugent. Boston: Kluwer.

Kimura, F. 2002. "Subcontracting and the Performance of Small and Medium Firms in Japan." In *Small Firm Dynamism in East Asia*. Volume 18(1-3), edited by Farrukh Iqbal and Shujiro Urata. Netherlands: Kluwer Academic Publishers.

_____. 2007. "The Mechanics of Production Networks in Southeast Asia: The Fragmentation Theory Approach. CEI Working Paper Series, No. 2007-8, Institute of Economic Research, Hitotsubashi University, Tokyo, Japan.

Khor, N. and I. Sebastian. Forthcoming. "Exports Vulnerability and the Global Crisis."

Korean Statistical Information Service, Korea, Republic of. Available at http://www.kosis.kr.

Korea National Statistical Office, Korea Republic of. 2003. *Report on Mining and Manufacturing Survey*. December.

La Porta, R. and Shleifer, A. 2008. "The Unofficial Economy and Economic Development," NBER Working Papers 14520. National Bureau of Economic Research, Inc.

Laeven, L. and C.Woodruff. 2007. "The Quality of the Legal System, Firm Ownership, and Firm Size." *The Review of Economics and Statistics* 89(4): 601-614.

Lall, S. 1978. *Learning to Industrialize: The Acquisition of Technological Capability in India*. London: Macmillan Press.

_____. 2001. *Competitiveness, Technology and Skills*. Cheltenham: Edward Elgar Publishing Limited.

Lei, W. 2008. "SME Development Policies in China." A Country Paper for the Workshop on SME Development and Regional Economic Integration, Tokyo, September 22-26, 2008. Available at http://www.adbi.org/conf-seminar-papers/2009/02/02/2827.paper.china.sme.dev.mngt.

Levy, B. 1991. "Transaction costs, the size of firms and industrial policy: lessons from a comparative case study of the footwear industry in Korea and Taiwan." *Journal of Development Economics* 34 (1991): 151-178.

Lilienfeld-Toal, U. D. Mookherjee, and S. Visaria. 2009. "The Distributive Impact of Reforms in Credit Enforcement: Evidence from Indian Debt Recovery Tribunals." Department of Economics-The Institute for Economic Development Working Papers Series DP-183. Boston University, Boston, MA. Available: http://www.bu.edu/econ/ied/dp/papers/dp%20183.pdf.

Lim, H. ed. 2007. *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5. Japan: Institute of Developing Economies (IDE)-JETRO.

_____. 2009. "SME Support for Technology in Singapore." Background Note prepared for ADB.

Lu, J. 2009. "Chinese Enterprise Dynamics and Enterprise Development." Background paper prepared for ADB.

Lucas, R.E. Jr. 1978. "On the Size Distribution of Business Firms." *Bell Journal of Economics* 9 (Autumn 1978): 508-523.

Mahajan, A. 2009. "Management Intervention for Mid-sized Firms in Maharashtra, India." Background paper prepared for ADB.

Mazumdar, D. 1997. 'Structure, Growth and Productivity of the Small-scale manufacturing sector in India: An Overview', National Council of Applied Economic Research, New Delhi.

_____. 1998. "Size-structure of manufacturing establishments and the productivity differentials between large and small firms: A comparative study of Asian economies." CIS Working Paper: 1998-7, Department of Economics, University of Toronto. Available at http://www.utoronto.ca/cis/asiasize.pdf.

Comparison of the Indian and South Korean Engineering Industries. New Delhi: Sage Publications.

Karlan, D. and M. Valdivia. 2007. "Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions." CGD Working Paper 107. Center for Global Development, Washington, DC. Available at http://www.cgdev.org/content/publications/detail/12331.

Khwaja, A. and B. Klinger. 2009. "Entrepreneurial Finance Lab." Mimeo, Center for International Development, Harvard University.

Khwaja, A.I. and A. Mian. 2005. "Do Lenders Favor Politically Connected Firms? Rent Provision in Emerging Financial Market." *The Quarterly Journal of Economics* 120(4): 1371-1411.

Kim, C.K. 2004. "Developing on SME Development Policy for Indonesia: Drawing on the Korean Experience." UNSFIR Working Paper. United Nations Support Facility for Indonesia Recovery. July.

Kim, L. and J. B. Nugent. 1994. "The Republic of Korea's Small and Medium-Size Enterprises and their Support systems." Policy Research Working Paper No. 1404. World Bank, Washington D.C.

_____. 1999. "Korean SMEs and their Support Systems." In *Fulfilling the Export Potential of Small and Medium Firms*, edited by Brian Levy, Albert Berry and Jeffrey B. Nugent. Boston: Kluwer.

Kimura, F. 2002. "Subcontracting and the Performance of Small and Medium Firms in Japan." In *Small Firm Dynamism in East Asia*. Volume 18(1-3), edited by Farrukh Iqbal and Shujiro Urata. Netherlands: Kluwer Academic Publishers.

_____. 2007. "The Mechanics of Production Networks in Southeast Asia: The Fragmentation Theory Approach. CEI Working Paper Series, No. 2007-8, Institute of Economic Research, Hitotsubashi University, Tokyo, Japan.

Khor, N. and I. Sebastian. Forthcoming. "Exports Vulnerability and the Global Crisis."

Korean Statistical Information Service, Korea, Republic of. Available at http://www.kosis.kr.

Korea National Statistical Office, Korea Republic of. 2003. *Report on Mining and Manufacturing Survey*. December.

La Porta, R. and Shleifer, A. 2008. "The Unofficial Economy and Economic Development," NBER Working Papers 14520. National Bureau of Economic Research, Inc.

Laeven, L. and C.Woodruff. 2007. "The Quality of the Legal System, Firm Ownership, and Firm Size." *The Review of Economics and Statistics* 89(4): 601-614.

Lall, S. 1978. *Learning to Industrialize: The Acquisition of Technological Capability in India*. London: Macmillan Press.

_____. 2001. *Competitiveness, Technology and Skills*. Cheltenham: Edward Elgar Publishing Limited.

Lei, W. 2008. "SME Development Policies in China." A Country Paper for the Workshop on SME Development and Regional Economic Integration, Tokyo, September 22-26, 2008. Available at http://www.adbi.org/conf-seminar-papers/2009/02/02/2827.paper.china.sme.dev.mngt.

Levy, B. 1991. "Transaction costs, the size of firms and industrial policy: lessons from a comparative case study of the footwear industry in Korea and Taiwan." *Journal of Development Economics* 34 (1991): 151-178.

Lilienfeld-Toal, U. D. Mookherjee, and S. Visaria. 2009. "The Distributive Impact of Reforms in Credit Enforcement: Evidence from Indian Debt Recovery Tribunals." Department of Economics-The Institute for Economic Development Working Papers Series DP-183. Boston University, Boston, MA. Available: http://www.bu.edu/econ/ied/dp/papers/dp%20183.pdf.

Lim, H. ed. 2007. *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5. Japan: Institute of Developing Economies (IDE)-JETRO.

_____. 2009. "SME Support for Technology in Singapore." Background Note prepared for ADB.

Lu, J. 2009. "Chinese Enterprise Dynamics and Enterprise Development." Background paper prepared for ADB.

Lucas, R.E. Jr. 1978. "On the Size Distribution of Business Firms." *Bell Journal of Economics* 9 (Autumn 1978): 508-523.

Mahajan, A. 2009. "Management Intervention for Mid-sized Firms in Maharashtra, India." Background paper prepared for ADB.

Mazumdar, D. 1997. 'Structure, Growth and Productivity of the Small-scale manufacturing sector in India: An Overview', National Council of Applied Economic Research, New Delhi.

_____. 1998. "Size-structure of manufacturing establishments and the productivity differentials between large and small firms: A comparative study of Asian economies." CIS Working Paper: 1998-7. Department of Economics, University of Toronto. Available at http://www.utoronto.ca/cis/asiasize.pdf.

_____. 2003. "Small and Medium Enterprise Development in Equitable Growth and Poverty Alleviation." In Reducing Poverty in Asia: Emerging Issues in Growth, Targeting and Measurement edited by Christopher M. Edmonds. Chantelham, UK: Edward Elgar.

_____. 2009. "A Comparative Study of the Size Structure of Manufacturing in Asian Countries", Background paper prepared for ADB. Toronto, Canada.

McKenzie, D. 2009. "Impact Assessments in Finance and Private Sector Development: What Have We Learned and What Should We Learn?" Policy Research Working Paper Series No. 4944. World Bank, Washington, DC.

McKinsey and Co. 2001. *India: The Growth Imperative*. Washington, DC: McKinsey and Company.

Mian, A. 2006. "Distance Constraints: The Limits of Lending in Poor Economics." *Journal of Finance* 61(3): 1465-1505.

Ministry of Labour and Employment. 2009. "Report on Effect of Economic Slowdown on Employment in India." Labour Bureau, Government of India

Ministry of Manpower, Singapore. Available at http://www.mom.gov.sg.

Ministry of Statistics and Programme Implementation, India. Annual Survey of Industries 2004-2005

Moore, H. 1911. *Laws of Wages: An Essay in Statistical Economics*. New York: Augustus M. Kelley.

Munusamy, M. 2009. "Development of SMEs in Malaysia. A paper presented at the Regional Workshop on SME Development and Regional Economic Integration, Tokyo September 22-26, 2008. Available at http://www.adbi.org/files/2008.09.23.cpp.paper.malaysia.sme.dev.mngt.pdf.

National Bureau of Statistics of China. Available at http://www.stats.gov.cn/english/.

National Commission for Enterprises in the Unorganised Sector (NCEUS). 2007. *Report of Financing of Unorganised Enterprises*. NCEUS, New Delhi.

_____. 2009. *A Report in Technology Upgradation for Enterprises in the Unorganised Sector Status: Constraints and Recommendations*. NCEUS, New Delhi.

National Statistics, Taipei,China. Available at http://eng.stat.gov.tw.

_____. 2006 Industry Commerce and Service Census

National Statistics Office, Philippines. Available at http://www.census.gov.ph

_____. Annual Survey of Business and Industry 2005.

_____. Labor Force Survey 2007.

National Statistical Office, Thailand. Available at http://web.nso.go.th/.

_____. Labor Force Survey 2005.

_____. 2007 Industrial Census.

National Sample Survey Organisation (NSSO), India. 2005-2006 Socio-Economic Survey 61st Round (Schedule 10-Employment and Unemployment).

_____. 2005-2006 Manufacturing Enterprise – 62nd Round (Schedule 2.2).

Nugent, J. 1996. "What explains the trend reversal in the size distribution of Korean manufacturing establishments?" *Journal of Development Economics* 48(2): 225-251. March.

Office of Small and Medium Enterprises Promotion (OSMEP). Available at http://www.sme.go.th/cms/web/homeeng

Oh, I., J.D. Lee, G.G. Choi, and A. Heshmati. 2008. "Evaluation of Credit Guarantee Policy Using Propensity Score Matching." *Small Business Economics*, forthcoming.

Oi, W. and T.L. Idson. 1999. "Firm size and wages." In *Handbook of Labor Economics* Volume 3B, edited by Orley C. Ashenfelter and David Card. Amsterdan, The Netherlands: Elsevier B.V.

Oldsman, E. and K. Hallberg. 2003. "Framework for evaluating the Impact of Small Enterprise Initiatives."

Organisation for Economic Co-operation and Development (OECD). 2005. *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, Third Edition*. OECD. Paris.

Piore, M. and C. Sabel. 1984. *The Second Industrial Divide*. New York: Basic Books.

Pisitpaibool, C. 2009. "Best Practices on SME Development and Management in Thailand." A paper presented at the Regional Workshop on SME Development and Regional Economic Integration, Tokyo, September 22-26, 2008. Available at http://www.adbi.org/files/2008.09.23.cpp.paper.thailand.sme.dev.mngt.pdf.

Punyasavatsut, C. 2008. "SMEs in The Thai Manufacturing Industry: Linking with MNEs." In *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5, edited by Hank Lim. Chiba, Japan: Institute of Developing Economics (IDE)-JETRO.

Rajiv Gandhi Institute for Contemporary Studies (RGICS). 2006. "Small Sector in India: Status, Growth and De-reservation. "

Ratha, D., S. Mohapatra, K.M. Vijavalakshmi, and Z. Xu. 2008. "Revisions to Remittance Trends 2007." Migration and Development Brief 5, World Bank. Available at http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/MD_Brief5.pdf.

Ratha, D., S. Mohapatra, and A. Silwa. 2009. "Outlook for Remittance Flows 2009-2011: Remittances expected to fall by 7-10 percent in 2009." Migration and Development Brief No. 10. World Bank. Available at http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/MigrationandDevelopmentBrief10.pdf.

Ravallion, M. 2008. " Are There Lessons for Africa from China's Success Against Poverty?" Policy Research Working Paper No. 4463, World Bank. Washington, D.C.

Rodrik, D. 2007. *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton, NJ: Princeton University Press.

_____. 2008. The New Development Economics: We Shall Experiment, But How Shall We Learn?" John F. Kennedy School of Government, Harvard University.

_____. 2009. "Growth After the Crisis." Paper prepared for Commission on Growth and Development. Available at http://ksghome.harvard.edu/~drodrik/Growth%20after%20the%20crisis.pdf.

Schumpeter, J.A. 1947. "The Creative Response in Economic History." *Journal of Economic History* 7 (2): 149-159.

Sembiring, M. 2009. "SMEs Growth and Development in Indonesia." A paper presented at the Regional Workshop on SME Development and Regional Economic Integration, Tokyo, September 22-26, 2008. Available at http://www.adbi.org/files/2008.09.23.cpp.paper.indonesia.sme.dev.mngt.pdf.

Senthilkumar, T., S. Kadirvel, and S. S. Ramasamy. 2002. "A Low Cost Shuttleless Loom for the Decentralised Powerloom Sector." *Powerloom Development & Export Promotion Council Newsletter* 4(4). June. Available at http://www.pdexcil.org/news/35N0802/low.htm.

Small and Medium Business Administration website. Available at http://eng.smba.go.kr/main.jsp.

Small and Medium Enterprise Administration website. Available at http://www.moeasmea.gov.tw.

Small and Medium Industries Development Corporation (SMIDEC) website. Available at http://www.smidec.gov.my.

Small and Medium Enterprise Development Bank of Thailand. 2008. Business Performance 2008. http://www.smebank.co.th/download/annual51_en/BusinessPerformance2008.pdf .

SMED Council- Department of Trade and Industry. 2004. SME Development Plan 2004-2010. Available: http://www.dti.gov.ph/uploads/file/SMED%20plan%202004-2010.pdf.

SME Foundation. 2009. *SME Foundation Fact Sheet*. Available at http://www.smef.org.bd/media/fact_sheet/fact_sheet_09.pdf. Downloaded: July 10, 2009

SPRING Singapore. Programme for SMES. Available at http://www.business.gov.sg.

Tambunan, T. 2008. "SME Development in Indonesia with Reference to Networking, Innovativeness, Market Expansion and Government Policy." In *ASEAN SMEs and Globalization*. ERIA Research Project Report 2007 No. 5, edited by Hank Lim. Chiba, Japan: Institute of Developing Economies (IDE)-JETRO.

Tokman, V.E. 2007. "Modernizing the informal sector." DESA Working Paper No. 42. United Nations

Department of Economic and Social Affairs, New York. June.

Tybout, J. 2000. "Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?" *Journal of Economic Literature* 38(March 2000): 11-44.

Uchikawa, S. 2009. "Japanese Small and Medium Enterprises under Long-term Recession."

Uddin, N. 2008. "Country Paper for Joint Regional Workshop on SME Development and Regional Economic Integration Bangladesh ." A Country Paper for the Workshop on SME Development and Regional Economic Integration, Tokyo, September 22-26, 2008. Available at http://www.adbi.org/files/2008.09.24.cpp.paper.bangladesh.tvet.sme.dev.mngt.pdf.

United Nations Industrial Development Organization (UNIDO). 2007. International Yearbook of Industrial Statistics 2007. UK: Edward Elgar Publishing Limited.

_____. 2008. The International Yearbook of Industrial Statistics 2008. UK: Edward Elgar Publishing Limited.

Visaria, S. 2009. "Legal Reform and Loan Repayment: The Microeconomic Impact of Debt Recovery Tribunals in India." *American Economic Journal: Applied Economics* 1(3): 59–81.

Wengel, J. and E. Rodriguez. 2006. "SME export performance in Indonesia after the crisis". *Small Business Economics* 26(1): 25-37. February.

World Bank. 2008. *Finance for All? Polices and Pitfalls in Expanding Access*. Washington, DC: World Bank.

_____. Global Development Finance Online database

_____. Migration and Remittance Data (for March). Available at http://econ.worldbank.org/WBSITE/EXTERNAL/

EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21122856~isCURL:Y~menuPK:3145470~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html.

_____.World Bank Enterprise Survey database. Available at http://www.enterprisesurveys.org.

_____. *World Development Indicators Online*. Downloaded 20 May 2009. Available at http://devdata.worldbank.org/dataonline/.

Woodruff, C. and R. Zenteno. 2001. "Remittances and Microenterprises in Mexico."

Xu, X. 2009. "Policy Measures to Assist SMEs in the People's Republic of China." Background paper prepared for ADB.

Yamawaki, H. 2002. "The Evolution and Structure of Industrial Clusters in Japan." *Small Business Economics* 18(1-3): 121-140. February.

Yang, D. 2008. "International Migration, Remittances and Household Investment: Evidence from Philippine Migrants' Exchange Rate Shocks." *The Economic Journal* 118 (April): 591–630.

Yao, Y. 2003. "Business Environment for SME Development in China." A presentation during the "Creating A Conducive Legal and Regulatory Framework for Small and Medium Enterprise Development in Russia A Policy Dialogue Workshop", St. Petersburg, Russia, September 14-16, 2003.

Zia, B.H. 2008. "Export incentives, financial constraints, and the (mis)allocation of credit: Micro-level evidence from subsidized export loans." *Journal of Financial Economics* 87(2008): 498-527.

PART II

Millennium Development Goals



Introduction to the Millennium Development Goals

At the Millennium Summit in September 2000, the largest gathering of world leaders in history adopted the United Nations Millennium Declaration, committing their nations to a new global partnership to reduce extreme poverty and setting out a series of targets, with a deadline of 2015. These have become known as the Millennium Development Goals (MDGs). In 2007, the MDG monitoring framework was revised to include four new targets agreed on by member states at the 2005 World Summit, namely, full and productive employment and decent work for all, access to reproductive health, access to treatment for HIV/AIDS, and protection of biodiversity. The indicators for these new targets became effective in January 2008 and this is the framework used here to monitor progress toward achieving the MDGs.

The first MDG targets the poor directly—those living on less than one dollar a day—while the next six focus on the underlying causes of poverty, such as lack of access to education, health care, and employment; gender inequality; poor housing conditions; and environmental degradation. The eighth goal is to develop a global partnership for development, and focuses on how the industrialized countries can work with the poorer countries to enhance the latter's standard of living. The MDGs thus complement the Asian Development Bank's vision of a region free of poverty, and its mission to help its developing member countries reduce poverty and improve the quality of life of their citizens. Box 1 lists the eight MDGs and the corresponding targets and indicators for monitoring progress.

Box 1 **Millennium Development Goals**

Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress
Goal 1: Eradicate extreme poverty and hunger	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below $1 (PPP) per day [1] 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below $1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrollment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15–24 year-olds, women and men
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate 4.3 Proportion of 1-year-old children immunized against measles
Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate 5.4 Adolescent birth rate 5.5 Antenatal care coverage (at least one visit and at least four visits) 5.6 Unmet need for family planning
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15–24 years 6.2 Condom use at last high-risk sex 6.3 Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS 6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs

continued.

Box 1 **Millennium Development Goals** *(continued)*

Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria 6.7 Proportion of children under 5 sleeping under insecticide-treated bednets 6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs 6.9 Incidence, prevalence, and death rates associated with tuberculosis 6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course
Goal 7: Ensure environmental sustainability	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.1 Proportion of land area covered by forest 7.2 CO_2 emissions, total, per capita, and per $1 GDP (PPP) 7.3 Consumption of ozone-depleting substances 7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums [2]
Goal 8: Develop a global partnership for development	
Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development and poverty reduction – both nationally and internationally Target 8.B: Address the special needs of the least developed countries Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly) Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	*Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries, and small island developing States.* Official development assistance (ODA) 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes 8.5 ODA received in small island developing States as a proportion of their gross national incomes Market access 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product 8.9 Proportion of ODA provided to help build trade capacity Debt sustainability 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) 8.11 Debt relief committed under HIPC and MDRI Initiatives 8.12 Debt service as a percentage of exports of goods and services
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Telephone lines per 100 population 8.15 Cellular subscribers per 100 population 8.16 Internet users per 100 population

AIDS = acquired immunodeficiency syndrome, CO_2 = carbon dioxide, DAC = Development Assistance Committee, GDP = gross domestic product, HIV = human immunodeficiency virus, MDRI = Multilateral Debt Relief Initiative, OECD = Organisation for Economic Co-operation and Development, PPP = purchasing power parity.

1 For monitoring country poverty trends, indicators based on national poverty lines should be used, where available.

2 The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: (a) lack of access to improved water supply, (b) lack of access to improved sanitation, (c) overcrowding (three or more persons per room), and (d) dwellings made of nondurable material.

To assess progress, all indicators should be disaggregated by sex and urban and/or rural areas as far as possible. Not all indicators listed in Box 1 are available for all countries. Several new indicators were introduced in the revised monitoring framework. The accompanying tables in Part II contain the indicators currently available on a comparable basis for countries of the Asia and Pacific region.

Progress toward Achieving the Millennium Development Goals

The MDGs discussed in Part II are taken in order according to the classification presented in Box 1. For each goal, there is a short nontechnical write-up together with supporting statistical information in the form of figures, boxes, and tables, on the performance of countries toward achieving the goals.

To ascertain the performance of countries toward reaching the MDGs, countries are assessed according to latest available data. It is important to remember that the progress of countries is provisional and is likely to change as the 2015 target date draws closer. This is particularly relevant at the present time in view of the global economic crisis, which began in the second half of 2008.

Not all MDGs are likely to be affected to the same extent by the economic crisis. Progress toward eradicating extreme poverty and hunger (MDG 1) may be particularly vulnerable because of rising unemployment and falling household incomes. Reducing child mortality (MDG 4) and improving maternal health (MDG 5) could also be affected if governments cut back on immunization campaigns, training midwives, and antenatal care, for example. On the other hand, the impact on MDGs 2 and 3—achieve universal primary education, and promote gender equality and empower women—may be less severe.

Country Groups

In commenting on performance made by countries toward achieving the MDGs, three groups of countries are often singled out for special mention:

(i) The five most populous countries, namely, Bangladesh, People's Republic of China, India, Indonesia, and Pakistan, are of special interest because progress by these countries determines the progress of most of the population of the Asia and Pacific region.
(ii) The 14 Pacific countries are mostly small and isolated and they have similar difficulties in meeting their targets.
(iii) The countries of the former Soviet Union in Central and West Asia are still to some extent in transition from systems of government characterized by central planning and extensive welfare provision, to market economies in which fewer health and education services are being provided by government. As a result, they have similar experiences with each other in meeting many of the targets.

Data Sources and Comparability with Other Publications

The tables included in Part II contain data that have mostly been compiled by the designated international agencies for the respective MDG indicators. These data have been verified to the extent possible but responsibility for the reliability of the statistics remains with the agencies that are listed as the sources of each table.

Differences in the data and analyses of the performance of countries in meeting the goals that exist between this publication and reports from other organizations may be due to several factors, including data sources, dates when statistics were collected and published, and methodology.

Selected References

Organisation for Economic Co-operation and Development. 2007. *OECD Factbook 2007*. Paris.

Perucci, Francesca. 2008. "Global MDG Monitoring: The New Monitoring Framework." Presentation at the Workshop on Millennium Development Goals Monitoring. 5–8 May, Kampala, Uganda. Available: mdgs.un.org/unsd/mdg/Resources/Attach/Capacity/Uganda08%20Presentations/8%20May/1%20-%20UNSD%20-%20Global%20MDG%20Monitoring%20and%20new%20MDG%20framework.ppt.

United Nations Development Group. 2003. *Indicators for Monitoring the Millennium Development Goals: Definitions, Rationale, Concepts and Methods*. New York. Available: mdgs.un.org/unsd/mdg/Resources/Attach/Indicators/HandbookEnglish.pdf.

United Nations Economic and Social Council. 2008. Report of the Secretary-General on the indicators for monitoring the Millennium Development Goals. Available: unstats.un.org/unsd/statcom/doc08/2008-29-Indicators-E.pdf.

United Nations Economic and Social Commission for Asia and the Pacific, Asian Development Bank, and United Nations Development Programme. 2007. "The Millennium Development Goals: Progress in Asia and the Pacific 2007." *Asia Pacific MDG Study Series ST/ESCAP/2465*. Bangkok, Thailand.

World Bank. 2009a. *Global Monitoring Report 2009*. Washington, DC.

——— 2009b. *World Development Indicators 2009*. Washington, DC.

Goal 1: Eradicate Extreme Poverty and Hunger

In 19 economies in the Asia and Pacific region, including some of the most populous, more than 10% of the population live on less than **$1.25 a day.** In general, economies with **more equal income distributions** have lower percentages of poor people. In 19 economies, again including some of the most populous, more than 10% of the population are **malnourished.** In nearly two thirds of economies for which data are available, 10% or more of children under 5 years of age are **underweight.** Compared to 2007, gains in **GDP per person employed** were somewhat lower in 2008 for many economies.

Introduction

Goal 1 has three targets:

1.A: *Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.* Note that this is a purchasing power parity (PPP) adjusted dollar that has the same purchasing power in all countries. The "dollar-a-day" poverty threshold was recently reviewed and the threshold has been increased to $1.25. For convenience, it is still referred to by its old name.

1.B: *Achieve full and productive employment and decent work for all, including women and young people.* This target was introduced in the revised MDG framework.

1.C: *Halve, between 1990 and 2015, the proportion of people who suffer from hunger.* Hunger here is measured by the percentage of the population below the minimum level of dietary energy consumption as determined by the Food and Agriculture Organization (FAO).

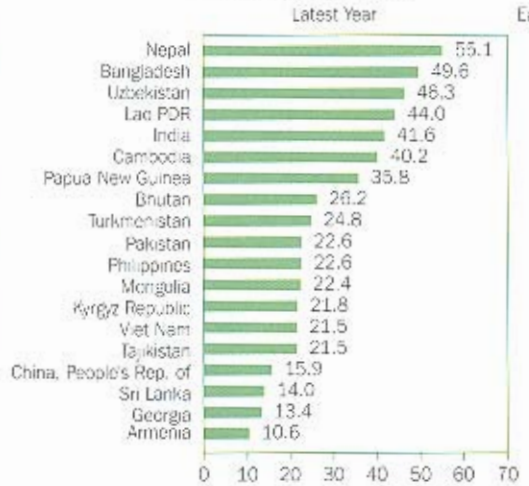
Key Trends

Extreme poverty affects at least 10% of the population in many parts of the Asia and Pacific region. Figure 1.1 lists 19 economies where more than 10% of the population were living on less than $1.25 a day in the latest year for which data are available. Data for the earliest year are also presented, where available.

Six of the 19 economies in Figure 1.1 are from the former Soviet Union. Four of the five most populous countries are also included; data are not available for Indonesia. It is clear that many people in the developing parts of the Asia and Pacific region live in economies where extreme poverty afflicts at least 10% of the population.

Five of the economies listed in Figure 1.1 (People's Republic of China [PRC], Pakistan, Tajikistan, Turkmenistan, and Viet Nam) have at least halved the percentages of their population living on less than $1.25 a day. Four other economies (Georgia, Kyrgyz Republic, Mongolia, and Uzbekistan) have experienced rising poverty rates.

Figure 1.1 **Economies where More than 10% of the Population Live on Less than $1.25 a Day**



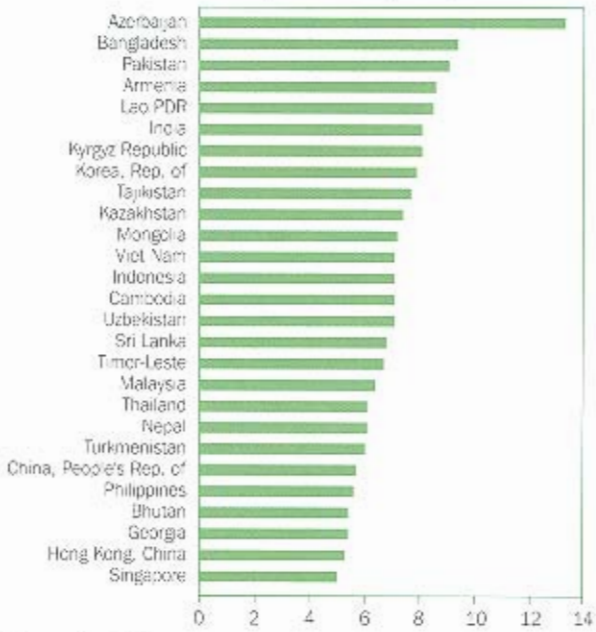
Source: Table 1.1.

Other aspects of poverty need to be considered. Two other poverty measures are shown in Table 1.1. These are "poverty gaps" and a "quintile measure" of income distribution. Poverty gaps are measured as the distance from $1.25 of the average income of persons living on less than $1.25 a day multiplied by the percentage of the population below the $1.25-a-day poverty line. For example, if 20% of the population is below the $1.25-a-day line and the average income of these persons is $0.80, the poverty gap would be (1.25 minus 0.8) times 20%, i.e., 9%. The smaller the poverty gap, the easier it will be for countries to bring people above the $1.25-a-day threshold. India has a relatively large poverty gap of 11%; other countries with poverty gaps above 10% include Bangladesh, Cambodia, Lao People's Democratic Republic, Nepal, Timor-Leste, and Uzbekistan.

The "quintile measure" shows the percentage of total household income of an economy (in many economies household consumption expenditure is used as a proxy for household income) that is received by the poorest 20% (one fifth or "quintile") of the population. Low percentages reflect greater inequality while high percentages indicate a more even distribution of incomes.

In general, economies with more equal income distributions can be expected to have lower percentages of poor people. But Figures 1.1 and 1.2 show that this is not always the case. Bangladesh has a relatively high share of income going to the lowest quintile but it is among the highest for poverty measures; the PRC has a rather unequal income distribution but a fairly low percentage of the population living on less than $1.25 a day.

Figure 1.2 **Share of Total Income or Consumption for Lowest Quintile, Latest Year (percent)**



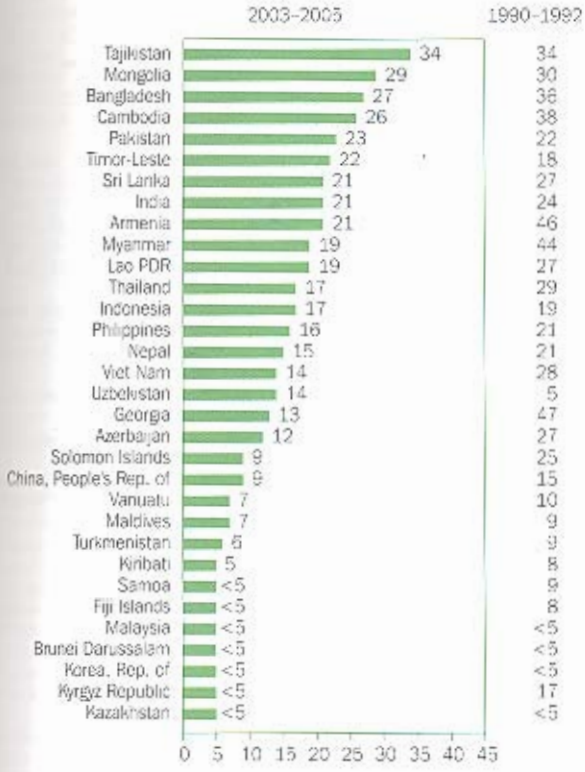
Source: Table 1.1.

Hunger still haunts much of Asia. Figure 1.3 shows the percentage of the total population suffering from hunger. These are people who are "undernourished" according to the minimum level of dietary requirements as defined by the FAO.

More than 30% of the population of Tajikistan suffer from hunger, while the percentages are between 20% and 30% in Armenia, Bangladesh, Cambodia, Mongolia, India, Pakistan, Sri Lanka, and Timor-Leste. Percentages for the PRC and Indonesia are 9% and 17% respectively.

Seven economies (Armenia, Azerbaijan, Georgia, Kyrgyz Republic, Myanmar, Solomon Islands, and Viet Nam) have at least halved the proportion of their population suffering from hunger. Seven other economies have rates of 5% or below. On the other hand, four other economies (Pakistan, Tajikistan, Timor-Leste, and Uzbekistan) have either rising or unchanged rates.

Figure 1.3 **Percentage of Population Suffering from Hunger**



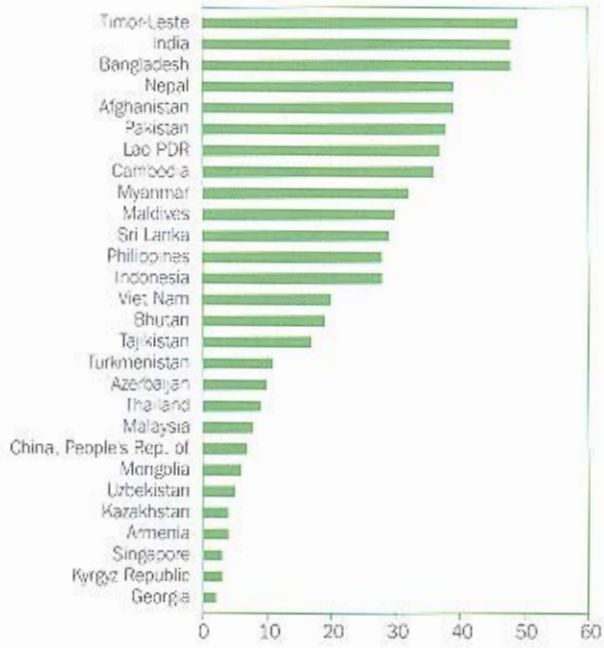
Source: Table 1.3

Poor nutrition is a serious problem among children in the region. While the hunger target relates to the total population considered to be malnourished, another useful indicator of hunger is the percentage of children under 5 years old who are underweight based on criteria identified by the United Nations Children's Fund (UNICEF) and World Health Organization (WHO).

Figure 1.4 shows that 10% or more of under-fives are underweight in about two thirds of the economies for which data are available. Percentages are over 40% in Bangladesh, India, and Timor-Leste; and between 20% and 40% in a further 11 economies including Indonesia, Pakistan, Philippines, and Viet Nam. Poor nutrition in young children is a serious problem in many developing economies in the Asia and Pacific region.

In Table 1.3, the percentages of underweight children are shown separately for boys and girls for 24 economies. When food is scarce, do boys tend to have more of it than girls? From Table 1.3 there is no evidence of a bias in favor of boys. The simple averages of underweight children for the economies for which the gender breakdown is available are 22% for both boys and girls.

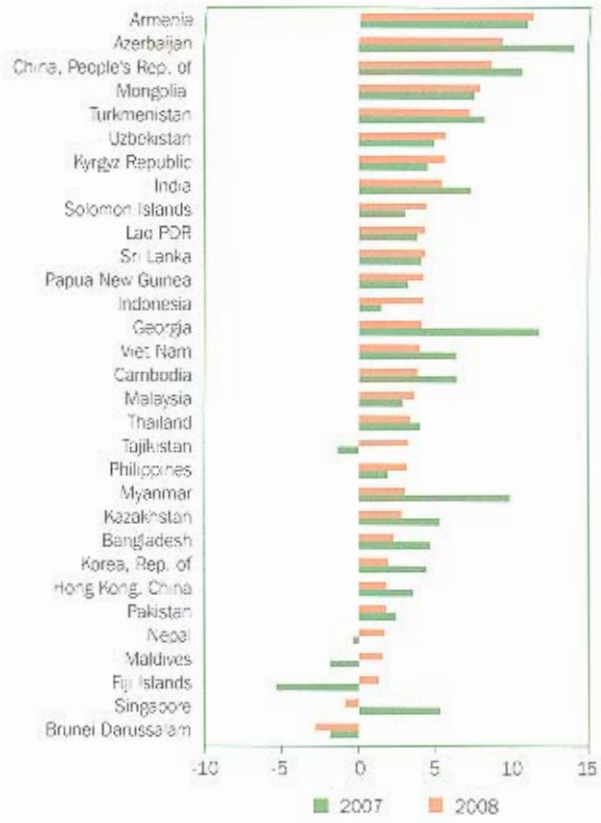
Figure 1.4 **Percentage of Underweight Children under 5 Years Old, Latest Year**



Source: Table 1.3.

Rising labor productivity offers hope of reducing poverty and hunger. Figure 1.5 shows the percentage gains in GDP per person employed. It is relevant to MDG targets regarding poverty and hunger because these gains are a broad measure of the additional amounts of GDP that become available each year from rising labor productivity. Economies where these gains are large will have more resources available to relieve hunger and poverty. Particularly large gains have recently been recorded by Armenia, Azerbaijan, PRC, Mongolia, and Turkmenistan but for several other economies in the region, the recent high rates of growth in GDP per person employed have exceeded 4%. The year 2007 was a particularly good year for Asian economies and gains were somewhat lower in 2008 for many economies. The economic crisis that began in the last part of 2008 will further erode these gains and hence the opportunities for eradicating poverty and hunger in 2009 and 2010.

Figure 1.5 **Growth Rate of GDP per Person Employed, 2007 and 2008 (percent at constant 1990 US$)**



Source: Table 1.2

Data Issues and Comparability

The "$1.25-a-day" test for determining poverty and the calculation of "poverty gaps" requires information on household income or household consumption expenditure, and the PPP dollar conversion rate for 2005. Both the measurement of household income or expenditure in national currency and the calculation of 2005 PPPs will have relatively high error margins in many countries. Data based on the $1.25-a-day poverty line are missing for most Pacific economies. The availability of such data will help to provide a better comparison of poverty incidence around the region.

The hunger indicators are based on standards that have been devised by FAO, UNICEF, and WHO. But while countries attempt to use the same standards, comparability is compromised by unavailability of regular data in many countries. Statistical techniques are typically used to extend data collected from household surveys to the full population. Such estimates may have large error margins.

The computation of labor productivity uses data on the number of persons employed, which does not take into account the actual number of hours worked. Assuming a constant mix of economic activities, the best measure of labor input to be used in the computation of labor productivity would be the "total number of annual hours actually worked by all persons employed". In addition, differences in the coverage of informal sector activities in the statistics of developing member countries may hamper the comparability of estimates of labor productivity growth.

Table 1.1 Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

	1.1 Proportion of Population below the Poverty Line (percent)				1.2 Poverty Gap Ratio		1.3 Share of Poorest Quintile in National Consumption (percent)
	$1.25 (PPP) a Day		National				
	Earliest Year	Latest Year	Earliest Year	Latest Year	Earliest Year	Latest Year	Latest Year
Developing Member Countries							
Central and West Asia							
Afghanistan	...	...	...	...	...	...	...
Armenia	17.5 (1996)	10.6 (2003)	55.1 (1999)	25.0 (2007)	4.7 (1996)	1.9 (2003)	8.6 (2003)
Azerbaijan	15.6 (1995)	<2.0 (2005)	68.1 (1995)	13.2 (2008)	4.4 (1995)	<0.5 (2005)	13.3 (2005)
Georgia	4.5 (1996)	13.4 (2005)	52.1 (2002)	39.4 (2005)	1.7 (1996)	4.4 (2005)	5.4 (2005)
Kazakhstan	4.2 (1993)	3.1 (2003)	34.6 (1996)	16.1 (2004)	<0.5 (1993)	<0.5 (2003)	7.4 (2003)
Kyrgyz Republic	18.6 (1993)	21.8 (2004)	47.6 (2001)	39.9 (2006)	8.6 (1993)	4.4 (2004)	8.1 (2004)
Pakistan	64.7 (1991)	22.6 (2005)	28.6 (1993)	22.3 (2005)	23.2 (1991)	4.4 (2005)	9.1 (2005)
Tajikistan	44.5 (1999)	21.5 (2004)	74.9 (1999)	44.4 (2003)	13.7 (1999)	5.1 (2004)	7.7 (2004)
Turkmenistan	63.5 (1993)	24.8 (1998)	...	29.9 (1998)	25.8 (1993)	7.0 (1998)	6.0 (1998)
Uzbekistan	32.1 (1998)	46.3 (2003)	...	26.2 (2003)	13.9 (1998)	15.0 (2003)	7.1 (2003)
East Asia							
China, People's Rep. of	60.2 [a] (1990)	15.9 [a] (2005)	6.0 (1996)	4.6 [b] (2007)	20.7 (1990)	4.0 (2005)	5.7 (2005)
Hong Kong, China	...	...	...	...	...	...	5.3 (1996)
Korea, Rep. of	...	<2.0 [c] (1998)	...	5.0 (2004)	...	<0.5 (1998)	7.9 (1998)
Mongolia	18.8 (1995)	22.4 (2005)	36.3 (1995)	35.2 (2008)	4.6 (1995)	6.2 (2005)	7.2 (2005)
Taipei,China	...	...	0.6 [d] (1993)	1.0 [d] (2007)	...	...	...
South Asia							
Bangladesh	66.8 [e] (1992)	49.6 [b] (2005)	51.0 (1996)	40.0 (2005)	21.1 (1992)	13.1 (2005)	9.4 (2005)
Bhutan	...	26.2 (2003)	...	23.2 (2007)	...	7.0 (2003)	5.4 (2003)
India	49.4 [e] (1994)	41.6 [b] (2005)	36.0 (1994)	27.5 (2004)	13.6 (1994)	10.5 (2005)	8.1 (2005)
Maldives	...	...	...	16.0 (2005)	...	...	...
Nepal	68.4 (1996)	55.1 (2004)	41.8 (1996)	30.9 (2004)	26.7 (1996)	19.7 (2004)	6.1 (2004)
Sri Lanka	15.0 (1991)	14.0 (2002)	20.0 (1991)	15.2 (2007)	2.7 (1991)	2.6 (2002)	6.8 (2002)
Southeast Asia							
Brunei Darussalam [f]	...	...	...	...	...	...	... ...
Cambodia	48.6 (1994)	40.2 (2004)	47.0 (1994)	34.7 (2004)	13.8 (1994)	11.3 (2004)	7.1 (2007)
Indonesia	...	...	17.5 (1996)	15.4 (2008)	...	...	7.1 (2005)
Lao PDR	55.7 (1992)	44.0 (2002)	45.0 (1993)	32.7 (2003)	16.2 (1992)	12.1 (2002)	8.5 (2003)
Malaysia	<2.0 (1992)	<2.0 (2004)	...	3.6 (2007)	<0.5 (1992)	<0.5 (2004)	6.4 (2004)
Myanmar	...	...	...	26.6 (2005)	...	...	...
Philippines	30.7 (1991)	22.6 (2006)	32.1 (1994)	32.9 (2006)	8.6 (1991)	5.5 (2006)	5.6 (2006)
Singapore	...	...	...	...	...	...	5.0 (1998)
Thailand	5.5 (1992)	<2.0 (2004)	9.8 (1994)	9.6 (2006)	<0.5 (1992)	<0.5 (2004)	6.1 (2004)
Viet Nam	63.7 (1993)	21.5 (2006)	37.4 (1998)	16.0 (2006)	23.6 (1993)	4.6 (2006)	7.1 (2006)
The Pacific							
Cook Islands	...	...	...	28.4 [a, g] (2008)	...	...	...
Fiji Islands	...	...	25.5 [g] (1996)	34.3 [a, g] (2007)	...	...	...
Kiribati	...	...	...	38.0 [g] (1996)	...	...	...
Marshall Islands	...	...	...	20.0 [g] (1999)	...	...	...
Micronesia, Fed. States of	...	...	...	36.7 [a, g] (2007)	...	...	...
Nauru	...	...	...	...	...	...	...
Palau	...	...	...	24.9 [a, g] (2008)	...	...	...
Papua New Guinea	...	35.8 (1996)	24.0 [g] (1990)	39.6 [g] (2002)	...	...	...
Samoa	...	...	15.0 [g] (1997)	20.3 [g] (2004)	...	...	...
Solomon Islands	...	...	...	22.7 [a, g] (2007)	...	...	...
Timor-Leste	...	...	...	41.9 (2001)	...	19.1 (2001)	6.7 (2001)
Tonga	...	...	...	22.3 [g] (2004)	...	...	...
Tuvalu	...	...	17.2 [g] (1994)	25.9 [a, g] (2006)	...	...	...
Vanuatu	...	...	...	15.9 [a, g] (2008)	...	...	...
Developed Member Countries							
Australia	...	...	...	...	...	...	5.9 (1994)
Japan	...	...	...	...	...	...	10.6 (1993)
New Zealand	...	...	...	...	...	...	6.4 (1997)

a Weighted average of urban and rural estimates.
b Refers to rural areas only.
c Refers to urban areas only.
d Defined as percent of low-income population to total population.
e Estimate is adjusted by spatial consumer price index information.
f Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
g Refers to percentage of population below the basic needs poverty line.

Sources: Millennium Indicators Database Online (UNSD 2009), Pacific Regional Information System (SPC), country sources.

Goal 1 Targets and Indicators

Table 1.2 **Target 1.B: Achieve full and productive employment and decent work for all, including women and young people**

	1.4 Growth Rate of GDP per Person Employed (percent, at constant 1990 US$ PPP)		1.5 Employment-to-Population Ratio (percent, aged 15 years and over)		1.6 Proportion of Employed People Living below $1.25 (PPP) per Day (percent)		1.7 Proportion of Own-Account and Contributing Family Workers in Total Employment (percent)	
	1992	2008	1991	2007	Earliest Year	Latest Year	Earliest Year	Latest Year
Developing Member Countries								
Central and West Asia								
Afghanistan	...	...	56.7	55.7	...	...	...	...
Armenia	-39.5	11.2	39.3	40.1	17.5 (1996)	10.8 (2003)	...	...
Azerbaijan	-23.7	9.3	56.9	60.9	15.5 (1995)	6.3 (2002)	37.4 (2003)	53.2 (2007)
Georgia	-43.3	4.1	58.3	55.6	4.5 (1996)	13.4 (2005)	53.9 (1998)	62.2 (2007)
Kazakhstan	-1.5	2.8	63.7	63.7	4.2 (1993)	3.1 (2003)	40.0 (2001)	35.8 (2004)
Kyrgyz Republic	-14.3	5.6	59.5	58.9	18.6 (1993)	21.8 (2004)	51.5 (2002)	47.3 (2005)
Pakistan	4.6	1.8	47.6	51.0	64.7 (1991)	22.6 (2005)	64.9 (1995)	61.8 (2007)
Tajikistan	-27.4	3.2	54.3	54.6	44.5 (1999)	21.5 (2004)	...	...
Turkmenistan	-8.7	7.2	56.1	58.5	63.5 (1993)	24.8 (1998)	...	...
Uzbekistan	-11.4	5.7	54.5	57.5	32.1 (1998)	46.3 (2003)	...	...
East Asia								
China, People's Rep. of	11.8	8.6	75.7	72.5	53.7 (1993)	16.2 (2005)	...	...
Hong Kong, China	5.7	1.8	62.6	59.0	...	...	5.5 (1993)	7.1 (2007)
Korea, Rep. of	3.9	1.9	59.0	58.9	...	...	30.0 (2000)	25.2 (2007)
Mongolia	-12.8	7.9	51.1	52.1	18.8 (1995)	22.4 (2005)	56.6 (2000)	58.7 (2003)
Taipei,China	...	...	...	...	...	...	27.6 (1990)	19.8 (2007)
South Asia								
Bangladesh	5.2	2.3	74.5	68.1	52.7 (1992)	50.5 (2005)	69.4 (1996)	85.0 (2005)
Bhutan	9.5	2.0	53.7	58.4	...	26.2 (2003)	...	52.3 (2005)
India	2.4	5.4	59.0	55.4	49.4 (1994)	41.6 (2005)	...	...
Maldives	2.2	1.6	49.8	56.9	...	...	46.3 (1990)	50.3 (2000)
Nepal	-0.6	1.7	61.2	61.8	68.4 (1996)	55.1 (2004)	...	71.6 (2001)
Sri Lanka	5.1	4.3	52.0	55.1	15.0 (1991)	13.9 (2002)	38.3 (1997)	40.7 (2007)
Southeast Asia								
Brunei Darussalam [a]	1.0	-2.8	62.6	63.8	...	...	...	4.1 (1991)
Cambodia	4.7	3.8	78.0	78.9	48.5 (1994)	40.2 (2004)	84.5 (2000)	86.7 (2004)
Indonesia	4.3	4.2	63.2	61.5	54.4 (1993)	21.4 (2005)	62.8 (1997)	63.1 (2007)
Lao PDR	3.8	4.3	80.4	78.2	55.7 (1992)	44.0 (2002)	...	90.1 (1995)
Malaysia	6.2	3.6	60.1	60.5	1.6 (1992)	0.5 (2004)	28.8 (1991)	22.3 (2007)
Myanmar	7.1	3.0	74.5	74.7	...	...	...	...
Philippines	-3.4	3.1	59.1	61.0	30.7 (1991)	22.6 (2006)	44.9 (1998)	44.7 (2007)
Singapore	3.5	-0.9	64.4	62.4	...	...	8.1 (1991)	10.2 (2007)
Thailand	6.8	3.3	77.7	72.0	5.4 (1992)	0.4 (2004)	70.3 (1990)	53.3 (2007)
Viet Nam	5.8	4.0	75.6	71.0	63.7 (1993)	21.5 (2006)	...	73.9 (2004)
The Pacific								
Cook Islands	...	...	...	60.0 (2001)	...	...	...	20.8 (2001)
Fiji Islands	2.7	1.3	53.7	56.4	...	...	...	39 (2005)
Kiribati	...	...	18.6 (2000)	22.6 (2005)	...	...	...	82.2 (2005)
Marshall Islands	...	...	...	...	...	...	...	26.7 (1999)
Micronesia, Fed. States of	...	...	...	21.9 (2000)	..	...	...	...
Nauru	...	...	...	53.9 (2002)	...	...	...	...
Palau	...	...	65.9 (2000)	68.3 (2005)	...	...	...	...
Papua New Guinea	11.8	4.2	70.4	70.4	...	35.8 (1996)	...	...
Samoa	...	...	25.3 (2001)	25.7 (2006)	...	...	...	47.7 (2006)
Solomon Islands	8.6	4.4	67.4	65.0	...	...	...	...
Timor-Leste	...	...	63.9	67.3	...	52.9 (2001)	...	...
Tonga	...	...	50.7 (1996)	37.2 (2006)	...	...	57.0 (1996)	33.6 (2006)
Tuvalu	...	...	...	33.2 (2002)	...	...	...	1.6 (2002)
Vanuatu	...	...	...	19.9 (1999)			...	...
Developed Member Countries					...	...		
Australia	0.4	0.6	57.2	61.5	...	...	10.3 (1990)	9.3 (2007)
Japan	-0.3	0.4	62.5	57.3	...	...	19.2 (1990)	10.8 (2007)
New Zealand	0.1	-0.4	57.0	65.0	...	...	12.7 (1991)	11.9 (2007)

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009), Pacific Regional Information System (SPC 2009), country sources.

Table 1.3 **Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger**

	1.8 Prevalence of Underweight Children under Five Years of Age (percent)						1.9 Proportion of Population below Minimum Level of Dietary Energy Consumption (percent)		
	Earliest Year		Latest Year						
	Total		Total	Girls	Boys		1990–1992	1995–1997	2003–2005
Developing Member Countries									
Central and West Asia									
Afghanistan	48	(1997)	39 [a]	40	38	(2003–2004)	...	...	...
Armenia	4	(1998)	4	6	2	(2005)	46	34	21
Azerbaijan	10	(1996)	10	10	9	(2006)	27	27	12
Georgia	3	(1999)	2	2	2	(2005)	47	24	13
Kazakhstan	8	(1995)	4	4	4	(2006)	<5	<5	<5
Kyrgyz Republic	11	(1997)	3	3	4	(2006)	17	13	<5
Pakistan	40	(1991)	38	36	38	(2001–2002)	22	18	23
Tajikistan	...		17	17	18	(2005)	34	42	34
Turkmenistan	12	(2000)	11	10	12	(2005)	9	9	6
Uzbekistan	19	(1996)	5	5	5	(2006)	5	5	14
East Asia									
China, People's Rep. of	19	(1990)	7	...	...	(2005)	15 [b]	12 [b]	9 [b]
Hong Kong, China	...		...	...	...		...	...	...
Korea, Rep. of	...		...	...	...		<5	<5	<5
Mongolia	12	(1992)	6	7	6	(2005)	30	40	29
Taipei,China	...		...	...	...		...	...	...
South Asia									
Bangladesh	67	(1992)	48	49	46	(2004)	36	40	27
Bhutan	...		19 [a]	17	20	(1999)	...	...	...
India	53	(1993)	48	49	46	(2005–2006)	24	21	21
Maldives	39	(1994)	30	30	31	(2001)	9	9	7
Nepal	48	(1995)	39	40	38	(2006)	21	24	15
Sri Lanka	38	(1993)	29 [c]	30	29	(2000)	27	24	21
Southeast Asia									
Brunei Darussalam [d]	...		...	...	...		<5	<5	<5
Cambodia	40	(1993)	36	36	35	(2005)	38	41	26
Indonesia	34	(1995)	28	...	...	(2003)	19	13	17
Lao PDR	44	(1993)	37	38	37	(2006)	27	26	19
Malaysia	23	(1993)	8	...	...	(2005)	<5	<5	<5
Myanmar	32	(1990)	32	32	31	(2003)	44	34	19
Philippines	34	(1990)	28	...	...	(2003)	21	18	16
Singapore	...		3	3	4	(2000)	...	...	...
Thailand	19	(1993)	9	10	9	(2005)	29	21	17
Viet Nam	45	(1994)	20	19	21	(2006)	28	21	14
The Pacific									
Cook Islands	...		...	...	...		...	...	...
Fiji Islands	...		...	...	...		8	5	<5
Kiribati	...		...	...	...		8	5	5
Marshall Islands	...		...	...	...		...	...	...
Micronesia, Fed. States of	...		...	...	...		...	...	...
Nauru	...		...	...	...		...	...	...
Palau	...		...	...	...		...	...	...
Papua New Guinea	...		...	...	...		...	...	...
Samoa	...		...	...	...		9	10	<5
Solomon Islands	...		...	...	...		25	13	9
Timor-Leste	43	(2002)	49	45	53	(2007)	18	13	22
Tonga	...		...	...	...		...	...	...
Tuvalu	...		...	...	...		...	...	...
Vanuatu	...		...	...	...		10	10	7
Developed Member Countries									
Australia	...		...	...	...		<5	<5	<5
Japan	...		...	...	...		<5	<5	<5
New Zealand	...		...	...	...		<5	<5	<5

a For children aged 6–59 months.
b Includes Hong Kong, China; Macao, China; and Taipei,China.
c For children aged 3–59 months.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009), Monitoring the Situation of Children and Women Online (UNICEF 2009).

Goal 2: Achieve Universal Primary Education

In eight economies in the region including a number from the Pacific, total net enrollment ratios in **primary education** are below 80%. Eleven economies including several from the former Soviet Union have achieved expected primary education **completion rates** of at least 95%. In most economies for which data are available, over 95% of 15–24 year olds are **literate**. In economies with lower literacy rates, women are more likely to be illiterate than men.

Introduction

The target is *to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling*. Primary education usually starts at 5 or 6 years and continues through to 11 or 12 years, but age requirements differ between countries.

To achieve this target, first, countries need to ensure that all primary school age children are enrolled in school; second, that they all complete the course. In the commentary below, the progress made by economies for these two components are considered separately. While in principle the goal is to achieve universal primary education, in practice, a rate of 95% and above is considered as a sufficient approximation.

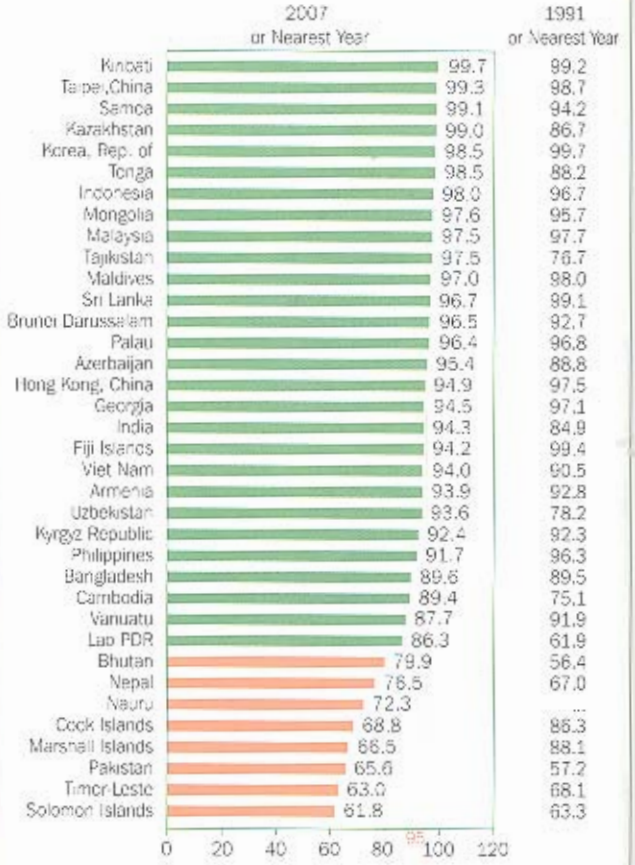
One test of the success of primary education is provided by **literacy rates** for persons in the 15–24 age group. These rates show how well the basic reading and writing skills learned in primary school have been retained at the time young persons are either joining the work force or entering higher technical or university education.

Key Trends

Total net enrollment ratio is generally good but eight economies have ratios of less than 80%. Figure 2.1 shows 36 economies with total net enrollment ratios in primary education. The indicator includes children of primary school age who are enrolled in secondary education. Economies with enrollment ratios of less than 80% are denoted by red bars and include a number from the Pacific. Enrollment ratios in these economies would need to rise by about 2%–5% per annum from their latest levels to reach 95% by 2015.

Fifteen economies (including Indonesia) had enrollment ratios of at least 95% in 2007. Nine of the other 21 economies including a number from the Pacific have seen their enrollment ratios fall. The falls have been particularly steep in the case of Cook Islands and Marshall Islands.

Figure 2.1 **Total Net Enrollment Ratio in Primary Education**



Source: Table 2.1.

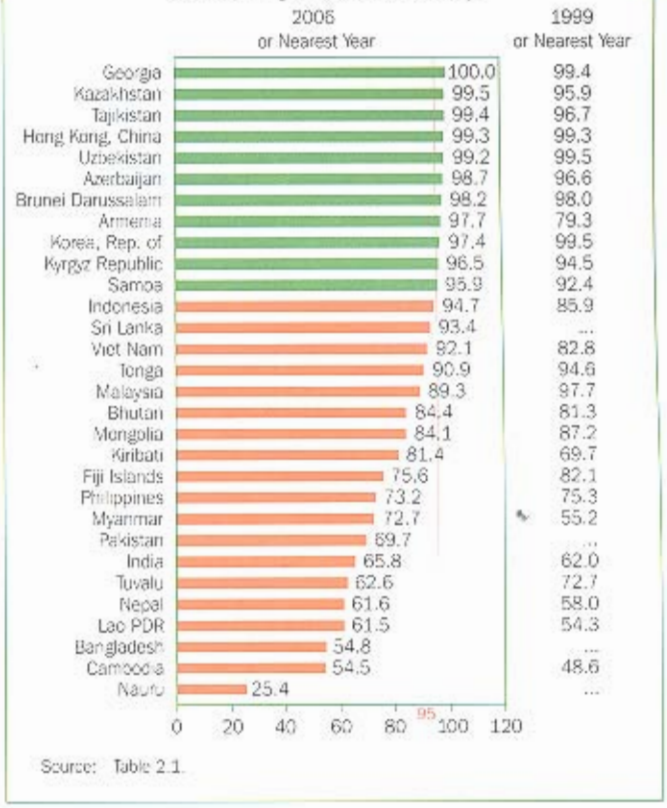
Eleven economies out of 30 have expected primary completion rates of at least 95%. Figure 2.2 shows how many of the children who have enrolled in the first grade of primary education can be expected to reach the last grade for 30 economies. In 2006, 11 economies (denoted by green bars) had expected completion rates of at least 95%. They comprise several countries from the former Soviet Union. The expected completion rates for six of the other 19 economies fell during the period.

Note that the data shown here are expected rates and not actual completion rates. Actual completion rates may turn out differently as they are affected by economic conditions. In particular, when times are hard, some parents may no longer be able to keep their children in school. Figure 2.2 mostly refers to pre-2007 data and so does not reflect the global economic crisis; this will only show up when data for 2009 become available.

The goal of universal primary education requires that both the enrollment and completion criteria are met. However, completion of primary schooling will only be possible if children are able to reach the last grade. Hence, enrollment rates need to be considered alongside survival rates.

Based on available data, only six economies have ratios of at least 95% for both indicators. These are Azerbaijan, Brunei Darussalam, Kazakhstan, Republic of Korea, Samoa, and Tajikistan. Other economies either miss one or both of the criteria or are able to provide statistics on only one or neither of them.

Figure 2.2 **Percentage of Children Starting Grade 1 and Reaching Last Grade of Primary**

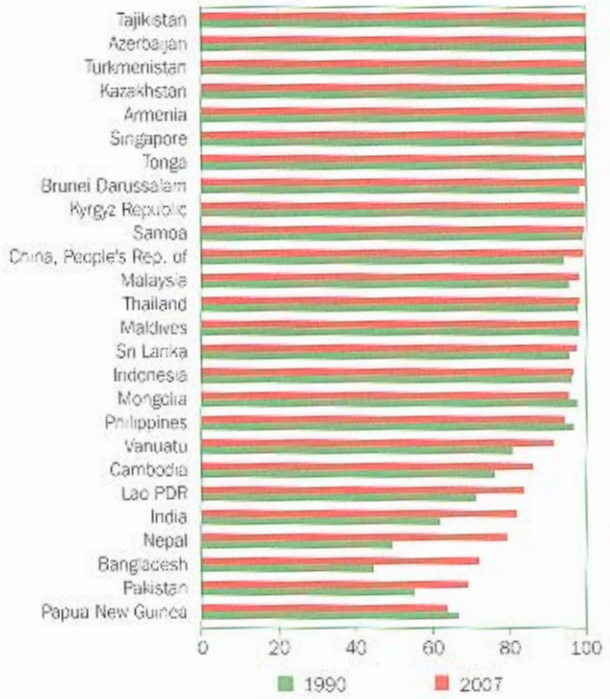


Source: Table 2.1.

Literacy rates have mostly risen around the region. Figure 2.3 shows literacy rates for 26 economies in the region for which data are available. In most countries literacy rates have increased over this period but there have been falls of 2–3 percentage points in Mongolia, Papua New Guinea, and Philippines. Particularly high gains are recorded for six economies that had low rates in 1990: Bangladesh, India, Lao People's Democratic Republic (Lao PDR), Nepal, Pakistan, and Vanuatu.

Table 2.1 shows these literacy rates separately for males and females. In economies with high rates of literacy, the differences between the male and female rates are small and are as likely to favor females as males. In economies with lower rates, however, there are clear gender differences, with female literacy rates being markedly lower than for males. This gender bias is particularly marked in Afghanistan, Bhutan, India, Lao PDR, Nepal, and Pakistan.

Figure 2.3 **Percentage of Literate 15–24-Year-Olds, 1990 and 2007 or Nearest Years**



Source: Table 2.1.

Data Issues and Comparability

The statistics for Goal 2 are mostly taken from the United Nations Educational, Scientific and Cultural Organization (UNESCO) sources, with countries trying to adhere to UNESCO classifications and definitions. Statistics on school enrollment are typically obtained from ministries of education or household surveys. Enrollment statistics are likely to be accurate in many countries, but may be over-reported in others. These statistics may also not reflect actual attendance or dropout rates during the year. The percentages of those starting Grade 1 who will continue on to the last grade of primary school are essentially forecasts based on recent experience on dropout rates.

Youth literacy rates are sometimes based on household surveys in which reading and writing skills are tested. In other countries they are based on the assumption that persons who have completed a certain number of years of schooling are literate. However, literacy skills may be lost through lack of use, hence the rates may be overstated.

Table 2.1 **Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling**

	2.1 Total Net Enrollment Ratio in Primary Education (percent)					
	Total		Girls [a]		Boys [a]	
	1991	2007	1991	2007	1991	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	...	...	...	...	...	...
Armenia	92.8 (2001)	93.9	93.6	95.5	92.0	92.5
Azerbaijan	88.8	95.4	...	94.7	...	96.1
Georgia	97.1	94.5	...	93.1	...	95.8
Kazakhstan	86.7	99.0	...	99.4	...	98.6
Kyrgyz Republic	92.3	92.4	...	92.4	...	92.5
Pakistan	57.2 (2001)	65.6 (2006)	46.0	57.3	67.8	73.5
Tajikistan	76.7	97.5	...	95.7	...	99.3
Turkmenistan	...	...	...	...	...	...
Uzbekistan	78.2	93.6	...	92.3	...	94.8
East Asia						
China, People's Rep. of	98.3	...	...	...	...	...
Hong Kong, China	97.5 (2001)	94.9 (2005)	95.5	92.8	99.5	96.9
Korea, Rep. of	99.7	98.5 (2006)	...	...	...	...
Mongolia	95.7	97.6	...	99.0	...	96.2
Taipei,China	98.7	99.3	...	..	...	...
South Asia						
Bangladesh	89.5 (2005)	89.6 (2006)	92.5	93.0	86.7	86.3
Bhutan	56.4 (1999)	79.9 (2006)	53.0	80.1	59.8	79.7
India	84.9 (2000)	94.3 (2006)	77.1	92.2	92.0	96.1
Maldives	98.0 (1999)	97.0	98.3	97.6	97.7	96.5
Nepal	67.0 (1999)	78.5	58.7	74.6	74.7	78.3
Sri Lanka	99.1 (2001)	98.7 (2004)	99.4	...	98.9	...
Southeast Asia						
Brunei Darussalam [b]	92.7	96.5	...	96.9	...	96.2
Cambodia	75.1	88.4	...	87.4	...	91.3
Indonesia	96.7	98.0	...	...	...	...
Lao PDR	61.9	86.3	...	84.1	...	88.5
Malaysia	97.7 (1999)	97.5 (2006)	96.7	97.3	98.7	97.6
Myanmar	98.6	...	...	...	...	...
Philippines	96.3	91.7	...	92.7	...	90.6
Singapore	...	...	...	...	...	...
Thailand	87.7	...	...	...	...	...
Viet Nam	90.5	94.0 (2001)	...	91.2	...	96.6
The Pacific						
Cook Islands	86.3 (1999)	68.8	84.5	67.4	87.9	70.0
Fiji Islands	99.4	94.2 (2006)	...	94.4	...	94.1
Kiribati	99.2 (1999)	89.7 (2002)	...	...	...	...
Marshall Islands	88.1 (2001)	66.5	88.4	66.3	87.8	66.8
Micronesia, Fed. States of	...	...	...	...	...	...
Nauru	...	72.3	...	72.7	...	71.9
Palau	96.8 (1999)	96.4 (2000)	93.9	94.5	99.4	98.3
Papua New Guinea	...	...	...	...	...	...
Samoa	94.2 (1999)	99.1 (2004)	93.9	...	94.5	...
Solomon Islands	63.3 (2003)	61.8 (2005)	62.3	61.5	64.2	62.1
Timor-Leste	68.1 (2005)	63.0	66.6	61.9	69.6	64.1
Tonga	88.2 (1999)	98.5 (2005)	86.2	...	90.1	...
Tuvalu	...	...	...	...	...	...
Vanuatu	91.9 (1999)	87.7	91.4	87.1	92.3	88.2
Developed Member Countries						
Australia	99.8	97.2	...	97.6	...	96.9
Japan	99.7	99.8	...	...	...	...
New Zealand	98.8	99.3	...	99.6	...	98.9

continued.

Goal 2 Target and Indicators

Table 2.1 **Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling** *(continued)*

	2.2 Proportion of Pupils Starting Grade 1 Who Reach Last Grade of Primary (percent)					
	Total		Girls [a]		Boys [a]	
	1999	2006	1999	2006	1999	2006
Developing Member Countries						
Central and West Asia						
Afghanistan	...	...	...	...	...	...
Armenia	79.3 (2001)	97.7	80.4	97.4	78.2	98.0
Azerbaijan	98.6	98.7	97.7	100.0	95.6	97.6
Georgia	99.4	100.0	100.0	...	98.8	...
Kazakhstan	95.9 (2000)	99.5 (2007)	93.3	100.0	98.4	99.1
Kyrgyz Republic	94.5	96.5	93.9	97.0	95.1	96.0
Pakistan	...	69.7 (2004)	...	72.4	...	67.8
Tajikistan	98.7	99.4	93.6	97.3	99.7	...
Turkmenistan	...	...	...	...	...	...
Uzbekistan	99.5	99.2	99.4	99.2	99.7	99.3
East Asia						
China, People's Rep. of	...	...	...	...	...	...
Hong Kong, China	99.3 (2002)	99.3 (2004)	100.0	100.0	98.7	98.6
Korea, Rep. of	99.5	97.4	99.3	97.3	99.6	97.5
Mongolia	87.2	84.1	89.7	82.6	84.7	85.5
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	...	54.8 (2005)	...	57.6	...	52.2
Bhutan	81.3	84.4 (2005)	85.7	87.8	77.8	81.2
India	62.0	65.8 (2005)	60.4	65.3	63.3	66.2
Maldives	...	...	...	...	...	...
Nepal	58.0	61.6 (2007)	61.4	63.6	55.7	59.7
Sri Lanka	...	93.4 (2005)	...	93.6	...	93.2
Southeast Asia						
Brunei Darussalam [b]	98.0 (2003)	98.2	96.0	99.3	100.0	97.2
Cambodia	48.6	54.5	45.0	55.8	51.9	53.3
Indonesia	85.9 (2001)	94.7	88.7	81.4	83.3	...
Lao PDR	54.3	61.5	53.6	61.1	54.9	61.7
Malaysia	97.7 (2002)	89.3 (2005)	97.3	89.6	98.0	89.1
Myanmar	55.2 (2000)	72.7	55.2	...	55.3	...
Philippines	75.3 (2001)	73.2	79.8	78.4	71.1	68.6
Singapore	...	...	...	...	...	...
Thailand	...	...	...	...	...	...
Viet Nam	82.8	92.1 (2005)	86.2	...	79.9	...
The Pacific						
Cook Islands	...	...	...	...	...	...
Fiji Islands	82.1	75.6	82.0	...	82.2	...
Kiribati	69.7 (2001)	81.4 (2003)	67.4	88.8	72.0	75.0
Marshall Islands	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...
Nauru	...	25.4 (2001)	...	30.1	...	21.5
Palau	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...
Samoa	92.4	95.9 (2000)	94.1	...	90.9	...
Solomon Islands	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...
Tonga	94.6 (2000)	90.9 (2005)	...	91.9	...	89.9
Tuvalu	72.7 (2000)	62.6 (2001)	...	...	...	...
Vanuatu	68.9	...	71.0	...	67.0	...
Developed Member Countries						
Australia	...	...	...	...	...	...
Japan	...	...	...	...	...	...
New Zealand	...	...	...	...	...	...

continued.

Table 2.1 **Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling** *(continued)*

	2.3 Literacy Rate of 15–24-Year Olds (percent)					
	Total		Female [a]		Male [a]	
	1990	2007	1990	2007	1990	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	...	34.3 (2000)	...	18.4	...	50.8
Armenia	99.8 (2001)	99.8	99.9	99.8	99.8	99.7
Azerbaijan	99.9 (1999)	99.9	99.9	100.0	99.9	99.9
Georgia	...	...	...	...	...	...
Kazakhstan	99.8 (1999)	99.8	99.9	99.9	99.8	99.8
Kyrgyz Republic	99.7 (1999)	99.6	99.7	99.7	99.7	99.5
Pakistan	55.3 (1998)	69.2 (2006)	43.1	58.4	67.1	79.1
Tajikistan	99.8 (2000)	99.9	99.8	99.9	99.8	99.9
Turkmenistan	99.8 (1995)	99.8	99.8	99.9	99.8	99.8
Uzbekistan	...	99.3 (2000)	...	99.3	...	99.4
East Asia						
China, People's Rep. of	94.3	99.3	91.5	99.1	97.0	99.4
Hong Kong, China	...	...	...	...	...	...
Korea, Rep. of	...	...	...	...	...	...
Mongolia	97.7 (2000)	95.4	98.4	97.3	97.0	93.7
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	44.7 (1991)	72.1	38.0	73.2	51.7	71.1
Bhutan	...	74.4 (2005)	...	68.0	...	80.0
India	61.9 (1991)	82.1	49.3	77.1	73.5	86.7
Maldives	98.2	98.1	98.3	98.4	98.0	97.8
Nepal	49.6 (1991)	79.3	32.7	73.0	68.2	85.3
Sri Lanka	95.6 (2001)	97.5 (2006)	96.1	97.9	95.1	97.0
Southeast Asia						
Brunei Darussalam [b]	98.1 (1991)	99.6	98.1	99.6	98.1	99.6
Cambodia	76.3 (1998)	86.2	71.1	82.7	81.8	89.6
Indonesia	96.2	96.7 (2006)	95.1	96.3	97.4	97.0
Lao PDR	71.1 (1995)	83.9 (2005)	64.1	78.7	78.8	89.2
Malaysia	95.6 (1991)	98.3	95.2	98.4	95.9	98.2
Myanmar	...	94.5 (2000)	..	93.4	...	95.7
Philippines	96.6	94.4	96.9	95.3	96.3	93.6
Singapore	99.0	99.7	99.1	99.8	98.9	99.7
Thailand	98.0 (2000)	98.2	97.8	98.1	98.1	98.3
Viet Nam	93.9 (1999)	...	93.6	...	94.2	...
The Pacific						
Cook Islands	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...
Nauru	...	...	...	...	...	...
Palau	...	...	...	...	...	...
Papua New Guinea	66.7 (2000)	64.1	64.1	65.4	69.1	62.8
Samoa	99.0 (1991)	99.4	99.0	99.5	99.1	99.4
Solomon Islands	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...
Tonga	99.3 (1986)	99.6	99.4	99.6	99.3	99.5
Tuvalu	...	...	...	...	...	...
Vanuatu	80.8 (1994)	91.7	79.3	91.7	82.3	91.8
Developed Member Countries						
Australia	...	...	...	...	...	...
Japan	...	...	...	...	...	...
New Zealand	...	...	...	...	...	...

a Figures refer to the same year as indicated in the column for "total".
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Taipei,China: economy sources.

Goal 3: Promote Gender Equality and Empower Women

Gender equality in primary school enrollment is high, with most economies having ratios of 0.95 or more. This is also the case for gender equality in secondary school enrollment, but not so for tertiary education. When women do enroll in school, they tend to study longer than men. In 10 developing economies of the region, women make up 45% or more of the **non-agricultural workforce**. These ratios are typical of developed economies.

Introduction

The target for **Goal 3** is to obtain equality of males and females in primary, secondary, and tertiary education enrollment. Equality is measured by dividing the percentage of females of the relevant age group enrolled in each educational level by the corresponding percentage of males. A ratio of 1.0 means that equal percentages of both genders are enrolled. Ratios below (above) 1.0 mean that a higher percentage of males (females) are enrolled.

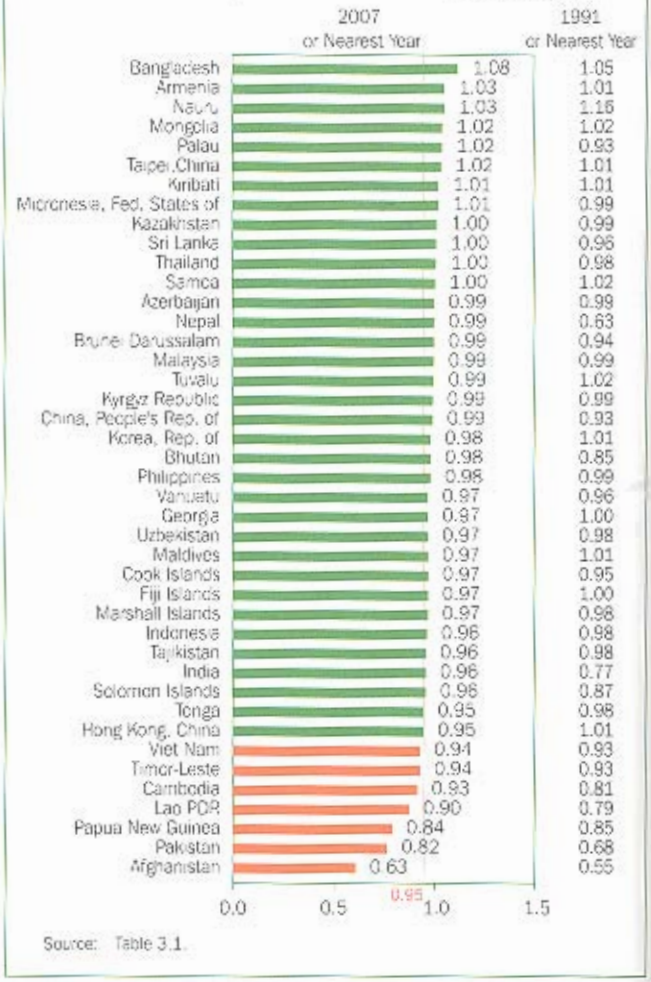
While in theory the target is complete equality (i.e., ratios of 1.0), in practice ratios of 0.95 and above are accepted as sufficient approximations. Note that this leads to a gender bias in favor of females since ratios above 1.0 are always considered to meet the target. For secondary and, particularly, tertiary education, many economies report ratios well above 1.0, but these high ratios in favor of females are not interpreted as gender bias to the detriment of males.

For primary and secondary education, the preferred target date was 2005, while for tertiary education 2015 is targeted.

Key Trends

Gender equality at the primary level is high. Figure 3.1 shows the girl-boy ratios in primary education for 42 economies. The overall picture is good with 35 economies (denoted by green bars) having achieved ratios of 0.95 or higher in 2007. These include four of the most populous economies—Bangladesh, People's Republic of China (PRC), India, and Indonesia. Pakistan's ratio is 0.82.

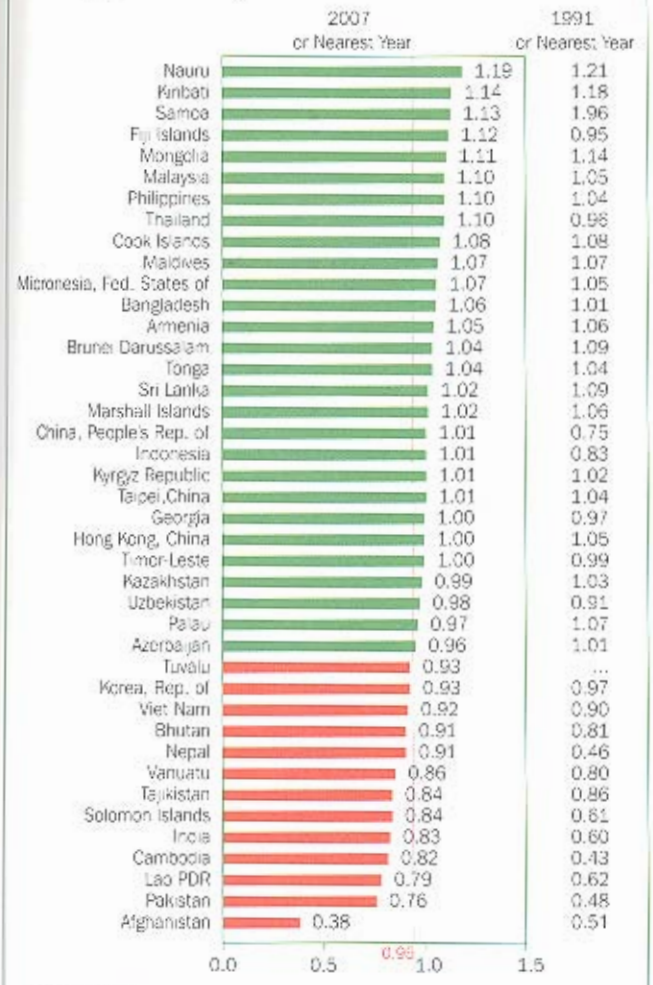
Figure 3.1 **Primary School Female–Male Enrollment Ratios**



Source: Table 3.1.

Gender equality at the secondary level is likewise high. Figure 3.2 shows progress towards gender equality in secondary education. The overall picture is again encouraging. Of the 41 economies shown, 28 (denoted by the green bars) had achieved ratios of 0.95 or higher in 2007. Bangladesh, PRC, and Indonesia are in this group but India now joins Pakistan in a group of 13 economies with ratios below 0.95. Three of these 13 economies (Afghanistan, Republic of Korea, and Tajikistan) have recorded a fall in their ratios. The fall for Afghanistan was quite steep.

Figure 3.2 **Secondary School Female–Male Enrollment Ratios**



Source: Table 3.1.

Gender equality needs to be improved at the tertiary level. Figure 3.3 shows that the picture is less good for tertiary education. Of the 34 economies in the figure, only 19 (denoted by the green bars), including PRC and Indonesia, had achieved ratios of at least 0.95 in 2007. Maldives and Palau had ratios of above 2. But 15 other economies (denoted by the red bars) had ratios below 0.95. These include Bangladesh, India, and Pakistan. Bhutan, Samoa, Uzbekistan, and Viet Nam have experienced falls in their ratios.

Figure 3.3 **Tertiary Education Female–Male Enrollment Ratios**



Source: Table 3.1.

Asian women study longer than Asian men. Figures 3.1 to 3.3 show that ratios in excess of one—meaning more females enrolled than males—become more frequent at higher levels of education. Ratios over one were reported by about a fifth of developing member countries for which data were available for primary education. This rises to slightly over one-half for secondary and tertiary education. It seems that in many of the economies in the Asia and Pacific region, females tend to study longer than males.

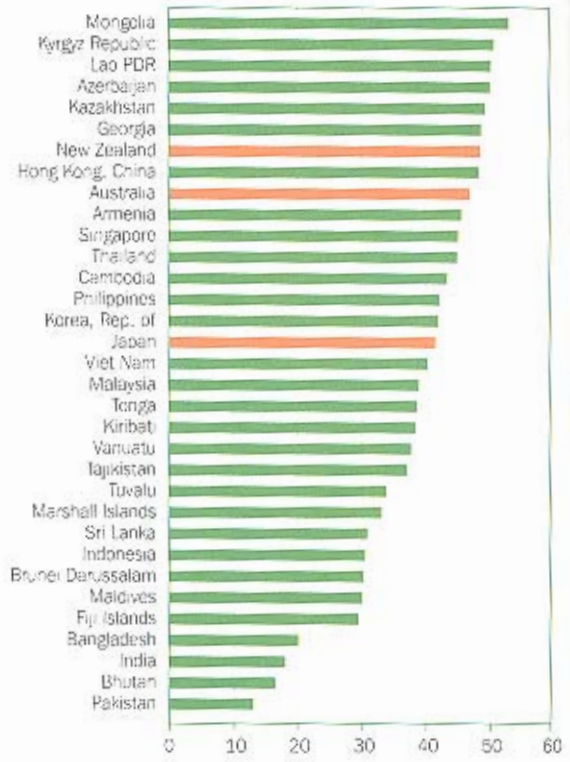
There are other aspects of women's empowerment. Table 3.1 contains two other indicators of women's empowerment. The first is the share of female workers in non-agricultural activities and these are shown in Figure 3.4.

For comparison purposes, Figure 3.4 includes the percentages for the three developed member economies in the region and these are shown by red bars. Ten developing member economies have ratios of at least 45%. These are five former Soviet Union republics where female employment ratios have traditionally been high, and Hong Kong, China; Lao People's Democratic Republic (Lao PDR); Mongolia; Singapore; and Thailand.

The other "empowerment" indicator in Table 3.1 shows the percentage of national parliamentary seats held by women. Its value as an empowerment indicator depends in part on the genuine power that the parliaments have to influence government policy. This is not the same in all economies.

In 2009, women hold 25% or more of the national parliamentary seats in Afghanistan, Kyrgyz Republic, Lao PDR, Nepal, Timor-Leste, and Viet Nam and over 20% in PRC, Pakistan, Philippines, and Singapore. Shares are between 10% and 20% in most of the economies of the former Soviet Union but are under 10% in most Pacific island economies.

Figure 3.4 **Percentage of Women in Non-Agricultural Employment, Latest Year**



Source: Table 3.1

Data Issues and Comparability

Enrollment rates generally follow the United Nations Educational, Scientific and Cultural Organization (UNESCO) guidelines on definitions of different levels of education and methods of calculation. Many small Pacific countries do not have facilities for tertiary education, and students from these countries receive their tertiary education abroad. For these countries, the tertiary gender parity index is not computed.

The most reliable information on female employment in non-agricultural activities comes from household labor force surveys, but these are not conducted in all countries in the region. Alternative sources include enterprise employment surveys, population censuses, and household demographic surveys.

The percentage of women in parliament refers only to national parliaments. In some countries, a more relevant measure of empowerment would refer to the numbers of women active in government at the local or community level.

Table 3.1 **Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015**

	3.1 Ratio of Girls to Boys in Education Levels [a]					
	Primary		Secondary		Tertiary [b]	
	1991	2007	1991	2007	1991	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	0.55	0.63	0.51	0.38	...	0.28 (2004)
Armenia	1.01 (2001)	1.03	1.06 (2001)	1.05	1.11 (1999)	1.20
Azerbaijan	0.99	0.99	1.01	0.96	0.67	0.88
Georgia	1.00	0.97	0.97	1.00	1.18	1.12
Kazakhstan	0.99	1.00	1.03	0.99	1.15 (1999)	1.44
Kyrgyz Republic	0.99 (1999)	0.99	1.02	1.01	1.04 (1999)	1.30
Pakistan	0.68 (2000)	0.82	0.48	0.76	0.58	0.85
Tajikistan	0.98	0.96	0.86 (1999)	0.84	0.35 (1999)	0.38
Turkmenistan	...	...	...	...	...	...
Uzbekistan	0.98	0.97	0.91	0.98	0.82 (1999)	0.71
East Asia						
China, People's Rep. of	0.93	0.99	0.75	1.01	0.53	1.01
Hong Kong, China	1.01	0.95 (2005)	1.05	1.00	0.96 (2003)	1.03
Korea, Rep. of	1.01	0.98	0.97	0.93	0.49	0.67
Mongolia	1.02	1.02	1.14	1.11	1.89	1.56
Taipei,China	1.01	1.02	1.04	1.01	0.96	1.05
South Asia						
Bangladesh	1.05 (2005)	1.08	1.01 (1999)	1.06	0.51 (1999)	0.57
Bhutan	0.85 (1999)	0.98 (2006)	0.81 (1999)	0.91 (2006)	0.58 (1999)	0.51
India	0.77	0.96 (2006)	0.60	0.83 (2006)	0.54	0.72 (2006)
Maldives	1.01 (1999)	0.97	1.07 (1999)	1.07 (2006)	2.37 (2003)	2.37 (2004)
Nepal	0.63	0.99	0.46	0.81	0.32	0.40 (2004)
Sri Lanka	0.98	1.00	1.09	1.02 (2004)	0.55	...
Southeast Asia						
Brunei Darussalam [c]	0.94	0.99	1.09	1.04	1.98 (1999)	1.88
Cambodia	0.81	0.93	0.43	0.82	0.33 (2000)	0.56
Indonesia	0.98	0.96	0.83	1.01	0.76 (2001)	1.00
Lao PDR	0.79	0.90	0.62	0.79	0.49 (1999)	0.72
Malaysia	0.99	0.99 (2006)	1.05	1.10 (2005)	1.02 (1999)	1.22 (2006)
Myanmar	0.97	...	0.99	...	...	...
Philippines	0.99	0.98	1.04	1.10	1.26 (1999)	1.24 (2006)
Singapore	...	...	...	...	...	...
Thailand	0.98	1.00	0.96	1.10	1.16 (1999)	1.23
Viet Nam	0.93	0.94 (2001)	0.90 (1999)	0.92 (2001)	0.76 (1999)	0.74 (2001)
The Pacific						
Cook Islands	0.95 (1999)	0.97	1.08 (1999)	1.08	...	...
Fiji Islands	1.00	0.97	0.95	1.12	1.20 (2003)	1.20 (2005)
Kiribati	1.01 (1999)	1.01 (2005)	1.18 (1999)	1.14 (2005)	...	...
Marshall Islands	0.98 (1999)	0.97	1.06 (1999)	1.02	1.29 (2001)	1.30 (2003)
Micronesia, Fed. States of	0.99 (2004)	1.01	1.05 (2004)	1.07 (2005)	...	...
Nauru	1.16 (2000)	1.03	1.21 (2000)	1.19	...	...
Palau	0.93 (1999)	1.02	1.07 (1999)	0.97	2.35 (2000)	2.15 (2002)
Papua New Guinea	0.85	0.84 (2006)	0.62	...	0.55 (1999)	...
Samoa	1.02	1.00	1.96	1.13 (2005)	1.04 (1999)	0.93 (2001)
Solomon Islands	0.87	0.96 (2005)	0.61	0.84 (2005)	...	...
Timor-Leste	0.93 (2004)	0.94	0.99 (2004)	1.00 (2005)	...	1.26 (2002)
Tonga	0.98	0.95 (2006)	1.04	1.04 (2006)	1.29 (1999)	1.68 (2004)
Tuvalu	1.02 (1999)	0.99 (2006)	...	0.93 (2001)	...	...
Vanuatu	0.96	0.97	0.80	0.86 (2004)	0.57 (2002)	0.59 (2004)
Developed Member Countries						
Australia	0.99	1.00	1.03	0.96	1.19	1.29
Japan	1.00	1.00	1.02	1.00	0.65	0.88
New Zealand	0.99	1.01	1.02	1.03	1.14	1.49

continued.

Goal 3 Target and Indicators

Table 3.1 **Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015** *(continued)*

	3.2 Share of Women in Wage Employment in the Non-agricultural Sector (percent)			3.3 Proportion of Seats Held by Women in National Parliament (percent)		
	1990	2000	2007	1990	2000	2009
Developing Member Countries						
Central and West Asia						
Afghanistan	17.8	...	...	3.7	27.3 (2006)	27.7
Armenia	50.8 (1997)	47.3	45.7	35.6	3.1	8.4
Azerbaijan	43.3 (1997)	43.6	50.1	12.0 (1997)	12.0	11.4
Georgia	...	49.2 (1999)	48.7	6.8 (1997)	7.2	6.0
Kazakhstan	...	48.4 (2001)	49.4 (2004)	13.4 (1997)	10.4	15.9
Kyrgyz Republic	48.5 (1996)	45.8	50.8	1.4 (1997)	1.4	25.6
Pakistan	7.7	13.0	13.2	10.1	2.3 (1999)	22.5
Tajikistan	40.2 (1995)	40.0	37.1 (2006)	2.8 (1997)	2.8	17.5
Turkmenistan	39.9 (1995)	42.1 (2002)	...	26.0	26.0	16.8
Uzbekistan	45.8 (1991)	43.5 (1995)	...	6.0 (1997)	6.8	17.5
East Asia						
China, People's Rep. of	37.8	39.1 (1999)	...	21.3	21.8	21.3
Hong Kong, China	41.2	44.8	48.3	...	...	...
Korea, Rep. of	38.1	40.1	42.1	2.0	3.7	13.7
Mongolia	50.3 (1993)	50.4	53.1	24.9	7.9	4.1
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	20.2 (1991)	24.7	20.1 (2006)	10.3	9.1	6.3 [d]
Bhutan	...	...	16.6 (2005)	2.0	2.0	8.5
India	12.7	16.6	18.1 (2005)	5.0	9.0	9.1
Maldives	15.8	40.6	30.0 (2006)	6.3	6.0 (2001)	12.0
Nepal	...	15.1 (1999)	...	6.1	5.9	33.2
Sri Lanka	30.8 (1993)	30.5	31.0	4.9	4.9	5.8
Southeast Asia						
Brunei Darussalam [c]	22.5 (1991)	30.3	30.3 (2003)	...	...	...
Cambodia	...	41.1	43.5 (2004)	5.8 (1997)	8.2	16.3
Indonesia	29.2	31.7	30.6	12.4	8.0 (2001)	11.6
Lao PDR	...	...	50.2 (2005)	8.3	21.2	25.2
Malaysia	35.3 (1991)	37.9	39.0	5.1	10.4 (2001)	10.8
Myanmar	40.6	...	...	...	...	...
Philippines	40.3	41.1	42.3	9.1	12.4	20.5
Singapore	42.5 (1991)	42.9 (1999)	45.2	4.9	4.3	24.5
Thailand	41.9	44.1	45.0	2.8	5.6	11.7
Viet Nam	41.0 (1996)	40.7	40.4 (2004)	17.7	26.0	25.8
The Pacific						
Cook Islands	38.4	38.2 (1993)	...	6.0 (1995)	8.0 (1999)	12.5 (2008)
Fiji Islands	29.9	33.2	29.6 (2003)	4.3 (1997)	11.3	8.5 (2006)
Kiribati	...	36.8	38.5 (2005)	...	4.9	4.3
Marshall Islands	...	29.3	33.2 (2005)	...	3.0 (2001)	3.0
Micronesia, Fed. States of	34.0 (1994)	34.0	...	– (1997)	–	–
Nauru	...	...	...	5.6	–	–
Palau	42.2 (1995)	39.6	...	– (1997)	–	–
Papua New Guinea	27.9	32.1	...	–	1.8	0.9
Samoa	31.7 (1991)	30.2	...	–	8.2	8.2
Solomon Islands	23.0 (1986)	30.8 (1999)	...	–	2.0	–
Timor-Leste	...	35.0 (2001)	...	...	26.1 (2003)	29.2
Tonga	...	35.7 (1996)	38.6 (2003)	–	0.0 (2001)	3.1
Tuvalu	...	34.3 (2002)	33.9 (2004)	7.7	–	–
Vanuatu	...	37.5 (2004)	37.8	4.3	–	3.8
Developed Member Countries						
Australia	44.6	48.1	46.8	6.1	22.4	26.7
Japan	38.0	40.0	41.6	1.4	4.6	9.4
New Zealand	43.8	47.3	48.5	14.4	29.2	33.6

a The ratio is a gender parity index, measured as the ratio of female-to-male value of the gross enrollment ratios at primary, secondary, and tertiary level of education.
b There is no tertiary education in Cook Islands, Kiribati, Nauru, Solomon Islands, and Tuvalu. In Maldives, tertiary education became available only recently.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
d This figure excludes the 45 reserved seats for women which were not yet filled in January 2009.

Sources: Millennium Indicators Database Online (UNSD 2009); Pacific Regional Information System (SPC 2009); for Taipei,China: Ministry of Education.

Goal 4: Reduce Child Mortality

In most economies, a child has a very good chance of reaching the **fifth birthday** if he or she survives the first year of life. In over 40% of the economies with available data, **child deaths** are 30 or less per 1,000 live births. The People's Republic of China is in this group but the other four most populous countries all have higher rates. **Measles immunization rates** are generally rising in the region. In 2000, only 12 economies had measles vaccination percentages of 95% or better, but by 2007 the number had risen to 17. Immunization against measles in the first year of life can be particularly effective in reducing **child mortality**.

Introduction

The target is to reduce *by two-thirds, between 1990 and 2015, the under-five mortality rate.*

Two related indicators are considered here:

(i) Deaths per thousand live births of children under 1 year old (referred to as the *infant mortality rate*).

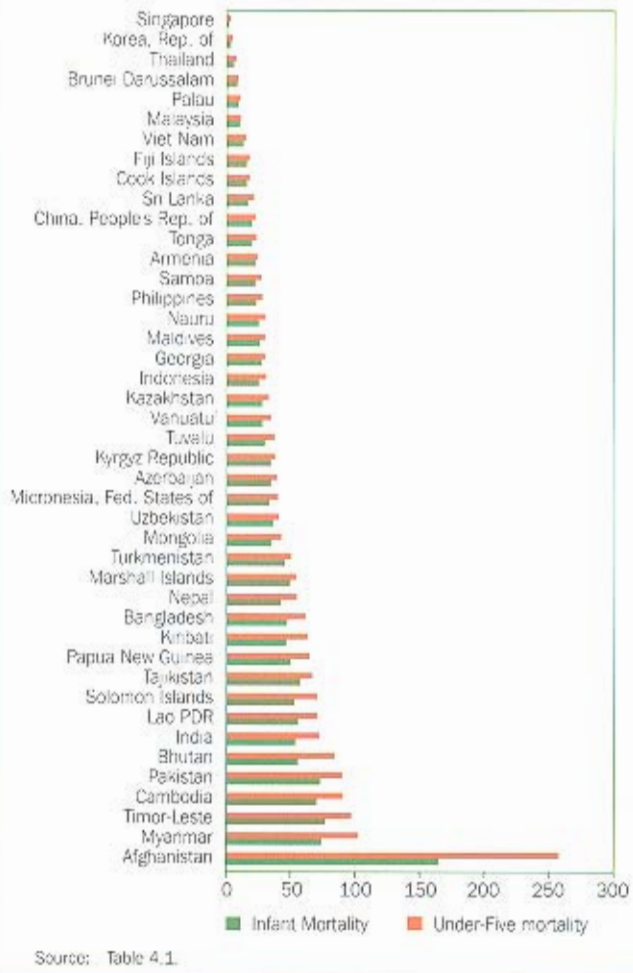
(ii) Percentage of 1-year-old children who have been immunized against measles.

Immunization against measles has a direct impact on child mortality, and the percentage of 1-year-olds who have been immunized is also a good indicator of the quality of the child health care system.

Key Trends

Most deaths of young children happen in their first year. Figure 4.1 shows the number of deaths per 1,000 live births of children under 5 years old and of children under 1 year. In most cases the red bars, which are the under-five mortality rates, are only slightly longer than the blue bars showing mortality rates for 1-year olds. This illustrates the important point that the first year of life is especially hazardous. Once a child has survived this first year, the chances of attaining the age of five are very good in most countries. That is why post-natal care, advice to mothers, and immunization programs for the very young are crucial for reducing child mortality rates.

Figure 4.1 **Under-Five Mortality and Infant Mortality Rates, 2007 (per 1,000 live births)**



Source: Table 4.1.

Child deaths are 30 or less per 1,000 live births in more than 40% of the economies in the region. Figure 4.2 shows the under-five mortality rate for 43 economies for 1990 and 2007. No economy experienced increased child mortality rates over the period. In more than 40% of the economies in Figure 4.2, child deaths are 30 or less per 1,000 live births. In developed countries, child mortality rates are now mostly about six or less per thousand live births. Of the economies listed in Figure 4.2 only the Republic of Korea and Singapore have achieved rates of six or less, although Hong Kong, China would probably be in this group if data were available.

Figure 4.2 **Under-Five Mortality Rate (number of deaths per 1,000 live births)**

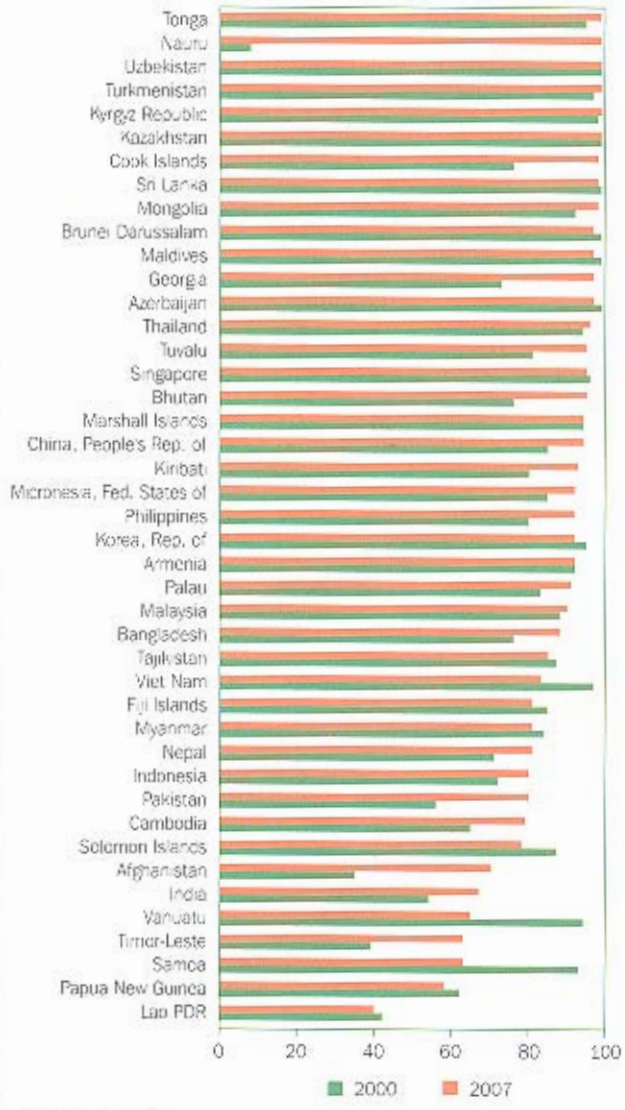


Source: Table 4.1.

Measles immunization rates are generally rising in the region. Figure 4.3 shows the third indicator of the quality of child health care—the percentage of 1-year-old children immunized against measles. This immunization program is promoted by the World Health Organization and helps to keep babies healthy during the first crucial year of life. Figure 4.3 covers 43 economies, and in 24 of them, the immunization percentages were higher in 2007 than in 2000. Gains have been particularly dramatic in economies that started from a low base in 2000 such as Afghanistan, Bhutan, Georgia, Nauru, and Pakistan. Moreover, in 2000, only 12 economies had percentages above or equal to 95%, but by 2007, 17 economies recorded percentages in this range.

In 15 economies, however, immunization rates were lower in 2007 than they had been in 2000. In most cases, the falls were only 1 to 3 percentage points and probably within the statistical margin of error but much larger reductions were recorded by Viet Nam and three Pacific economies: Samoa, Solomon Islands, and Vanuatu.

Figure 4.3 **Percentage of 1-Year-Old Children Immunized against Measles, 2000 and 2007**

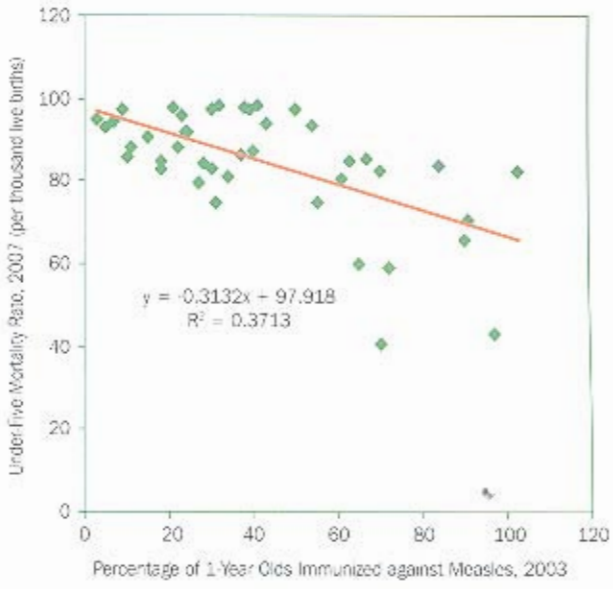


Source: Table 4.1.

Increasing the immunization rate can reduce the number of child deaths. Figure 4.4 relates measles immunization in 2003 to under-five mortality in 2007. Different dates are used because it is assumed that immunization in the first year of life continues to have a beneficial effect during the next 4 years. The immunization rate for 2003 was estimated by linear interpolation between the rates for 2000 and 2007.

Figure 4.4 suggests that just over 37% of the variation in under-five mortality is explained by measles immunization. The regression also suggests that an increase of three percentage points in the immunization rate reduces the number of deaths by one per thousand live births. Measles immunization is of course just one of a range of programs to fight child mortality. Others are improved water supply, better sanitation, and anti-malaria nets.

Figure 4.4 **Under-Five Mortality and Immunization against Measles**



Source: Derived from Table 4.1.

Data Issues and Comparability

In the more developed countries, data on mortality are usually taken from vital statistics registration records. In most developing countries, this source is not available and the data are usually taken from living standards, demographic surveys, and health surveys of households. As coverage of these surveys is often incomplete and the surveys may not be held each year, econometric estimation techniques may be used to produce a consistent time series. For these reasons, mortality data are of varying quality in the Asia and Pacific region.

Data on immunization may be provided directly by the health workers and clinics providing inoculation or, more commonly in the Asia and Pacific region, the information is collected from samples of households in health and demographic surveys. As with mortality data, estimation techniques will often be used to convert partial data into comprehensive estimates.

Goal 4 Target and Indicators

Table 4.1 **Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate**

	4.1 Under-Five Mortality Rate (per 1,000 live births)			4.2 Infant Mortality Rate (per 1,000 live births)			4.3 Proportion of 1-Year-Old Children Immunized against Measles (percent)		
	1990	2000	2007	1990	2000	2007	1990	2000	2007
Developing Member Countries									
Central and West Asia [a]	**130**	**119**	**107**	**98**	**89**	**80**	...	...	...
Afghanistan	260	257	257	168	165	165	20	35	70
Armenia	56	36	24	48	32	22	93 (1992)	92	92
Azerbaijan	98	69	39	78	58	34	66 (1992)	99	97
Georgia	47	35	30	41	31	27	16 (1992)	73	97
Kazakhstan	60	44	32	51	38	28	89 (1992)	99	99
Kyrgyz Republic	74	50	38	62	43	34	94 (1992)	98	99
Pakistan	132	106	90	102	84	73	50	56	80
Tajikistan	117	94	67	91	75	57	68 (1992)	87	85
Turkmenistan	99	71	50	81	59	45	76 (1992)	97	99
Uzbekistan	74	62	41	61	53	36	84 (1992)	99	99
East Asia [a]	**44**	**36**	**22**	**35**	**29**	**19**	...	...	...
China, People's Rep. of	45	37	22	36	30	19	98	85	94
Hong Kong, China	...	...	...	6	3	2	...	...	...
Korea, Rep. of	9	5	5	8	5	4	93	95	92
Mongolia	98	63	43	71	49	35	92	92	98
Taipei,China	...	...	...	5	6	5	...	...	...
South Asia [a]	**121**	**90**	**70**	**85**	**66**	**53**	...	...	...
Bangladesh	151	91	61	105	66	47	65	76	88
Bhutan	148	106	84	91	68	56	93	76	95
India	117	91	72	83	67	54	56	54	67
Maldives	111	55	30	79	43	26	96	99	97
Nepal	142	85	55	99	63	43	57	71	81
Sri Lanka	32	23	21	26	18	17	80	99	98
Southeast Asia [a]	**77**	**47**	**34**	**53**	**35**	**27**	...	...	...
Brunei Darussalam [b]	11	9	9	10	8	8	99	99	97
Cambodia	119	107	91	87	80	70	34	65	79
Indonesia	91	48	31	60	36	25	58	72	80
Lao PDR	163	101	70	120	77	56	32	42	40
Malaysia	22	14	11	16	11	10	70	88	90
Myanmar	130	110	103	91	78	74	68	84	81
Philippines	62	37	28	43	29	23	85	80	92
Singapore	8	4	3	6	3	2	84	96	95
Thailand	31	13	7	26	11	6	80	94	96
Viet Nam	56	30	15	40	23	13	88	97	83
The Pacific [a]	**98**	**77**	**65**	**73**	**59**	**51**	...	...	...
Cook Islands	32	24	18	26	20	16	67	76	98
Fiji Islands	22	18	18	19	16	16	84	85	81
Kiribati	88	70	63	65	52	46	75	80	93
Marshall Islands	92	68	54	63	55	49	52	94	94
Micronesia, Fed. States of	58	47	40	45	38	33	81	85	92
Nauru	...	30	30	...	25	25	99 (1997)	8	99
Palau	21	14	10	18	13	9	98	83	91
Papua New Guinea	94	76	65	69	57	50	67	62	58
Samoa	50	34	27	40	28	22	89	93	63
Solomon Islands	121	88	70	86	65	53	70	87	78
Timor-Leste	184	129	97	138	100	77	...	39 (2002)	63
Tonga	32	26	23	26	22	19	86	95	99
Tuvalu	53	42	37	42	35	30	95	81	95
Vanuatu	62	48	34	48	38	28	66	94	65
Developed Member Countries [a]	**7**	**5**	**4**	**6**	**3**	**3**	...	...	...
Australia	9	6	6	8	5	5	86	91	94
Japan	6	5	4	5	3	3	73	96	98
New Zealand	11	7	6	9	6	5	90	85	79
TOTAL DMCs [a]	**89**	**71**	**55**	**65**	**54**	**43**	...	...	...

a Estimated using data on births provided by the United Nations Children's Fund as weights.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Hong Kong, China: Census and Statistics Department and Centre for Health Protection, Department of Health; for Taipei,China: Directorate-General of Budget, Accounting and Statistics; ADB staff estimates.

Goal 5: Improve Maternal Health

In the Asia and Pacific region, **maternal mortality** ranges from 1 per 100,000 live births in Hong Kong, China to 1,800 in Afghanistan. The People's Republic of China (PRC) has a rather low rate of 45 but over 300 women die in childbirth per 100,000 live births in Bangladesh, India, Indonesia, and Pakistan. There is fairly strong evidence that maternal mortality ratios are reduced when a **trained health worker is present. Adolescent birth rates** have generally been falling since 1990 and in some cases the falls have been dramatic. But seven economies reported increases.

Introduction

Goal 5 has two targets:

5.A: *Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.* This ratio is calculated as the number of deaths in child birth per 100,000 live births. It is not yet possible to assess progress toward this target because data for earlier and more recent years are not sufficiently comparable for a number of economies. A related indicator is the number of births that are attended to by a health worker who has been trained to conduct deliveries and care for newborns.

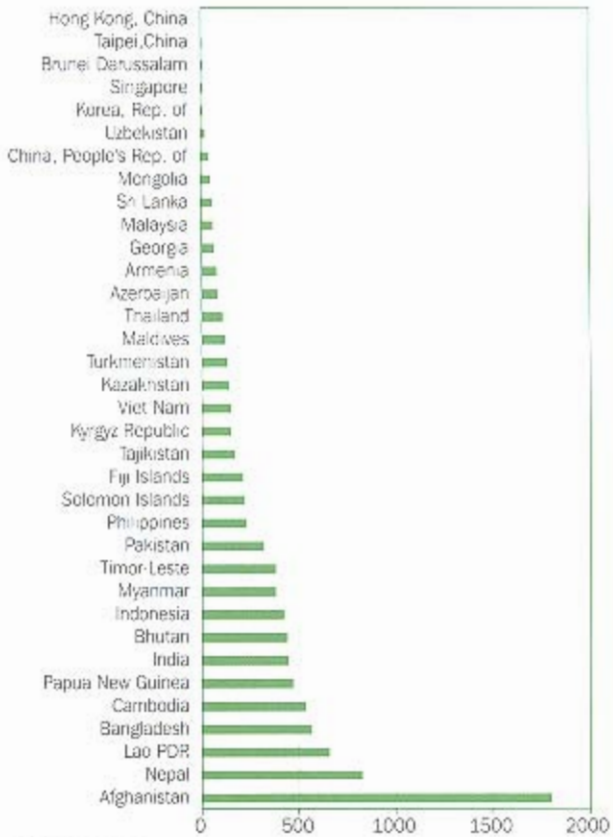
5.B: *Achieve, by 2015, universal access to reproductive health.* These services should cover advice on contraceptive methods and family planning, antenatal care, and advice on transmission of HIV/AIDS and other sexually transmitted diseases. This is a new target introduced in the revised MDG framework.

Key Trends

Maternal mortality is unacceptably high in many countries. Figure 5.1 shows the number of maternal deaths per 100,000 live births in 2005. Afghanistan had an extremely high ratio of 1,800. Of the five most populous economies, the People's Republic of China (PRC) has by far the lowest ratio: 45 per 100,000 live births in 2005. Bangladesh, India, Indonesia, and Pakistan all have maternal mortality ratios well above 300 per 100,000 live births. Other economies showing relatively high mortality ratios over 500 were Cambodia, Lao People's Democratic Republic, and Nepal. In many of these countries, tradition encourages young girls to marry at ages when their bodies are not yet fit for the rigors of childbirth.

The richer economies of Brunei Darussalam; Hong Kong, China; Republic of Korea; Singapore; and Taipei,China reported less than 15 maternal deaths per 100,000 live births, with Hong Kong, China having the lowest ratio of 1. By comparison, maternal mortality rates for the developed countries of Western Europe and North America are rarely over 10 per 100,000 live births.

Figure 5.1 **Maternal Mortality Ratio, 2005 or Latest Year (per 100,000 live births)**

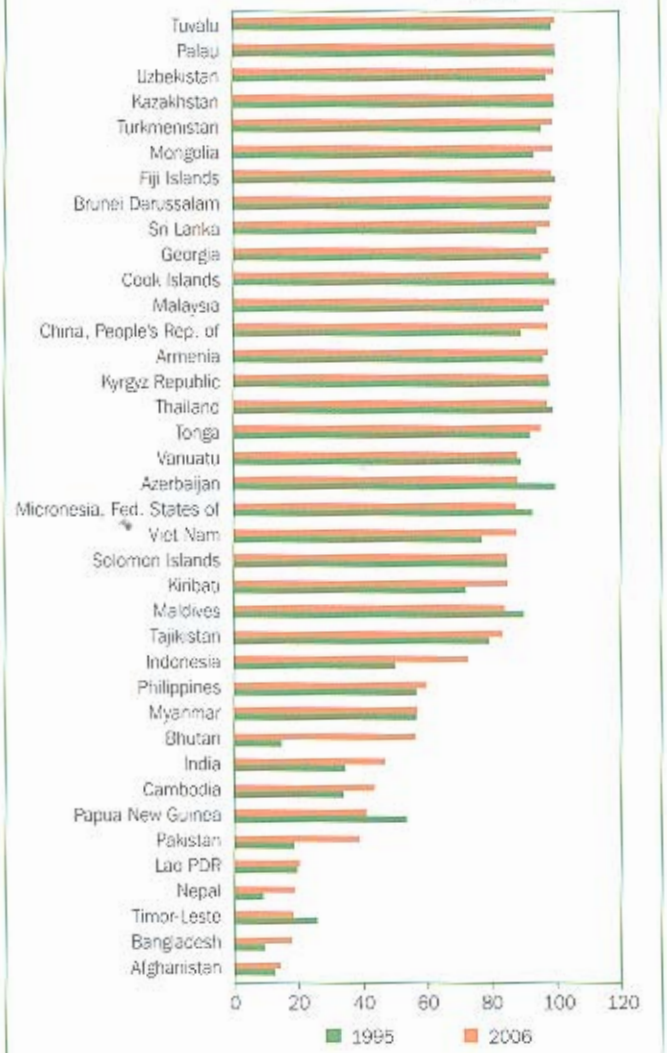


Source: Table 5.1.

Properly trained midwives are scarce in many countries. Figure 5.2 shows that in the latest year for which data are available, skilled health personnel assisted in 90% or more of childbirths in 17 of the 38 economies; of these, nine economies reported that 99–100% of births were professionally attended. Of the five most populous economies, the PRC reported that 98% of births were professionally attended. For Indonesia, the figure was 73%. The others were much lower: India 47%, Pakistan 39%, and Bangladesh 18%, which is the lowest in the region apart from Afghanistan.

In 2006, the percentages were higher or remained the same in 28 economies, compared with those in 1995. Sharp rises occurred in Bhutan, Indonesia, and Pakistan. On the other hand, 10 countries reported falling percentages. These were usually quite small but larger falls were reported by Azerbaijan, Papua New Guinea, and Timor-Leste.

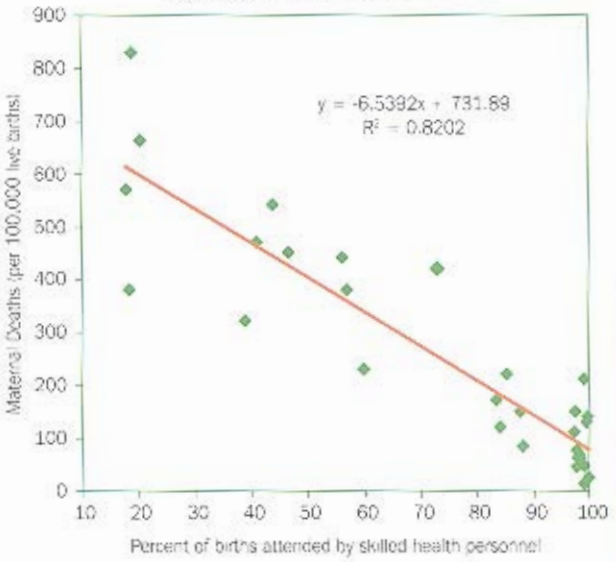
Figure 5.2 **Births Attended by Skilled Health Personnel, 1995 and 2006 or Nearest Years (percent)**



Source: Table 5.1.

Maternal deaths are reduced when a trained health worker is present. Figure 5.3 plots maternal deaths per 100,000 live births against the percentage of births attended by skilled health personnel for 30 selected member countries that have data for both variables for recent years. (The dates of the two variables are fairly close but not identical.) The linear regression suggests that over 80% of the variation in maternal mortality ratios between economies is explained by whether or not skilled health personnel are in attendance. The regression results also suggest that maternal mortality ratios fall by about 6.5 per 100,000 live births for every percentage point increase in the percentage of births attended by skilled health personnel.

Figure 5.3 **Maternal Mortality and Births Attended by Skilled Health Personnel, 2006 or Latest Year**



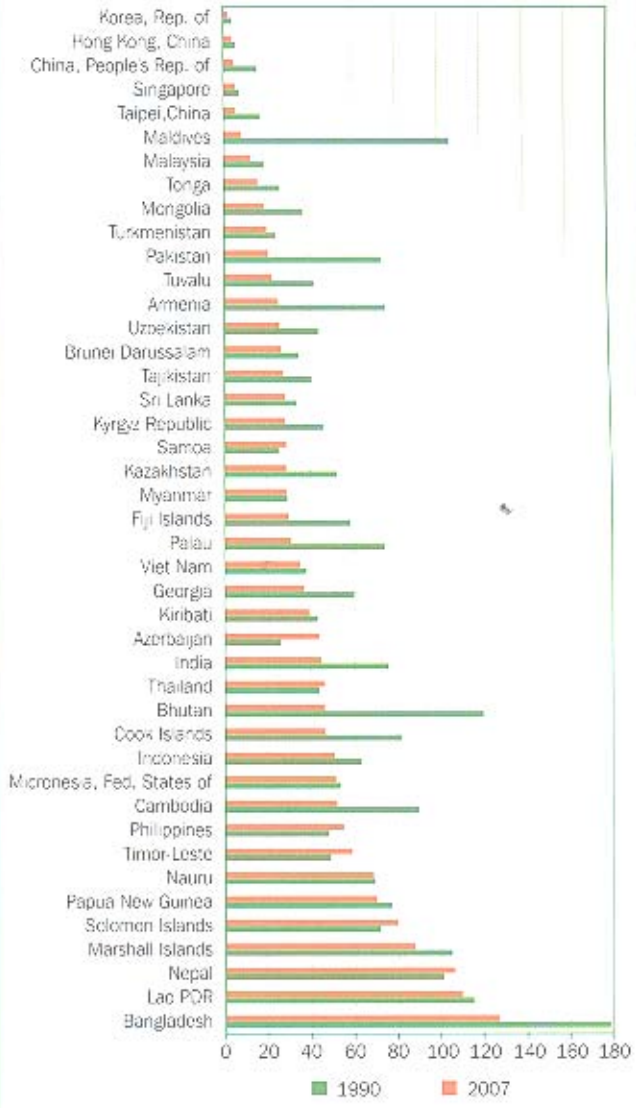
Source: Derived from Table 5.1.

Adolescent births show that in many countries, young women are still poorly advised about reproductive health. Figure 5.4 shows the number of adolescent births as a percentage of the female population aged 15–19 years. This is taken as an indicator of the extent to which women have access to good reproductive health care, including advice on family planning and modern contraceptive methods.

Most of the 43 economies shown in Figure 5.4 have seen reductions in adolescent births since 1990, and in several countries the falls have been dramatic. The number per thousand women of childbearing age fell by 30 or more in nine economies, including Bangladesh, India, and Pakistan. Seven countries, however, reported increases, including Nepal, Philippines, and Thailand.

In the latest year available (mostly in 2005 or 2006) six economies had rates below 10 but three had rates of 100 or higher. Among the most populous countries, the PRC reported the lowest rate (5). Pakistan's rate was also quite low (20). Much higher rates were reported by India (45), Indonesia (51), and Bangladesh (127).

Figure 5.4 **Adolescent Birth Rate, 1990 and 2007 or Nearest Years (per thousand women aged 15–19)**



Source: Table 5.2.

Data Issues and Comparability

The most reliable information on maternal mortality comes from vital registration records or other administrative sources. In many developing economies, however, registration records are not well maintained, with many births taking place at home rather than in clinics, and many not being attended to by trained health workers. Mortality ratios for these economies are based on household surveys of varying reliability. Unfortunately, it is not possible to calculate the progress of many economies toward achieving the target because the maternal mortality ratios are not comparable, having been estimated using different methodologies. There is only 1–year data available for earlier years.

Data on the proportion of births attended by skilled health personnel are collected through national household surveys. However, it is difficult to standardize the definition of skilled health personnel due to the differences in the training of health personnel in different countries.

Data on the adolescent birth rate are derived from vital registration systems or household surveys. Data derived using both sources may suffer from limitations such as the misreporting of the mother's age and exclusion of previous births.

Goal 5 Targets and Indicators

Table 5.1 **Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio**

	5.1 Maternal Mortality Ratio (per 100,000 live births)	5.2 Proportion of Births Attended by Skilled Health Personnel (percent)	
	2005	1995	2006
Developing Member Countries			
Central and West Asia			
Afghanistan	1800	12 (2000)	14 (2003)
Armenia	76	96 (1997)	98 (2005)
Azerbaijan	82	100 (1998)	88
Georgia	66	96 (1998)	98 (2005)
Kazakhstan	140	100	100
Kyrgyz Republic	150	98 (1997)	98
Pakistan	320	19 (1991)	39 (2007)
Tajikistan	170	79 (1996)	83 (2005)
Turkmenistan	130	96 (1996)	100
Uzbekistan	24	98 (1996)	100
East Asia			
China, People's Rep. of	45	89	98
Hong Kong, China	1 (2007)	...	...
Korea, Rep. of	14	...	...
Mongolia	46	94 (1998)	99
Taipei,China	7 (2007)	...	...
South Asia			
Bangladesh	570	10 (1994)	18 (2007)
Bhutan	440	15 (1994)	56 (2003)
India	450	34 (1993)	47
Maldives	120	90 (1994)	84 (2004)
Nepal	830	9 (1996)	19
Sri Lanka	58	94 (1993)	99 (2007)
Southeast Asia			
Brunei Darussalam [a]	13	98 (1994)	99 (1999)
Cambodia	540	34 (1998)	44 (2005)
Indonesia	420	50	73 (2007)
Lao PDR	660	19 (2001)	20
Malaysia	62	96	98 (2005)
Myanmar	380	56 (1997)	57 (2001)
Philippines	230	56 (1998)	60 (2003)
Singapore	14	100 (1998)	...
Thailand	110	99 (2000)	97
Viet Nam	150	77 (1997)	88
The Pacific			
Cook Islands	...	100 (1998)	98 (2001)
Fiji Islands	210	100 (1998)	99 (2000)
Kiribati	...	72 (1994)	85 (1998)
Marshall Islands	...	95 (1998)	...
Micronesia, Fed. States of	...	93 (1999)	88 (2001)
Nauru	...	...	...
Palau	...	100 (1998)	100 (2002)
Papua New Guinea	470	53 (1996)	41 (2000)
Samoa	...	100 (1998)	...
Solomon Islands	220	85 (1994)	85 (1999)
Timor-Leste	380	26 (1997)	18 (2003)
Tonga	...	92 (1991)	95 (2000)
Tuvalu	...	99 (1997)	100 (2002)
Vanuatu	...	89	88 (1999)
Developed Member Countries			
Australia	4	100 (1999)	...
Japan	6	100 (1996)	...
New Zealand	9	100	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Hong Kong, China and Taipei,China: economy sources.

Table 5.2 **Target 5.B: Achieve, by 2015, universal access to reproductive health**

	5.3 Contraceptive Prevalence Rate (percent of married women 15–49 years)		5.4 Adolescent Birth Rate (per 1,000 women 15–19 years)	
	1995	Latest Year	1990	2007
Developing Member Countries				
Central and West Asia				
Afghanistan	5 (2000)	19 (2006)	...	151 (2001)
Armenia	61 (2000)	53 (2005)	75	25 (2006)
Azerbaijan	55 (2000)	51 (2006)	26	44 (2006)
Georgia	41 (2000)	47 (2005)	60	37 (2006)
Kazakhstan	59	51 (2006)	52	29
Kyrgyz Republic	60 (1997)	48 (2006)	46	28 (2006)
Pakistan	18	30 (2007)	73 (1992)	20 (2005)
Tajikistan	34 (2000)	38 (2005)	41	27 (2005)
Turkmenistan	...	62 (2000)	24	20 (2003)
Uzbekistan	56 (1996)	65 (2006)	44	26 (2006)
East Asia				
China, People's Rep. of	84 (1997)	87 (2001)	16	5 (2006)
Hong Kong, China	86 (1997)	84 (2002)	6	4 (2006)
Korea, Rep. of	77 (1994)	80 (2005)	4	2 (2006)
Mongolia	57 (1994)	66 (2006)	37	19
Taipei,China	...	...	17	6
South Asia				
Bangladesh	45 (1994)	56 (2007)	179	127 (2005)
Bhutan	19 (1994)	31 (2000)	120 (1993)	46 (2005)
India	41 (1993)	56 (2006)	76 (1991)	45 (2006)
Maldives	42 (1999)	39 (2004)	106	8 (2006)
Nepal	29 (1996)	48 (2006)	101	106 (2004)
Sri Lanka	66 (1993)	68 (2007)	33 (1991)	28 (2005)
Southeast Asia				
Brunei Darussalam [a]	...	...	35	26 (2002)
Cambodia	13	40 (2005)	90 (1993)	52 (2003)
Indonesia	54	61 (2007)	63 (1992)	51 (2006)
Lao PDR	19 (1993)	32 (2000)	115 (1992)	110 (2005)
Malaysia	55 (1994)	...	19	13 (2004)
Myanmar	33 (1997)	37 (2001)	29	29 (1999)
Philippines	51	51 (2006)	48	55 (2001)
Singapore	65 (1992)	62 (1997)	8	6 (2006)
Thailand	72 (1987)	81 (2006)	44	46 (2005)
Viet Nam	65 (1994)	79 (2007)	38 (1991)	35
The Pacific				
Cook Islands	63 (1996)	43 (1999)	82 (1996)	47 (2001)
Fiji Islands	...	...	59	30 (2004)
Kiribati	...	36 (2000)	43	39 (2005)
Marshall Islands	...	...	105 (1995)	88 (2006)
Micronesia, Fed. States of	...	...	54 (1994)	51 (2003)
Nauru	...	36 (2007)	70 (1992)	69 (2006)
Palau	...	33 (2003)	74	31 (2005)
Papua New Guinea	...	26 (1996)	77 (1994)	70 (2000)
Samoa	...	25 (1998)	25 (1991)	29 (2006)
Solomon Islands	...	...	72 (1998)	80 (1999)
Timor-Leste	23 (1994)	10 (2003)	49 (1993)	59 (2004)
Tonga	...	...	26	16 (2006)
Tuvalu	...	...	41 (1991)	22 (2005)
Vanuatu	38	...	...	92 (1999)
Developed Member Countries				
Australia	67	71 (2002)	22	16
Japan	58 (1994)	54 (2005)	4	5 (2006)
New Zealand	74	...	34	29 (2006)

continued.

Goal 5 Targets and Indicators

Table 5.2 **Target 5.B: Achieve, by 2015, universal access to reproductive health** *(continued)*

	5.5 Antenatal Care Coverage (percent of live births)		5.6 Unmet Need for Family Planning (percent of women aged 15–49 years who are married or in consensual union)	
	≥ One Visit	≥ Four Visits	Earliest Year	Latest Year
Developing Member Countries				
Central and West Asia				
Afghanistan	16 (2003)	...	...	...
Armenia	93 (2005)	71 (2005)	12 (2000)	13 (2005)
Azerbaijan	77 (2006)	45 (2006)	12 (2001)	23 (2006)
Georgia	94 (2005)	75 (2005)	24 (2000)	16 (2005)
Kazakhstan	100 (2006)	70 (1999)	16 (1995)	9 (1999)
Kyrgyz Republic	97 (2006)	81 (1997)	...	12 (1997)
Pakistan	61 (2007)	28 (2007)	32 (1991)	25 (2007)
Tajikistan	77 (2005)	...	...	...
Turkmenistan	99 (2006)	83 (2000)	...	10 (2000)
Uzbekistan	99 (2006)	79 (1996)	...	14 (1996)
East Asia				
China, People's Rep. of	90 (2006)	...	3 (1992)	2 (2001)
Hong Kong, China	...	...	...	...
Korea, Rep. of	...	...	...	...
Mongolia	99 (2006)	...	10 (1998)	5 (2003)
Taipei,China	...	...	...	...
South Asia				
Bangladesh	51 (2007)	21 (2007)	19 (1994)	17 (2007)
Bhutan	88 (2007)	...	...	...
India	74 (2006)	51 (2006)	17 (1993)	13 (2005)
Maldives	81 (2001)	...	...	...
Nepal	44 (2006)	29 (2006)	28 (1991)	25 (2006)
Sri Lanka	99 (2007)	...	...	18 (2000)
Southeast Asia				
Brunei Darussalam [a]	100 (1994)	...	...	...
Cambodia	69 (2005)	27 (2005)	33 (2000)	25 (2005)
Indonesia	93 (2007)	81 (2002)	13 (1991)	9 (2007)
Lao PDR	35 (2005)	...	...	40 (2000)
Malaysia	79 (2005)	...	...	...
Myanmar	76 (2001)	...	21 (1991)	19 (2001)
Philippines	88 (2003)	70 (2003)	26 (1993)	17 (2003)
Singapore	...	...	...	...
Thailand	98 (2006)	...	...	3 (2006)
Viet Nam	91 (2006)	29 (2002)	7 (1997)	5 (2002)
The Pacific				
Cook Islands	...	...	...	...
Fiji Islands	...	...	...	...
Kiribati	88 (1994)	...	...	...
Marshall Islands	...	...	...	...
Micronesia, Fed. States of	...	...	...	...
Nauru	...	...	...	...
Palau	...	...	...	...
Papua New Guinea	78 (1996)	...	...	...
Samoa	...	...	...	...
Solomon Islands	...	...	...	...
Timor-Leste	61 (2003)	30 (2003)	18 (1991)	4 (2003)
Tonga	...	...	...	...
Tuvalu	...	...	...	...
Vanuatu	...	...	...	...
Developed Member Countries				
Australia	100 (1991)	...	...	...
Japan	...	...	...	...
New Zealand	95 (1994)	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Taipei,China: Directorate-General of Budget, Accounting and Statistics.

Goal 6: Combat HIV/AIDS, Malaria, and Other Diseases

The large majority of **HIV sufferers** live in just six countries. Adult HIV victims in the region are mainly men. In Lao People's Democratic Republic (Lao PDR), over 90% of those living with HIV **have access to antiretroviral drugs.** In most other countries, less than 30% of those who need them currently have access to antiretroviral drugs. Most economies have been very successful in reducing the prevalence of **tuberculosis**, but prevalence rates are rising in seven Central and West Asian economies although the rates are still quite low.

Introduction

Goal 6 has three targets:

6.A: *Have halted by 2015 and begun to reverse the spread of HIV/AIDS.* This is targeted at the age 15–24 group but for most economies, comparable data on HIV prevalence are available only for those aged 15–49 years. Time series are currently too short to assess if this target will be met.

6.B: *Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.* This is a new target introduced in the revised MDG framework.

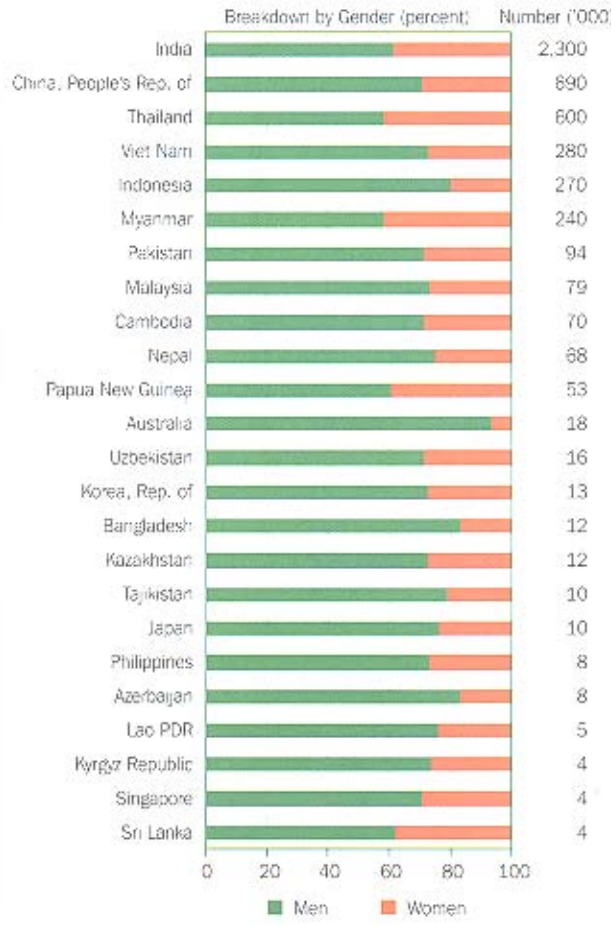
6.C: *Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.*

Key Trends

HIV is mainly a man's disease in Asia. Figure 6.1 shows the total number of persons over 15 years living with HIV and the breakdown by gender. Most of the HIV victims in the region are living in just six countries—the People's Republic of China (PRC), India, Indonesia, Myanmar, Thailand, and Viet Nam. Adult HIV victims in Asia are primarily men. The averages for all countries are 65% for men and 35% for women, but percentages about 40% for women are reported by India, Thailand, Myanmar, Papua New Guinea, and Sri Lanka.

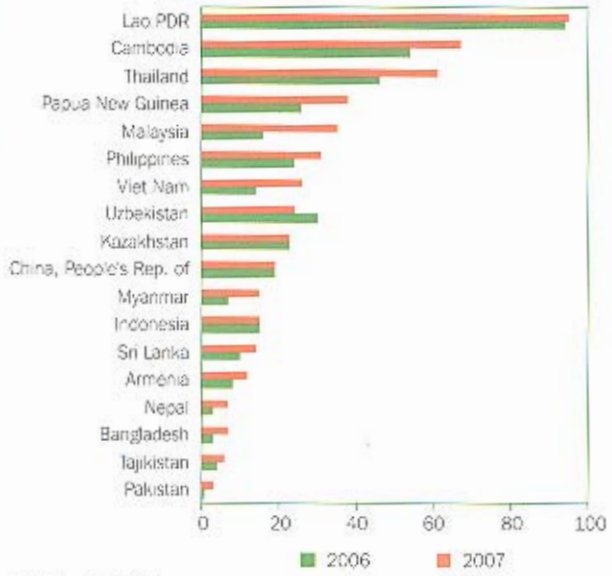
Antiretroviral drugs need to be more accessible. Figure 6.2 shows the percentage of those living with advanced HIV infection that have access to antiretroviral drugs. MDG target 6.B is for all those who need it to have access to these drugs. Only Lao People's Democratic Republic (Lao PDR) is near to meeting this target, although as Figure 6.1 shows, Lao PDR has a relatively small HIV population—about 5,000. Among the six economies where most of Asia's HIV sufferers live, Thailand does best by providing treatment to about 60% but in PRC, Indonesia, Myanmar, and Viet Nam, less than 30% of HIV sufferers are receiving antiretroviral drugs. For almost all countries, the 2007 percentages are higher than for 2006 and Cambodia, Malaysia, and Thailand reported particularly large gains in 2007.

Figure 6.1 **Adults Living with HIV, 2007**



Source: Derived from Regional Table 1.22.

Figure 6.2 **Percentage of the Population with Advanced HIV Infection with Access to Antiretroviral Drugs, 2006 and 2007**

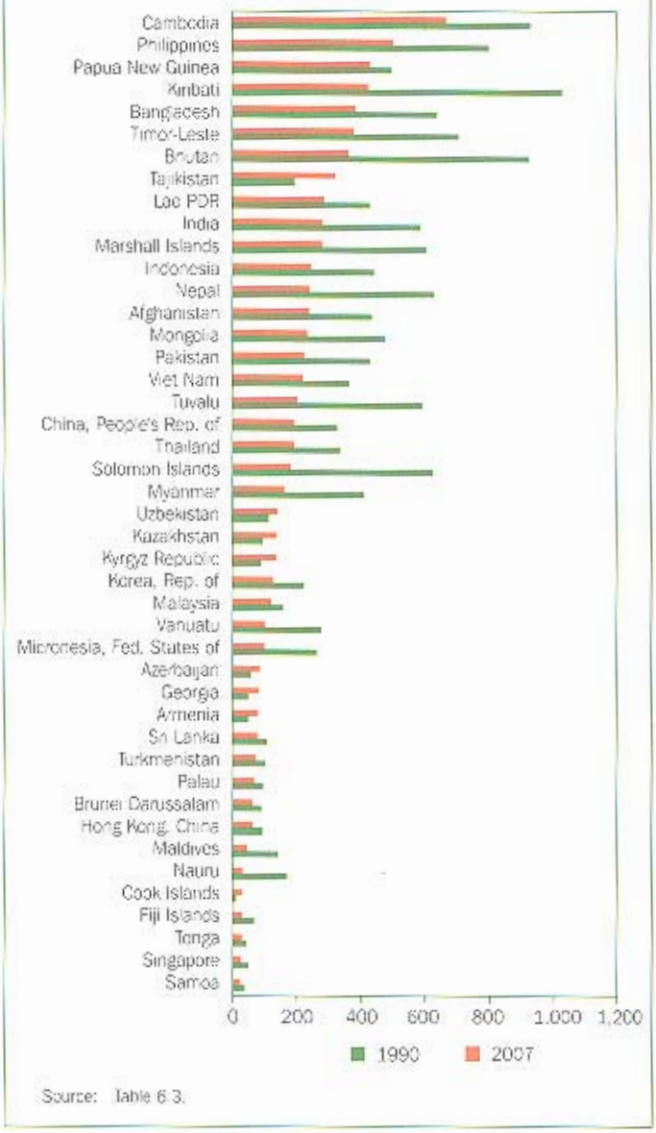


Source: Table 6.2.

The prevalence of tuberculosis has been greatly reduced. Figure 6.3 shows the prevalence of tuberculosis per 100,000 inhabitants for 44 economies. "Prevalence" refers to the total number of persons with the disease, many of whom may have been suffering from tuberculosis for several years. Tuberculosis is one of the major diseases targeted by MDG target 6.C. In 36 economies, tuberculosis prevalence rates were lower in 2007 compared with those in 1990. Particularly large reductions were achieved by five Pacific economies (Kiribati, Marshall Islands, Solomon Islands, Timor-Leste, and Tuvalu) and by Bhutan, India, Nepal, and Philippines.

However, seven economies in Central and West Asia namely, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan reported increased prevalence, although the increases were generally small. The rise in prevalence of tuberculosis may reflect some deterioration in health services following the collapse of the former Soviet Union.

Figure 6.3 **Prevalence of Tuberculosis, 1990 and 2007 (per 100,000 people)**



Source: Table 6.3.

Data Issues and Comparability

Data on prevalence of HIV/AIDS generally come from various sources covering particular subgroups of the population. Infection rates may be under-reported in several countries because of the stigma attached to the disease. Also, persons with HIV/AIDS are particularly susceptible to various opportunistic diseases, and they may instead be reported as infected by only the opportunistic disease.

Data to compute the proportion of population with advanced HIV infection with access to antiretroviral drugs are derived from various sources such as ministries of health, bilateral partners, foundations, and nongovernment organizations, and statistical modeling methods. However, the indicator does not distinguish between the different types of treatments available.

Data on the prevalence of tuberculosis are typically derived from demographic and health surveys as administrative records may be incomplete. These are not generally repeated annually and may only cover particular target groups. They often have to be extrapolated to adjoining years and to the whole population.

Table 6.1 **Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS**

	6.1 HIV Prevalence (percent of population 15–49 years)		6.3 Proportion of Population Aged 15–24 Years with Comprehensive Correct Knowledge of HIV/AIDS (percent)	
	2001	2007	Female	Male
Developing Member Countries				
Central and West Asia				
Afghanistan	...	...	...	...
Armenia	0.1	0.1	23 (2005)	15 (2005)
Azerbaijan	<0.1	0.2	5 (2006)	5 (2006)
Georgia	<0.1	0.1	15 (2005)	...
Kazakhstan	...	0.1	22 (2006)	...
Kyrgyz Republic	<0.1	0.1	20 (2006)	...
Pakistan	0.1	0.1	3 (2006)	...
Tajikistan	0.1	0.3	2 (2005)	...
Turkmenistan	...	...	5 (2006)	...
Uzbekistan	<0.1	0.1	31 (2006)	7 (2002)
East Asia				
China, People's Rep. of	0.1	0.1	...	...
Hong Kong, China	...	...	...	...
Korea, Rep. of	<0.1	<0.1	...	...
Mongolia	<0.1	0.1	35 (2005)	...
Taipei,China	...	...	...	...
South Asia				
Bangladesh	<0.1	<0.1	16 (2006)	...
Bhutan	<0.1	0.1	...	...
India	0.5	0.3	20 (2006)	36 (2006)
Maldives	<0.1	<0.1	...	...
Nepal	0.5	0.5	28 (2006)	44 (2006)
Sri Lanka	<0.1	<0.1	...	...
Southeast Asia				
Brunei Darussalam [a]	...	...	...	...
Cambodia	1.8	0.8	50 (2005)	45 (2005)
Indonesia	0.1	0.2	1 (2003)	0 (2003)
Lao PDR	<0.1	0.2	...	...
Malaysia	0.3	0.5	...	...
Myanmar	0.9	0.7	...	...
Philippines	<0.1	<0.1	12 (2003)	18 (2003)
Singapore	0.1	0.2	...	...
Thailand	1.7	1.4	46 (2006)	...
Viet Nam	0.3	0.5	44 (2006)	50 (2005)
The Pacific				
Cook Islands	...	...	...	...
Fiji Islands	0.1	0.1	...	...
Kiribati	...	...	...	...
Marshall Islands	...	...	27 (2007)	39 (2007)
Micronesia, Fed. States of	...	...	...	...
Nauru	...	...	...	...
Palau	...	...	...	...
Papua New Guinea	0.3	1.5	...	...
Samoa	...	...	...	...
Solomon Islands	...	...	...	...
Timor-Leste	...	...	...	...
Tonga	...	...	...	...
Tuvalu	...	...	...	...
Vanuatu	...	...	...	...
Developed Member Countries				
Australia	0.1	0.2	...	...
Japan	<0.1	<0.1	...	...
New Zealand	0.1	0.1	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Millennium Indicators Database Online (UNSD 2009).

Goal 6 Targets and Indicators

Table 6.2 **Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it**

	6.5 Proportion of Population with Advanced HIV Infection with Access to Antiretroviral Drugs (percent)	
	2006	2007
Developing Member Countries		
Central and West Asia		
Afghanistan	...	...
Armenia	8	12
Azerbaijan	...	14
Georgia	...	...
Kazakhstan	23	23
Kyrgyz Republic	...	14
Pakistan	1	3
Tajikistan	4	6
Turkmenistan	...	...
Uzbekistan	30	24
East Asia		
China, People's Rep. of	19	19
Hong Kong, China	...	...
Korea, Rep. of	...	...
Mongolia	...	...
Taipei,China	...	...
South Asia		
Bangladesh	3	7
Bhutan	...	...
India	...	...
Maldives	...	...
Nepal	3	7
Sri Lanka	10	14
Southeast Asia		
Brunei Darussalam [a]	...	...
Cambodia	54	67
Indonesia	15	15
Lao PDR	94	95
Malaysia	16	35
Myanmar	7	15
Philippines	24	31
Singapore	...	...
Thailand	46	61
Viet Nam	14	26
The Pacific		
Cook Islands	...	...
Fiji Islands	...	...
Kiribati	...	...
Marshall Islands	...	...
Micronesia, Fed. States of	...	...
Nauru	...	...
Palau	...	...
Papua New Guinea	26	38
Samoa	...	...
Solomon Islands	...	...
Timor-Leste	...	...
Tonga	...	...
Tuvalu	...	...
Vanuatu	...	...
Developed Member Countries		
Australia	...	...
Japan	...	...
New Zealand	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Millennium Indicators Database Online (UNSD 2009).

Table 6.3 **Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases**

	6.9 Incidence of Tuberculosis (per 100,000 people)		6.9 Prevalence of Tuberculosis (per 100,000 people)	
	1990	2007	1990	2007
Developing Member Countries				
Central and West Asia				
Afghanistan	168	168	437	238
Armenia	33	72	52	81
Azerbaijan	35	77	58	86
Georgia	39	84	51	83
Kazakhstan	58	129	95	139
Kyrgyz Republic	55	121	90	134
Pakistan	181	181	430	223
Tajikistan	112	231	193	322
Turkmenistan	64	69	105	75
Uzbekistan	68	113	114	141
East Asia				
China, People's Rep. of	117	98	327	194
Hong Kong, China	94	62	96	63
Korea, Rep. of	166	90	223	126
Mongolia	205	205	477	234
Taipei,China	...	0	...	...
South Asia				
Bangladesh	264	223	639	387
Bhutan	540	246	924	363
India	168	168	586	283
Maldives	129	47	143	48
Nepal	243	173	629	240
Sri Lanka	61	61	109	79
Southeast Asia				
Brunei Darussalam [a]	58	59	91	65
Cambodia	585	495	928	665
Indonesia	343	228	443	244
Lao PDR	179	151	428	289
Malaysia	118	103	159	121
Myanmar	171	171	411	162
Philippines	393	290	799	500
Singapore	50	27	52	27
Thailand	142	142	336	192
Viet Nam	202	171	365	220
The Pacific				
Cook Islands	6 (1991)	15	10 (1991)	31
Fiji Islands	51	21	69	30
Kiribati	513	365	1026	423
Marshall Islands	302	215	605	281
Micronesia, Fed. States of	189	97	264	100
Nauru	85	33	170	33
Palau	64	60	96	71
Papua New Guinea	250	250	498	430
Samoa	32	19	36	25
Solomon Islands	312	128	625	180
Timor-Leste	322	322	706	379
Tonga	34	24	45	28
Tuvalu	297	166	593	203
Vanuatu	139	77	278	102
Developed Member Countries				
Australia	7	6	7	6
Japan	47	21	62	28
New Zealand	10	7	10	7

continued.

Goal 6 Targets and Indicators

Table 6.3 **Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases** *(continued)*

	6.9 Death Rates Associated with Tuberculosis (per 100,000 people)		6.10 Proportion of Tuberculosis Cases under DOTS (percent)			
			Detected		Cured	
	1990	2007	1995	2007	1995	2006
Developing Member Countries						
Central and West Asia						
Afghanistan	50	30	4 (1997)	64	45 (1997)	84
Armenia	5	10	12	51	83	69
Azerbaijan	5	10	5	47	86 (1996)	60
Georgia	7	9	18	113	58	76
Kazakhstan	8	17	4 (1998)	69	79 (1998)	72
Kyrgyz Republic	8	18	3 (1996)	80	88 (1996)	82
Pakistan	49	29	1	67	70	88
Tajikistan	20	46	2 (2002)	30	79 (2002)	84
Turkmenistan	9	9	17 (2000)	84	70 (2000)	84
Uzbekistan	10	16	0 (1998)	45	78 (1998)	81
East Asia						
China, People's Rep. of	25	15	15	80	96	94
Hong Kong, China	8	5	64 (1999)	60	85 (1998)	78
Korea, Rep. of	19	10	30	14	76	81
Mongolia	48	29	8	76	78 (1996)	88
Taipei,China	10	4 (2006)	...	...	...	...
South Asia						
Bangladesh	77	45	6	65	71	92
Bhutan	101	44	38	45	97	89
India	42	28	0	68	79	86
Maldives	7	4	107	92	97	91
Nepal	51	23	5 (1996)	66	85 (1996)	89
Sri Lanka	10	8	62	85	79	87
Southeast Asia						
Brunei Darussalam [a]	10	7	90 (1999)	90	85 (1998)	84
Cambodia	119	90	40	61	91	93
Indonesia	92	39	1	68	91	91
Lao PDR	38	24	24 (1996)	78	70	92
Malaysia	22	18	64	81	70	49
Myanmar	52	13	27 (1996)	116	66	84
Philippines	87	41	0	76	82 (1996)	89
Singapore	6	3	62	96	86	84
Thailand	30	21	0 (1996)	72	78 (1996)	77
Viet Nam	33	24	30	82	91	92
The Pacific						
Cook Islands	2 (1991)	4	90	90 (2005)	100	100 (2005)
Fiji Islands	9	4	51	67	86	66
Kiribati	116	49	7 (1997)	66	83 (1998)	90
Marshall Islands	68	32	18 (1998)	33	83 (1998)	75
Micronesia, Fed. States of	33	9	12	97	80	90
Nauru	19	3	90 (2000)	90	50 (1999)	100
Palau	12	8	90	90	67	60
Papua New Guinea	68	60	1 (1997)	15	93 (1997)	73
Samoa	5	3	73	80 (2006)	80	91 (2005)
Solomon Islands	70	21	24 (1996)	50	65	90
Timor-Leste	73	47	84 (2002)	61	81 (2002)	79
Tonga	6	2	67	129	75	100
Tuvalu	62	17	60 (2005)	152	100 (2004)	75
Vanuatu	31	12	28 (1999)	52	88 (1999)	91
Developed Member Countries						
Australia	1	1	22 (1998)	49	65 (1997)	80 (2005)
Japan	6	3	23 (2000)	78	76 (1999)	60 (2005)
New Zealand	1	1	40 (2000)	60	30 (2000)	60 (2005)

DOTS = Directly Observed Treatment Short Course.

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Taipei,China: economy sources.

Goal 7: Ensure Environmental Sustainability

From 1990 to 2005, 85,000 square kilometers of **forest area** were lost to other uses, and six economies that are major producers of tropical hardwoods reported a combined loss of 440,000 square kilometers—an area roughly the size of Uzbekistan. Per capita emissions of **carbon dioxide** are rising in most economies in the region including all five most populous economies. The five most populous countries are also high or medium-high consumers of **ozone-depleting substances**. About half of the economies for which data are available have either cut the proportion of urban population without access to **improved sanitation** by at least half or kept the proportion at 5% or below. But 13 economies still have more than a quarter of urban households without access to improved sanitation.

Introduction

Goal 7 has four targets:

7.A *Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.* This target is applicable to the developed as well as to the developing economies of the region, hence the relevant figures and boxes below include data for Australia, Japan, and New Zealand.

7.B *Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.* This is a new target introduced in the revised MDG framework.

7.C *Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.*

7.D *By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.* Slums are defined as dwellings in urban areas with at least one of the following characteristics: (i) lack of access to improved water supply, (ii) lack of access to improved sanitation, (iii) overcrowding (three or more persons per room), and (iv) dwellings made of nondurable material. This target is for the world as a whole and does not refer to any particular economy.

Only the third target can be unambiguously quantified, but the tables for the other targets give statistics that indicate in a broad fashion progress toward those targets.

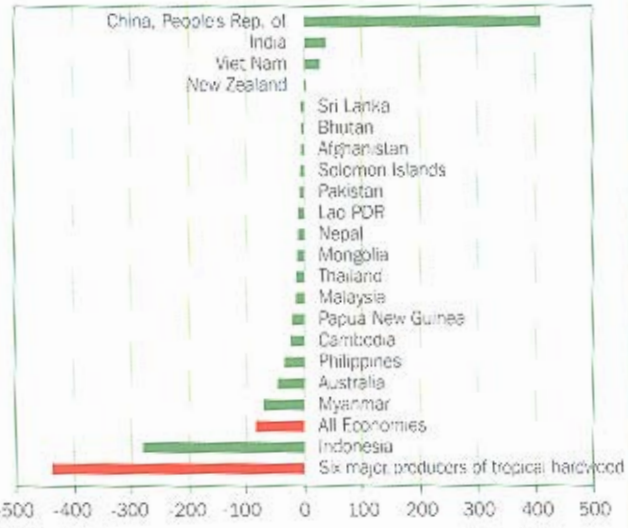
Key Trends

Forest area losses in the region far outweigh the gains. Environmental resources include land, forests, natural species, air, water, and subsoil assets. Table 7.1 gives indicators relevant to some aspects of these resources. Figure 7.1 shows the change in forest area from 1990 to 2005. Bars to the left mean deforestation; bars to the right indicate an increase in forest areas. Economies not shown in Figure 7.1 reported zero or very small changes.

Four countries reported increases in forest areas—People's Republic of China (PRC), India, New Zealand, and Viet Nam—but these gains were far outweighed by losses reported by the other 16. The red bar for "All Economies" shows the net effect of losses and gains for all countries, including those with only small changes that are not shown in Figure 7.1. The net loss of forest area came to 85,000 square kilometers.

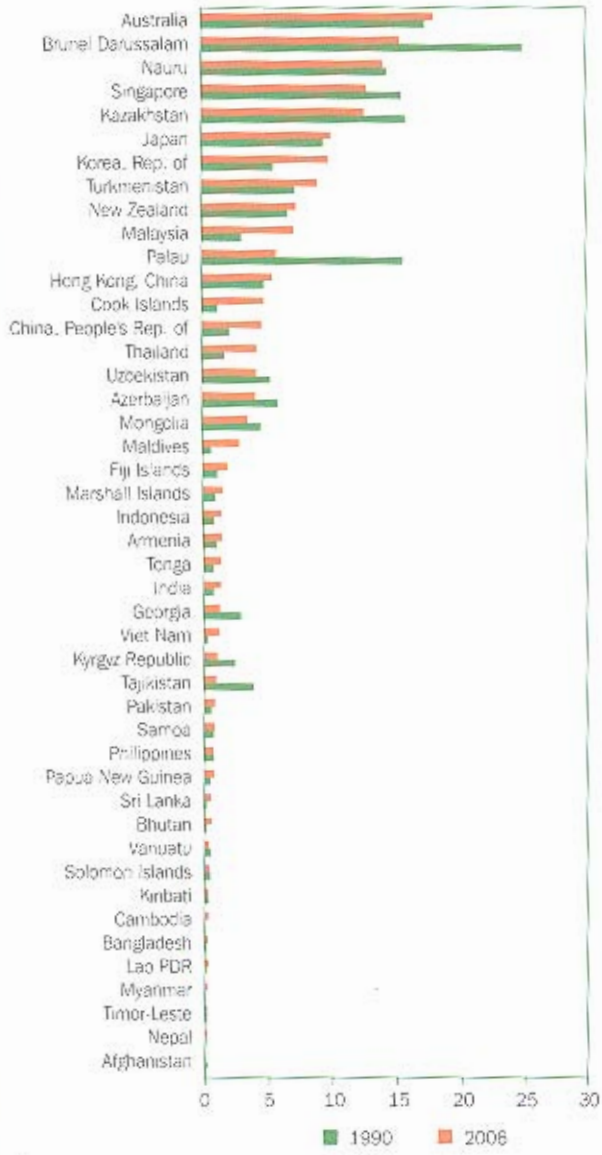
The longer red bar shows the net loss of forest area for six major producers of tropical hardwoods: Cambodia, Indonesia, Malaysia, Myanmar, Philippines, and Thailand. The total loss was just under 440,000 square kilometers—an area roughly the size of Uzbekistan. Indonesia was the main contributor to this catastrophic loss of a crucial natural resource. Apart from the inherent value of the timber, tropical forests are home to a rich variety of fauna and act as a natural sink to absorb carbon dioxide emissions.

Figure 7.1 **Change in Forest Area between 1990 and 2005 (thousand square kilometers)**



Sources: Derived from Table 7.1 and FAOSTAT 2009 (FAO)

Figure 7.2 **Per Capita Emissions of Carbon Dioxide, 1990 and 2006 or Nearest Years (metric tons)**



Source: Table 7.1.

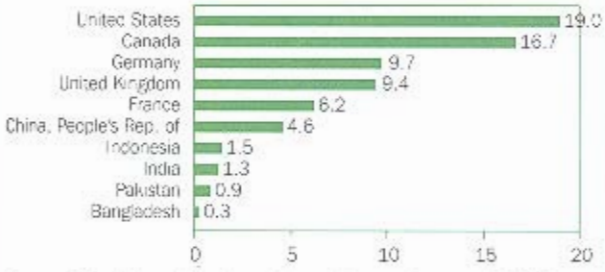
Carbon dioxide emissions: Catastrophe ahead? Figure 7.2 shows per capita emissions of carbon dioxide (CO_2) from consumption of carbon fuels for heating, transport, and electricity generation; emissions from cement production and gas flaring are also included but they do not include CO_2 emissions from deforestation or agriculture. There is a positive correlation between per capita emissions and per capita income. Rising incomes seem to inevitably involve higher CO_2 emissions and this is why the developed member economies are in the top part of Figure 7.2. On the other hand, Afghanistan, Nepal, and Timor-Leste are among the poorest economies in the region and have the lowest per capita CO_2 emissions.

Exactly one third of the 45 economies shown in Figure 7.2 reduced per capita emissions from 1990 to 2006. Particularly large reductions were reported by Brunei Darussalam, Kazakhstan, Palau, Singapore, and Tajikistan. Among the 30 economies reporting rising emissions, particularly large increases in emissions were recorded for PRC, Cook Islands, Republic of Korea, Malaysia, Maldives, and Thailand.

Among the five most populous developing economies, the PRC has the highest per capita emissions followed by Indonesia, India, Pakistan, and Bangladesh. All five economies increased their emissions from 1990 to 2006. Although, with the exception of the PRC, the increases were not large on a per capita basis, their contribution to global warming is substantial because of their huge populations.

To put CO_2 emissions from Asia in a global context, Figure 7.3 compares emissions by the five most populous economies of the Asia and Pacific region with emissions by five large developed countries. The differences between the five countries at the top of the table and the five Asian economies are striking. In 2006, each resident in the United States was emitting as much CO_2 as 71 residents in Bangladesh, 21 in Pakistan, 14 in India, 13 from Indonesia, or 4 in the PRC.

Figure 7.3 **Per Capita Emissions of Carbon Dioxide in Five Industrialized Countries and in the Five Most Populous Countries of Asia, 2006 (metric tons)**



Sources: Table 7.1 and Millennium Indicators Database Online (UNSD 2009) for Canada, France, Germany, United Kingdom, and United States.

If the huge populations of the five Asian economies were to emit CO_2 at the per capita levels currently typical of the industrialized countries, the consequences for climate change would be catastrophic. Future increases in per capita CO_2 emissions by Asian economies are inevitable as their living standards rise. Can these be counterbalanced by reduced per capita emissions in the industrialized countries of North America and Europe? France offers one possible solution. It has the lowest CO_2 emissions of the five industrialized countries because most of its electricity is generated by nuclear power.

The ozone layer is under attack. Box 7.1 shows consumption of substances that deplete the ozone layer. Economies are grouped into four categories according to the levels of consumption for 2007. The five most populous countries are all either high consumers of ozone-depleting substances or medium-high consumers. Japan is also in the medium-high category but the other two developed country members, Australia and New Zealand, are medium-low consumers. Chlorofluorocarbons (CFC) gases used for refrigeration and air-conditioning are the main cause of the depletion of the ozone layer. Non-harmful but more expensive gases can be used instead of CFCs and are now widely used in the developed countries of Europe and North America, but ozone-depleting gases are still being used in many economies in Asia.

Box 7.1 **Consumption of All Ozone-Depleting Substances, 2007 (ODP metric tons)**

High consumers (over 1,000)			
China, People's Rep. of	25189.9	India	2971.0
Korea, Rep. of	4552.7	Thailand	1316.6
Medium-high consumers (101–1,000)			
Japan	996.6	Viet Nam	298.2
Malaysia	664.2	Bangladesh	192.7
Indonesia	500.1	Singapore	153.0
Pakistan	354.0	Kazakhstan	120.9
Philippines	325.7		
Medium-low consumers (10–100)			
Australia	82.7	New Zealand	27.4
Sri Lanka	77.6	Cambodia	19.9
Afghanistan	61.3	Vanuatu	16.6
Armenia	29.4	Brunei Darussalam	10.4
Low Consumers (below 10)			
Papua New Guinea	9.5	Solomon Islands	0.9
Turkmenistan	8.3	Azerbaijan	0.8
Lao PDR	8.0	Micronesia, Fed. States of	0.5
Georgia	6.3	Marshall Islands	0.2
Kyrgyz Republic	5.8	Samoa	0.2
Fiji Islands	4.5	Bhutan	0.1
Maldives	4.4	Kiribati	0.1
Tajikistan	3.8	Palau	0.1
Myanmar	2.4	Tonga	0.1
Mongolia	1.7	Uzbekistan	0.1
Nepal	1.2		

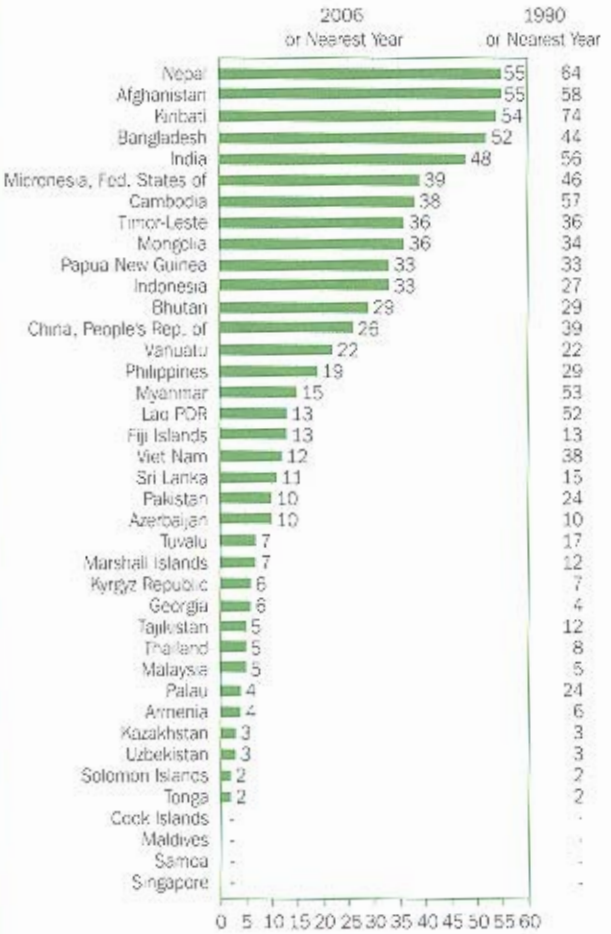
Source: Table 7.1.

Good progress has generally been achieved in providing basic sanitation to urban households. Target 7.C relating to access to improved water sources and sanitation facilities is broken down into urban and rural areas. Figure 7.4 shows progress made toward achieving one of these targets, i.e., halving the proportion of urban households without access to improved sanitation.

Eighteen of the 39 economies in Figure 7.4 have either reduced the proportions of urban population without access to improved sanitation by at least half or kept the proportion at 5% or below. In 10 of the other 21 economies (including Bangladesh and Indonesia), the percentages of urban population without access to improved sanitation have remained unchanged or risen. Thirteen economies still have more than a quarter of urban households without access to improved sanitation.

The data in Figure 7.4 are also relevant for Target 7.D: *By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.* The revised MDG Framework includes lack of access to basic sanitation as one of four criteria for defining slums, the others being lack of access to improved water supply, overcrowding, and dwellings made from nondurable materials.

Figure 7.4 **Proportion of Urban Households without Access to Improved Sanitation (percent)**



Source: Derived from Table 7.3.

Data Issues and Comparability

Data on forests and on land set aside for protecting biodiversity come from administrative sources supplemented by satellite imagery. They are broadly comparable and reasonably reliable. Information on CO_2 emissions comes mainly from international agencies and is derived by applying emission coefficients to estimates of fuel consumption, cement production, and gas flaring. Emissions by international carriers (ships and aircraft) are usually omitted because they cannot be assigned to a particular country.

Data on housing conditions come mainly from population or housing censuses or from sociodemographic and living standard surveys.

Table 7.1 **Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources**

	7.1 Proportion of Land Area Covered by Forest (percent)		7.2 Carbon Dioxide Emissions (thousand metric tons)		7.2 Carbon Dioxide Emissions (per capita, metric tons)	
	1990	2005	1990	2006	1990	2006
Developing Member Countries						
Central and West Asia						
Afghanistan	2.0	1.3	2677	697	0.2	0.0
Armenia	12.3	10.0	3681 (1992)	4371	1.1 (1992)	1.5
Azerbaijan	11.3	11.3	44169 (1992)	35050	5.9 (1992)	4.2
Georgia	39.7	39.7	15334 (1992)	5518	2.9 (1992)	1.2
Kazakhstan	1.3	1.2	261316 (1992)	193508	15.9 (1992)	12.6
Kyrgyz Republic	4.4	4.5	11048 (1992)	5566	2.5 (1992)	1.1
Pakistan	3.3	2.5	68559	142659	0.6	0.9
Tajikistan	2.9	2.9	21296 (1992)	6391	3.9 (1992)	1.0
Turkmenistan	8.8	8.8	28065 (1992)	44103	7.2 (1992)	9.0
Uzbekistan	7.4	8.0	114004 (1992)	115672	5.3 (1992)	4.3
East Asia						
China, People's Rep. of	16.8	21.2	2414699	6103493	2.1	4.6
Hong Kong, China	...	...	27661	39039	4.8	5.5
Korea, Rep. of	64.5	63.5	241637	475248	5.6	9.9
Mongolia	7.3	6.5	10047	9442	4.5	3.6
Taipei,China	51.6	58.1	...	...	...	...
South Asia						
Bangladesh	6.8	6.7	15528	41609	0.1	0.3
Bhutan	64.6	68.0	128	381	0.2	0.6
India	21.5	22.8	690595	1510351	0.8	1.3
Maldives	3.0	3.0	154	869	0.7	2.9
Nepal	33.7	25.4	634	3241	0.0	0.1
Sri Lanka	36.4	29.9	3773	11876	0.2	0.6
Southeast Asia						
Brunei Darussalam [a]	59.4	52.8	6420	5911	25.0	15.5
Cambodia	73.3	59.2	451	4074	0.0	0.3
Indonesia	64.3	48.8	150451	333483	0.8	1.5
Lao PDR	75.0	69.9	235	1426	0.1	0.2
Malaysia	68.1	63.6	56588	187865	3.1	7.2
Myanmar	59.6	49.0	4275	10025	0.1	0.2
Philippines	35.5	24.0	44528	68328	0.7	0.8
Singapore	3.4	3.4	95828	272521	15.6	12.8
Thailand	31.2	28.4	46937	56217	1.8	4.3
Viet Nam	28.8	39.7	21406	106132	0.3	1.2
The Pacific						
Cook Islands	63.9	66.5	22	66	1.2	4.8
Fiji Islands	53.6	54.7	818	1610	1.1	1.9
Kiribati	3.0	3.0	22	29	0.3	0.3
Marshall Islands	...	...	48	92	1.0	1.6
Micronesia, Fed. States of	90.6	90.6	...	...	...	...
Nauru	...	...	132	143	14.4	14.1
Palau	82.9	87.6	235	117	15.7	5.8
Papua New Guinea	69.6	65.0	2141	4620	0.5	0.7
Samoa	45.9	60.4	125	158	0.8	0.9
Solomon Islands	98.9	77.6	161	180	0.5	0.4
Timor-Leste	65.0	53.7	161 (2002)	176	0.2 (2002)	0.2
Tonga	5.0	5.0	77	132	0.8	1.3
Tuvalu	33.3	33.3	...	...	...	...
Vanuatu	36.1	36.1	70	92	0.5	0.4
Developed Member Countries						
Australia	21.9	21.3	293124	372013	17.4	18.1
Japan	68.4	68.2	1172248	1293409	9.5	10.1
New Zealand	28.8	31.0	22741	30488	6.7	7.4

continued.

Goal 7 Targets and Indicators

Table 7.1 **Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources** *(continued)*

	7.3 Consumption of All Ozone-Depleting Substances (ODP metric tons)		7.5 Proportion of Total Water Resources Used	
	1990	2007	1990	2000
Developing Member Countries				
Central and West Asia				
Afghanistan	– (1991)	61	...	36
Armenia	– (1991)	29	45	36 (2005)
Azerbaijan	3 (1991)	1	45	35 (2005)
Georgia	95 (1991)	6	6	3 (2005)
Kazakhstan	2356	121	33	31
Kyrgyz Republic	134 (1991)	6	53	49
Pakistan	1456	354	69	75
Tajikistan	93 (1991)	4	75	75
Turkmenistan	145	8	100	100
Uzbekistan	4 (1991)	0	124	116
East Asia				
China, People's Rep. of	59674	25190	18	22
Hong Kong, China	...	...	...	...
Korea, Rep. of	– (1991)	4553	...	27
Mongolia	– (1991)	2	1 (1995)	1
Taipei,China	...	...	15	17 (2006)
South Asia				
Bangladesh	202	193	...	7
Bhutan	– (1991)	0	...	0
India	–	2971	26	34
Maldives	5	4	...	...
Nepal	25 (1991)	1	...	5
Sri Lanka	218	78	20	25
Southeast Asia				
Brunei Darussalam [a]	– (1991)	10	1	...
Cambodia	– (1991)	20	...	1
Indonesia	81 (1991)	500	3	3
Lao PDR	– (1991)	8	...	1
Malaysia	4194	664	2	2
Myanmar	17 (1992)	2	...	3
Philippines	3477	326	6 (1995)	6
Singapore	4855	153	...	...
Thailand	6984	1317	...	21
Viet Nam	430 (1991)	298	6	8
The Pacific				
Cook Islands	0 (1991)	–	...	...
Fiji Islands	42	5	...	0
Kiribati	– (1991)	0	...	...
Marshall Islands	1	0	...	...
Micronesia, Fed. States of	(1991)	1	...	...
Nauru	– (1991)	–	...	...
Palau	– (1991)	0	...	...
Papua New Guinea	29 (1991)	10	...	0
Samoa	4 (1991)	0	...	...
Solomon Islands	2	1	...	...
Timor-Leste	...	...	...	...
Tonga	0 (1991)	0	...	...
Tuvalu	– (1991)	–	...	...
Vanuatu	– (1991)	17	...	...
Developed Member Countries				
Australia	7434	83	...	5
Japan	120074	997	21	20
New Zealand	1195	27	...	1

ODP = ozone-depleting potential.

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Millennium Indicators Database Online (UNSD 2009).

Table 7.2 **Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss**

	7.6 Proportion of Terrestrial and Marine Areas Protected (percent)	
	1990	2008
Developing Member Countries		
Central and West Asia		
Afghanistan	0.2	0.2
Armenia	7.2	8.2
Azerbaijan	5.2	6.2
Georgia	2.6	3.6
Kazakhstan	2.5	2.8
Kyrgyz Republic	2.4	3.1
Pakistan	8.6	8.7
Tajikistan	2.3	13.7
Turkmenistan	2.5	2.5
Uzbekistan	1.8	1.9
East Asia		
China, People's Rep. of	11.2	14.3
Hong Kong, China	46.9	50.1
Korea, Rep. of	3.8	3.9
Mongolia	4.1	13.9
Taipei,China [a]	9.2	18.8 (2007)
South Asia		
Bangladesh	1.5	1.8
Bhutan	12.1	24.6
India	4.1	4.6
Maldives	...	...
Nepal	6.8	16.6
Sri Lanka	13.0	14.3
Southeast Asia		
Brunei Darussalam [b]	27.8	32.4
Cambodia	14.9 (1993)	21.9
Indonesia	3.9	6.9
Lao PDR	0.8	15.9
Malaysia	13.8	15.5
Myanmar	2.4	5.5
Philippines	2.1	3.3
Singapore	2.2	3.1
Thailand	11.9	17.4
Viet Nam	1.0	3.6
The Pacific		
Cook Islands	0.1 (2000)	0.1
Fiji Islands	0.2	0.3
Kiribati	1.0	1.0 (2005)
Marshall Islands	0.7 (1999)	0.7
Micronesia, Fed. States of	0.1	0.1
Nauru	...	...
Palau	0.4	7.8
Papua New Guinea	1.0	1.5
Samoa	0.8	1.8
Solomon Islands	0.1 (1996)	0.1
Timor-Leste	3.1 (2000)	7.3
Tonga	2.2 (1996)	2.2
Tuvalu	0.2 (1996)	0.2
Vanuatu	0.4	0.5
Developed Member Countries		
Australia	7.8	21.4
Japan	6.0	9.4
New Zealand	16.0	20.5

a Refers to nature protected areas as percent of national territory.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Taipei,China: economy sources.

Goal 7 Targets and Indicators

Table 7.3 **Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation**

	7.8 Population Using Improved Water Sources (percent)					
	1990			2006		
	Total	Urban	Rural	Total	Urban	Rural
Developing Member Countries						
Central and West Asia						
Afghanistan	21 (1995)	37 (1995)	17 (1995)	22	37	17
Armenia	91 (1995)	99 (1995)	75 (1995)	98	99	96
Azerbaijan	68	82	51	78	95	59
Georgia	76	91	58	99	100	97
Kazakhstan	96	99	91	96	99	91
Kyrgyz Republic	77 (1995)	97 (1995)	65 (1995)	89	99	83
Pakistan	86	96	81	90	95	87
Tajikistan	56 (1995)	91 (1995)	42 (1995)	67	93	58
Turkmenistan	...	...	...	...	...	...
Uzbekistan	90	97	85	88	98	82
East Asia						
China, People's Rep. of	67	97	55	88	98	81
Hong Kong, China	...	...	...	...	...	...
Korea, Rep. of	91 (1995)	97 (1995)	71 (1995)	92 (2000)	97 (2000)	71 (2000)
Mongolia	64	97	21	72	90	48
Taipei,China	84	...	...	92 (2007)	...	...
South Asia						
Bangladesh	78	88	76	80	85	78
Bhutan	81 (2000)	98 (2000)	79 (2000)	81	98	79
India	71	90	65	89	96	86
Maldives	96	100	95	83	98	76
Nepal	72	97	70	89	94	88
Sri Lanka	67	91	62	82	98	79
Southeast Asia						
Brunei Darussalam [a]	...	...	...	...	...	...
Cambodia	19 (1995)	47 (1995)	14 (1995)	65	80	61
Indonesia	72	92	63	80	89	71
Lao PDR	41 (1995)	73 (1995)	34 (1995)	60	86	53
Malaysia	98	100	96	99	100	96
Myanmar	57	86	47	80	80	80
Philippines	83	92	75	93	96	88
Singapore	100	100	na	100	100	na
Thailand	95	98	94	98	99	97
Viet Nam	52	87	43	92	98	90
The Pacific						
Cook Islands	94	99	87	95	98	88
Fiji Islands	48	43	51	47	43	51
Kiribati	48	76	33	65	77	53
Marshall Islands	96	95	97	88 (2000)	83 (2000)	96 (2000)
Micronesia, Fed. States of	88	93	86	94	95	94
Nauru	...	...	...	...	...	...
Palau	90	73	98	89	79	94
Papua New Guinea	39	88	32	40	88	32
Samoa	91	99	89	88	90	87
Solomon Islands	69	94	65	70	94	65
Timor-Leste	61 (2000)	77 (2000)	56 (2000)	62	77	56
Tonga	100	100	100	100	100	100
Tuvalu	90	92	89	93	94	92
Vanuatu	61	93	53	59 (2000)	86 (2000)	52 (2000)
Developed Member Countries						
Australia	100	100	100	100	100	100
Japan	100	100	100	100	100	100
New Zealand	97	100	82	97 (1995)	100 (1995)	82 (1995)

continued.

Table 7.3 **Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation** *(continued)*

	7.9 Population Using Improved Sanitation Facilities (percent)					
	1990			2006		
	Total	Urban	Rural	Total	Urban	Rural
Developing Member Countries						
Central and West Asia						
Afghanistan	32 (1995)	42 (1995)	29 (1995)	30	45	25
Armenia	89 (1995)	94 (1995)	78 (1995)	91	96	81
Azerbaijan	80 (1995)	90 (1995)	70 (1995)	80	90	70
Georgia	94	96	91	93	94	92
Kazakhstan	97	97	96	97	97	98
Kyrgyz Republic	92 (1995)	93 (1995)	92 (1995)	93	94	93
Pakistan	33	76	14	58	90	40
Tajikistan	83 (1995)	88 (1995)	81 (1995)	92	95	91
Turkmenistan	...	...	...	...	...	...
Uzbekistan	93	97	91	96	97	95
East Asia						
China, People's Rep. of	48	61	43	55	74	59
Hong Kong, China	...	...	...	...	...	...
Korea, Rep. of	...	...	...	...	...	...
Mongolia	47 (1995)	66 (1995)	23 (1995)	50	64	31
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	26	56	18	36	48	32
Bhutan	52 (2000)	71 (2000)	50 (2000)	52	71	50
India	14	44	2	28	52	18
Maldives	57 (1995)	100 (1995)	42 (1995)	59	100	42
Nepal	9	36	6	27	45	24
Sri Lanka	71	85	68	86	89	86
Southeast Asia						
Brunei Darussalam [a]	...	...	...	...	...	...
Cambodia	8 (1995)	43 (1995)	2 (1995)	28	62	19
Indonesia	51	73	42	52	67	37
Lao PDR	13 (1995)	48 (1995)	6 (1995)	48	87	38
Malaysia	94 (2000)	95 (2000)	93 (2000)	94	95	93
Myanmar	23	47	15	82	85	81
Philippines	58	71	46	78	81	72
Singapore	100	100	na	100	100	na
Thailand	78	92	72	96	95	96
Viet Nam	29	82	21	65	88	56
The Pacific						
Cook Islands	96	100	91	100	100	100
Fiji Islands	68	87	55	71	87	55
Kiribati	22	26	20	33	46	20
Marshall Islands	75	88	51	81 (2000)	93 (2000)	57 (2000)
Micronesia, Fed. States of	29	54	20	25	61	14
Nauru	...	...	...	...	...	...
Palau	61	76	54	67	96	52
Papua New Guinea	44	67	41	45	67	41
Samoa	98	100	98	100	100	100
Solomon Islands	29	98	18	32	98	18
Timor-Leste	40 (2000)	64 (2000)	32 (2000)	41	64	32
Tonga	96	98	96	96	98	96
Tuvalu	78	83	74	89	93	84
Vanuatu	49 (1995)	78 (1995)	42 (1995)	50 (2000)	78 (2000)	42 (2000)
Developed Member Countries						
Australia	100	100	100	100	100	100
Japan	100	100	100	100	100	100
New Zealand	...	...	88	...	...	88 (1995)

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); for Taipei,China: economy sources.

Goal 7 Targets and Indicators

Table 7.4 Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

	7.10 Slum Population as Percentage of Urban Population [a]	
	1990	2005
Developing Member Countries		
Central and West Asia		
Afghanistan	98.5	98.5 (2001)
Armenia	...	...
Azerbaijan	...	...
Georgia	...	...
Kazakhstan	...	...
Kyrgyz Republic	...	...
Pakistan	78.7	47.5
Tajikistan	...	...
Turkmenistan	...	...
Uzbekistan	...	...
East Asia		
China, People's Rep. of	43.6	32.9
Hong Kong, China	...	...
Korea, Rep. of	68.5	37.0 (2001)
Mongolia [b]	68.5	57.9
Taipei,China	...	...
South Asia		
Bangladesh	87.3	70.8
Bhutan	70.0	44.1 (2001)
India	60.8	34.8
Maldives	...	...
Nepal	96.9	60.7
Sri Lanka	24.8	13.6 (2001)
Southeast Asia		
Brunei Darussalam [c]	...	...
Cambodia	71.7	78.9
Indonesia	32.2	26.3
Lao PDR [d]	66.1	79.3
Malaysia	...	...
Myanmar [e]	31.1	45.6
Philippines	54.9	43.7
Singapore	...	...
Thailand [e]	19.5	26.0
Viet Nam	60.5	41.3
The Pacific		
Cook Islands	...	...
Fiji Islands	...	...
Kiribati	...	...
Marshall Islands	...	...
Micronesia, Fed. States of	...	...
Nauru	...	...
Palau	...	...
Papua New Guinea	...	...
Samoa	...	...
Solomon Islands	...	...
Timor-Leste	...	...
Tonga	...	...
Tuvalu	...	...
Vanuatu	...	...
Developed Member Countries		
Australia	...	...
Japan	...	...
New Zealand	...	...

a The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: (i) lack of access to improved water supply; (ii) lack of access to improved sanitation; (iii) overcrowding (three or more persons per room); and (iv) dwellings made of nondurable material.

b For 1990, only two shelter components (water and sanitation), from UNICEF/WHO were used to compute the estimate. For 2005, four shelter components (water, sanitation, sufficient living, and durable housing) from MICS 2000 were used.

c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

d For 1990, only two shelter components (water and sanitation) from UNICEF/WHO were used to compute the estimate. For 2005, three shelter components (water, sanitation, and durable housing) from MICS 2000 were used.

e For 1990, only two shelter components (water and sanitation) from UNICEF/WHO were used to compute the estimate. For 2005, four shelter components (water, sanitation, sufficient living, and durable housing) were used.

Source: Millennium Indicators Database Online (UNSD 2009).

Goal 8: Develop a Global Partnership for Development

The relative weight of **debt service** has been falling since 2000 in most economies for which data are available. **Cell phones** are now much more common than **fixed line** telephones throughout Asia. The "digital divide" as measured by **internet access** is still wide. In eight economies, 50% or more of the population have internet access, but the rate is less than 20% in the majority of countries.

Introduction

Goal 8 has six targets but the first three are directed at developed donor countries and are not considered here. The other three targets that are relevant to developing economies (and developed countries in some instances) are:

8.D: *Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.*

8.E: *In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries.*

8.F: *In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.* This target may be applicable to all countries, so the relevant figures below include data for Australia, Japan, and New Zealand.

Key Trends

Debt service: The load gets lighter for most economies. Figure 8.1 shows debt service as a percentage of exports of goods and services plus net income from abroad. Together, these comprise a "nationally generated" fund from which foreign debt can be serviced without incurring additional foreign liabilities. Debt service includes both interest and capital repayments due on loans from nonresidents.

Most economies have substantially reduced the relative size of their debt service in 2007 compared to their debt service in 2000. They include the five most populous economies as well as several Southeast Asian economies. Particularly large falls relative to 2000 were reported by Azerbaijan, People's Republic of China (PRC), India, Kazakhstan, and Thailand. In some cases the reduction was mainly or wholly due to the growth in export earnings rather than to debt relief negotiated with donor countries.

Ratios of debt service to earnings were higher in 2007 compared with that in 2000 in Nepal and in four small economies: Maldives, Samoa, Tonga, and Vanuatu.

Figure 8.1 **Debt Service as a Percentage of Exports of Goods and Services, 2000 and 2007 or Nearest Years**



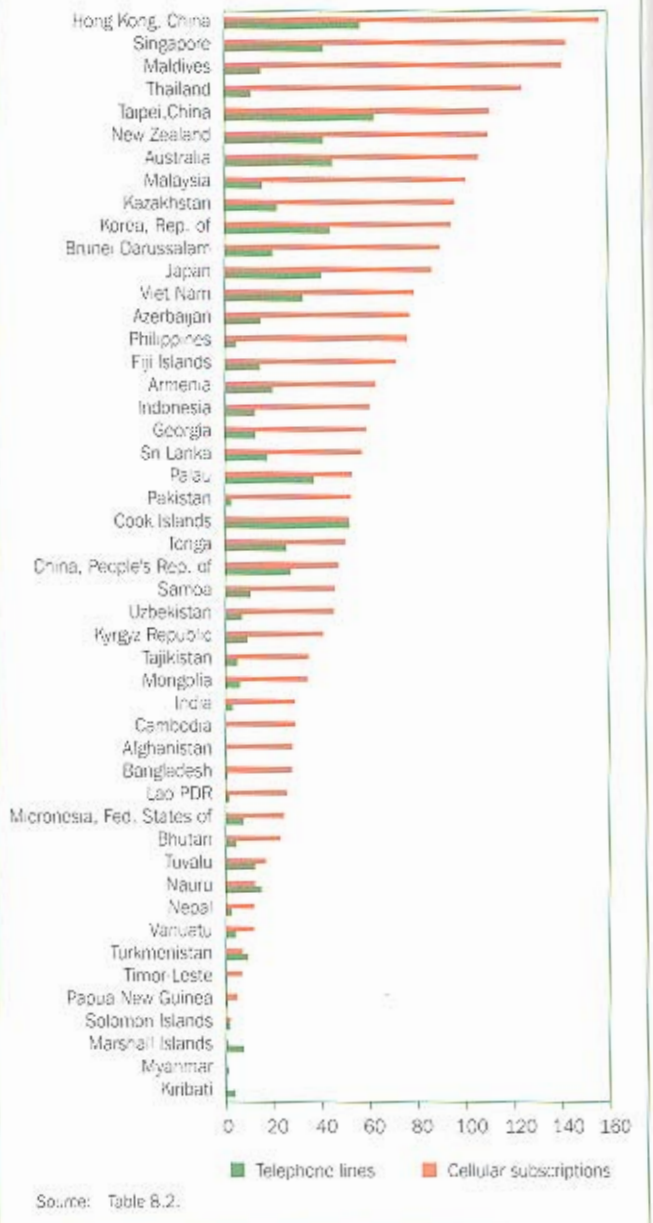
Source: Table 8.1.

Figures 8.2 and 8.3 address progress in providing access to new technologies in communications and information.

Cell phones are now more popular than fixed line phones. Figure 8.2 shows that cellular phones are much more widely used than fixed line phones throughout the region. The only exceptions are Myanmar, Turkmenistan, and four Pacific economies—Cook Islands, Kiribati, Marshall Islands, and Nauru. Telephone communication by either cell phone or fixed line is relatively rare in these economies except in the Cook Islands.

As regards cellular phone subscriptions, by 2008, Indonesia led the five most populous economies with 60 per 100 population, followed by Pakistan (53), PRC (47), India (29), and Bangladesh (28). In Australia; Hong Kong, China; Malaysia; Maldives; New Zealand; Singapore; Taipei,China; and Thailand, some people have more than one cell phone subscription.

Figure 8.2 **Telephone Lines and Cellular Subscriptions, 2008 or Latest Year (per 100 population)**



Source: Table 8.2.

Access to the internet is sharply uneven. Internet access is shown in Figure 8.3. There is a sharp divide between the top group of eight economies comprising Australia; Hong Kong, China; Japan; Republic of Korea; Malaysia; New Zealand; Singapore; and Taipei,China where over 50% of the population have access to the internet and the many other economies where internet access is available to less than 20% of the population. Much has to be done before the target of making the benefits of new technologies more widely available is reached.

Among the five most populous economies, the PRC had the highest number of internet users per 100 inhabitants in 2008 at 22. Pakistan followed with 11. India had 7, Indonesia 6, and Bangladesh only 0.3 or less than 1 per 100 population. Figures for the last three economies refer to 2007.

Figure 8.3 **Internet Users, 2008 or Latest Year (per 100 population)**



Source: Table 8.2.

Data Issues and Comparability

Data on debt service ratios are compiled according to international standards and are broadly comparable.

Data on cellular phone subscriptions and internet access are obtained by the International Telecommunication Union through annual questionnaires sent to government telecommunication authorities and operating companies. These data are supplemented by annual reports and statistical yearbooks of telecommunication ministries, regulators, operators, and industry associations. Common definitions are used and the data are considered to be reasonably accurate and comparable.

Goal 8 Targets and Indicators

Table 8.1 **Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term**

	8.12 Debt Service as a Percentage of Exports of Goods and Services		
	1990	2000	2007
Developing Member Countries			
Central and West Asia			
Afghanistan	...	4.0 (2003)	1.7
Armenia	1.1 (1993)	7.9	2.0
Azerbaijan	1.2 (1995)	5.2	0.6
Georgia	6.0 (1997)	13.4	4.2
Kazakhstan	3.5 (1995)	8.6	1.3
Kyrgyz Republic	0.4 (1996)	9.0	3.2
Pakistan	22.9	20.7	9.0
Tajikistan	...	9.0 (2002)	3.4
Turkmenistan	9.8 (1996)	20.3 (1997)	...
Uzbekistan	...	...	...
East Asia			
China, People's Rep. of	10.6	5.1	0.6
Hong Kong, China	...	...	...
Korea, Rep. of	...	...	...
Mongolia	17.1 (1992)	6.0	2.3 (2006)
Taipei,China	...	...	...
South Asia			
Bangladesh	34.8	10.7	5.3
Bhutan	..	...	...
India	29.3	15.7	3.7 (2006)
Maldives	4.0	4.0	4.8
Nepal	14.7	7.3	8.7
Sri Lanka	14.8	10.8	7.0
Southeast Asia			
Brunei Darussalam [a]	...	...	...
Cambodia	3.8 (1992)	1.4	0.5
Indonesia	25.6	11.1	6.3
Lao PDR	8.5	7.9	4.2
Malaysia	10.6	2.8	2.2
Myanmar	18.2	3.4	1.4 (2008)
Philippines	25.6	10.2	8.5
Singapore	...	...	...
Thailand	11.4	5.8	1.2
Viet Nam	3.2 (1998)	7.2	1.9
The Pacific			
Cook Islands	...	...	...
Fiji Islands	9.0	2.2	0.8 (2006)
Kiribati	...	...	...
Marshall Islands	...	...	...
Micronesia, Fed. States of	...	...	...
Nauru	...	...	...
Palau	...	...	...
Papua New Guinea	18.4	8.0	5.9 (2005)
Samoa	10.6	5.8 (1999)	7.7
Solomon Islands	11.3	2.8	2.0 (2006)
Timor-Leste	...	...	...
Tonga	3.5	7.7 (2001)	7.8
Tuvalu	...	...	
Vanuatu	1.6	0.9	1.1
Developed Member Countries			
Australia	...	...	...
Japan	...	...	...
New Zealand	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009).

Table 8.2 **Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications**

	8.14 Telephone Lines (per 100 population)			8.15 Cellular Subscriptions (per 100 population)		8.16 Internet Users (per 100 population)	
	1990	2000	2008	2000	2008	1995	2008
Developing Member Countries							
Central and West Asia							
Afghanistan	0.25	0.12	0.36	0.10 (2002)	27.98	0.07 (2003)	1.84 (2007)
Armenia	15.80	17.31	19.71 (2005)	0.57	62.50 (2007)	0.05	5.75 (2006)
Azerbaijan	8.60	9.84	15.45	5.16	76.73	0.03 (1997)	10.94 (2007)
Georgia	9.89	10.78	12.65 (2007)	4.13	59.15 (2007)	0.01	8.19 (2007)
Kazakhstan	8.08	12.20	21.95	1.31	96.00	0.01	12.32 (2007)
Kyrgyz Republic	7.15	7.59	9.07 (2007)	0.18	40.78 (2007)	0.07 (1998)	14.11 (2007)
Pakistan	0.76	2.14	2.65	0.21	52.72	0.03 (1997)	11.08
Tajikistan	4.53	3.55	5.05 (2007)	0.02	34.89 (2007)	0.03 (1999)	7.19 (2007)
Turkmenistan	6.00	8.09	9.22 (2007)	0.17	7.00 (2007)	0.04 (1999)	1.41 (2007)
Uzbekistan	6.84	6.89	6.91	0.21	45.55	0.01 (1997)	8.70
East Asia							
China, People's Rep. of	0.59	11.37	27.52 (2007)	6.69	47.44	0.01 (1996)	22.30
Hong Kong, China	43.39	59.15	58.44	82.08	156.27	3.23	56.66
Korea, Rep. of	30.97	55.29	44.07	57.33	94.25	0.81	77.45
Mongolia	2.99	4.71	6.07 (2007)	6.19	34.38 (2007)	0.02 (1996)	12.00 (2007)
Taipei,China	42.96 (1995)	56.75	61.96	80.24	110.31	28.10 (2000)	65.73
South Asia							
Bangladesh	0.21	0.38	0.83	0.22	27.67	0.04 (1999)	0.32 (2007)
Bhutan	0.34	2.53	4.54 (2007)	0.37 (2003)	22.73 (2007)	0.14 (1999)	6.08 (2007)
India	0.60	3.18	3.20	0.35	29.24	0.03	6.93 (2007)
Maldives	2.89	8.42	15.09	2.63	140.05	0.22 (1996)	23.06
Nepal	0.30	1.09	2.80	0.04	11.59 (2007)	0.02 (1997)	1.41 (2007)
Sri Lanka	0.68	3.87	17.77	2.17	57.14	0.05 (1996)	5.92
Southeast Asia							
Brunei Darussalam [a]	13.62	24.14	19.64 (2007)	28.49	89.45 (2007)	1.02	48.17 (2007)
Cambodia	0.03	0.24	0.31	1.02	28.83	0.02 (1998)	0.48 (2007)
Indonesia	0.59	3.19	12.96	1.75	59.99	0.03	5.61 (2007)
Lao PDR	0.17	0.77	1.62 (2007)	0.24	25.23 (2007)	0.04 (1999)	1.71 (2007)
Malaysia	8.89	20.15	15.88	22.27	100.36	0.15	62.54
Myanmar	0.17	0.57	1.45 (2007)	0.03	0.76	0.02 (2003)	0.08 (2007)
Philippines	1.00	4.04	4.36	8.52	75.96	0.03	6.03 (2007)
Singapore	34.94	48.44	41.36	68.39	141.99	2.88	68.00 (2007)
Thailand	2.42	9.10	11.00 (2007)	4.97	123.77 (2007)	0.08	21.00 (2007)
Viet Nam	0.15	3.23	32.65 (2007)	1.00	79.06	0.01 (1998)	20.45 (2007)
The Pacific							
Cook Islands	16.28	30.17	51.87	2.93	51.34	1.10	38.46
Fiji Islands	5.86	10.66	14.53 (2007)	6.79	71.09	0.06 (1996)	10.90 (2007)
Kiribati	1.67	3.74	4.30 (2006)	0.33	0.75 (2006)	0.58 (1998)	2.15 (2006)
Marshall Islands	1.06	7.67	7.77 (2003)	0.86	1.08 (2004)	0.04 (1996)	3.35 (2004)
Micronesia, Fed. States of	2.53	9.01	7.83 (2007)	0.09 (2002)	24.69 (2007)	0.28 (1996)	13.50 (2007)
Nauru	12.33 (1991)	14.76	14.80 (2001)	9.84	12.00 (2001)	2.40 (2001)	...
Palau	...	34.68 (2002)	36.97 (2007)	12.30 (2002)	53.03 (2007)	20.02 (2002)	27.25 (2004)
Papua New Guinea	0.73	1.22	0.95 (2007)	0.16	4.74 (2007)	0.10 (1997)	1.82 (2007)
Samoa	2.54	4.80	10.54 (2005)	1.41	45.98 (2007)	0.17 (1997)	4.54 (2007)
Solomon Islands	1.48	1.84	1.55 (2006)	0.27	2.20 (2007)	0.02	1.82 (2007)
Timor-Leste	...	0.24 (2003)	0.21 (2007)	2.42 (2003)	6.77 (2007)	0.10 (2005)	0.13 (2007)
Tonga	4.64	9.68	25.31	0.18	50.02	0.12	8.33
Tuvalu	1.27	8.48	12.15 (2007)	4.81 (2004)	16.82 (2007)	4.91 (2000)	37.38 (2007)
Vanuatu	1.74	3.47	3.90 (2007)	0.19	11.50 (2007)	0.06 (1996)	7.52 (2007)
Developed Member Countries							
Australia	46.15	52.70	44.72	44.89	105.58	2.79	56.80
Japan	44.14	48.77	40.04 (2007)	52.57	86.29	1.59	68.85 (2007)
New Zealand	43.07	47.95	41.52	40.39	109.61	4.92	70.00 (2007)

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Millennium Indicators Database Online (UNSD 2009); International Telecommunication Union World Telecommunication/ICT Indicators Database (International Telecommunication Union 2009); for Palau and Bhutan, World Development Indicators Online (World Bank 2009).

PART III

Regional Tables



Introduction to Regional Tables

The regional tables in Part III are grouped into seven areas or themes, each with short write-ups highlighting important developments since the 1990s. Each theme is further split into related subtopics. This issue of *Key Indicators* contains 107 regional tables illustrating economic and social developments in the Asia and Pacific region.

It should be noted that the regional tables in this issue of *Key Indicators* contain annual data only up to 2008 or even an earlier year for some topics. The global economic crisis erupted in the second half of 2008 and some economic statistics for that year show some leveling off in growth rates compared to those in 2007. The full impact of the crisis on Asia will become evident only in next year's edition of *Key Indicators*.

The economic crisis has once more highlighted the need for more up-to-date and reliable statistics for countries of the Asia and Pacific region. Quarterly statistics on national accounts and industrial output are still only available for a minority of countries. Unemployment, labor force, and retail sales are other areas where more and better statistics are urgently required.

The seven themes and their subtopics indicated below are a guide to help readers find the indicators they want.

People	
Population	Poverty Indicators
Labor Force and Employment	Social Indicators
Economy and Output	
National Accounts	Production
Money, Finance, and Prices	
Prices	Exchange Rates
Money and Finance	
Globalization	
Balance of Payments	Capital Flows
External Trade	External Indebtedness
International Reserves	
Infrastructure	
Transport	Communications and Electrification
Government and Governance	
Government Finance	Governance
Energy and Environment	
Energy	Environment

People

People brings together standard demographic indicators—e.g., size and growth of the population; birth, death, and fertility rates—including information on international migration, employment and unemployment, life expectancy, health, education resources, and the number of adults living with HIV. Poverty reduction is embodied in the Asian Development Bank's Strategy 2020—a vision of an Asia and Pacific region free of poverty. In this regard, statistics on the extent of poverty in the region are included in this theme.

The People theme also ranks economies of the Asia and Pacific region according to the United Nations *Human Development Index* (HDI). The HDI combines a range of economic and social statistics into an index number reflecting the overall level of well-being in each economy.

Economy and Output

Economy and Output focuses on the levels and growth of gross domestic product (GDP), related statistics taken from the national accounts, and related indicators on production. How have the GDP shares of agriculture, industry, and services changed since 1995? Which economies have high saving rates?

This theme compares the relative size of economies both within the region and in the world as a whole using purchasing power parities (PPPs). When countries' national accounts are converted to a common currency using PPPs, differences in purchasing power between countries are eliminated so that comparisons reflect only differences in the volumes of goods and services produced and consumed in each country. The PPP-converted GDP figures included under this theme show, for example, how the People's Republic of China (PRC) and India compare, in terms of real GDP, with an industrial giant like Japan. It also shows, on a per capita GDP basis, the richest and the poorest economies in the region.

Box 1 **What are Purchasing Power Parities?**

Purchasing power parities (PPPs) are calculated by comparing the prices of identical goods and services in different countries and applying expenditure weights of GDP. These price comparisons are made by calculating *price relatives*, which are the price of a specified good or service in one country divided by the price of the same item in another country. For example, if a 300 ml can of Pepsi costs Rp16.42 in country A and $3.24 in country B, a price relative can be calculated as 3.24/16.42, or about 0.20. Price relatives are calculated for several hundred items covering all the final expenditure components of GDP and PPPs are then obtained as the weighted average of these price relatives. The weights used are the shares of expenditure on each item in total GDP.

PPPs are currency converters that equalize the purchasing power of currencies in the different countries. They are used in two ways: first, to convert GDP and its expenditure components—household consumption, gross fixed capital formation, etc.—to a common currency so that GDP comparisons can be made in *real terms*, which means that differences in **price levels between countries** have been eliminated. Note that a parallel procedure is used when comparing real GDP from year to year in a single country; here, differences in **price changes over time** are eliminated by using constant prices. The second use of PPPs is to measure differences in price levels between countries, which is done by calculating ratios of PPPs to exchange rates.

The Asian Development Bank coordinated the computation of PPPs for 21 regional members and two nonmember economies in the Asia and Pacific region as part of the 2005 International Comparison Program (ICP). Coordination involved a number of steps: drawing up a master list of goods and services from which each economy could select items commonly found in their markets; assisting economies to break down their GDP into the 155 "basic headings" needed to obtain the expenditure weights; verifying the price data and expenditure weights submitted by the 23 economies; and calculating PPPs for the participating economies.

The ICP Global Office at the World Bank then combined the results for the Asia and Pacific region with those for the other regions to provide a set of global comparisons for 146 economies. The ICP Global Office also made econometric estimates of PPPs for a number of missing economies, including 14 in the Asia and Pacific region. The Asian Development Bank has computed real GDP estimates for the Asia and Pacific region back to 2000 and from 2006, and will carry them forward using GDP price deflators until the next benchmark.

Money, Finance, and Prices

Money, Finance, and Prices looks at inflation and financial markets. In 2008, inflation, as measured by consumer price indexes, rose throughout the region. Rising world prices for food, energy, and raw materials, particularly in the first part of 2008 lay behind the rise in inflation.

Since 1995, prices in the stock markets in Hong Kong, China; Republic of Korea; and Singapore show similar movements and no great volatility but stock markets in India and especially, the PRC, have moved much more sharply ending in a speculative boom in 2007 followed by a dramatic collapse in prices in 2008.

As explained in Box 1, PPPs are currency converters that have been calculated in such a way as to eliminate differences between economies in their price levels. Exchange rates are also currency converters but they have not been corrected for price level differences. Ratios of PPPs to exchange rates therefore measure the differences in price levels between economies. These ratios are called indexes of price levels. They identify economies where price levels are particularly high or low.

Globalization

Globalization gives statistics on key aspects of globalization in the Asia and Pacific region. Chief among these is the expansion of trade with countries in other regions and within the region itself. Globalization, however, is not confined to trade in goods and services. It also involves international movements of labor and capital.

Data on remittances by migrant workers and compensation of employees temporarily working abroad, which are an important source of income for many Asian economies, are also presented.

Capital moves between countries in several ways: as official development aid from richer countries, as foreign direct investment (FDI), and as short-term capital movements. Official development aid to the region is important for the Pacific economies and some of the poorer economies in other parts of Asia. Elsewhere, however, FDI is a major source of investment funds. In addition to generating employment, FDI is particularly important because it is often accompanied by transfer of technology and managerial know-how.

This theme also includes tables on the size of external debt and its importance relative to GNI and to exports of goods, services, and income.

Infrastructure

Infrastructure covers both road and rail transportation, communications, and household electrification. The PRC and India dominate both the rail and road networks in the region. A "digital divide" can be observed in the case of fixed broadband internet subscription, with very low numbers of fixed broadband internet subscribers (per 100 population) in most economies of the region. There is some overlap between this theme and Millennium Development Goal 8: *Develop a global partnership for development*, as one of the targets under Goal 8 is to make available to people the benefits of new technologies, especially communications and information.

Government and Governance

Government and Governance has several indicators. The government indicators cover the traditional role of government as tax collector and provider of defense, law and order, and social services.

Governments also play an important role in determining the "business environment." Does government encourage new entrepreneurs, or does it make it difficult to start new business ventures? How many days does it take to register a new enterprise and what are the costs involved? Some countries make it quick and inexpensive to establish a new business, while others have time-consuming and costly procedures. Those in the latter category are generally countries with lower per capita GDP. Governments can also encourage private business by ensuring that their officials do not abuse their position by demanding "special favors" before they issue licenses or process applications in a timely fashion. "Corruption" is difficult to measure objectively but through surveys, panels of knowledgeable business people can provide broad indications of which countries are more or less corrupt. Again, there are wide differences in perception of corruption between the economies of the Asia and Pacific region. Some are considered to be among the least corrupt, while others are among the worst when ranked against the 180 economies covered by the latest survey by Transparency International.

Energy and Environment

Energy and Environment brings together indicators on the production of energy as well as indicators related to the environment such as land use, air and water pollution, and forest resources.

The PRC is the largest energy producer in the region followed by India, Indonesia, and Australia. The different forms of energy can be converted to standard units, which can then be divided into GDP (PPP) to compare "energy productivity" in each economy. Energy productivity differs widely across the region but there is some evidence that the less productive economies have improved in recent years.

The Asia and Pacific region plays a key role in environmental issues because of its large population. Climate change would sharply accelerate if the region's per capita output of greenhouse gases were to approach that of Europe and North America. Another reason for Asia's importance in environmental issues is that the countries of South and Southeast Asia contain many of the world's remaining rain forests. These are threatened by both commercial logging and land clearance. There is some overlap between this theme and Millennium Development Goal 7: *Ensure environmental stability*, which seeks to integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

Selected References

Asian Development Bank. 2007. *2005 International Comparison Program for Asia and the Pacific: Purchasing Power Parities and Real Expenditures*. Manila. Available: www.adb.org/statistics/icp/icp.asp.

Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank. 1993. *System of National Accounts 1993*. Brussels/Luxembourg, New York, Paris, Washington, DC.

International Monetary Fund. 1993. *Balance of Payments Manual*, Fifth Edition. Washington, DC. Available: www.imf.org/external/np/sta/bop/bopman.pdf.

Menon, J., and A. Melendez-Nakamura. 2009. Aging in Asia: Trends, Impacts and Responses. ADB Working Paper Series on Regional Economic Integration No. 25, Office of Regional Economic Integration, Asian Development Bank, Manila. Available: aric.adb.org/pdf/workingpaper/WP25_Aging_in_Asia.pdf.

Organisation for Economic Co-operation and Development. 2007. *OECD Factbook 2007*. Paris.

Park, D. 2009. Ageing Asia's Looming Pension Crisis. ADB Economics Working Paper Series No 165. Asian Development Bank, Manila. Available: http://www.adb.org/Documents/Working-Papers/2009/Economics-WP165.pdf.

World Bank. 2008a. *Global Purchasing Power Parities and Real Expenditures, 2005 International Comparison Program*. Washington, DC. Available: siteresources.worldbank.org/ICPINT/Resources/icp-final.pdf.

——. 2009a. *World Development Indicators 2009*. Washington, DC.

——. 2009b. *Migration and Development Brief 10*. Washington, DC.

People

The People's Republic of China (PRC) and India account for 37% of the world's **population** and the Asia and Pacific region as a whole accounts for about 56%. Population **aging** is emerging as a problem in several countries. Economies with high **net outward migration** are predominantly Pacific economies. **HIV adult prevalence rates** are especially high in Papua New Guinea and five Southeast Asian countries. Well over half of the economies in the region are in the lower half of the global ranking in the **Human Development Index.** In almost all countries, **life expectancy at birth** has been rising since 1990 and very large gains have been recorded by some of the poorest countries.

Introduction

This **people** theme looks at the demography of the Asia and Pacific region—the size and growth of the population and its breakdown by age. Net migration is now a major factor in the growth of populations and its geographical distribution.

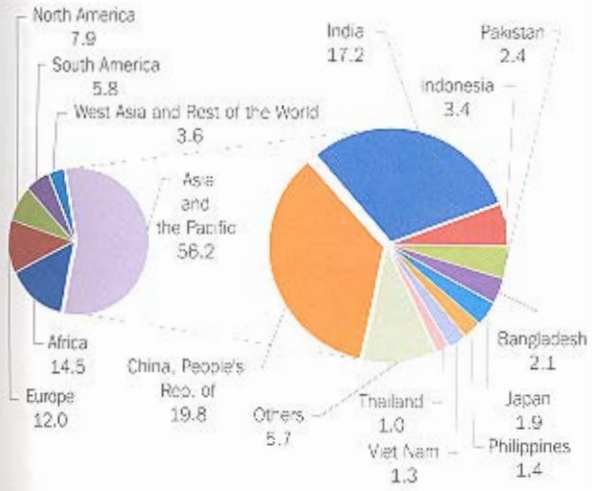
The theme likewise analyzes labor force issues—labor force participation rate, unemployment, and industry distribution of employment. This leads on to consideration of poverty and income distribution.

Finally, a number of social indicators are included in the tables—birth rates, death rates, fertility rates, life expectancy, number of adults living with HIV, and statistics on resources devoted to health and education services are presented.

Key Trends

Over half of the world's population lives in the Asia and Pacific region. Figure 1.1 shows that the Asia and Pacific region (comprising the 48 regional members of ADB) accounts for about 56% of the world's total population. The PRC and India together account for two thirds of the region's population and for 37% of the world's total population.

Figure 1.1 **Percentage Distribution of World Population, 2008**

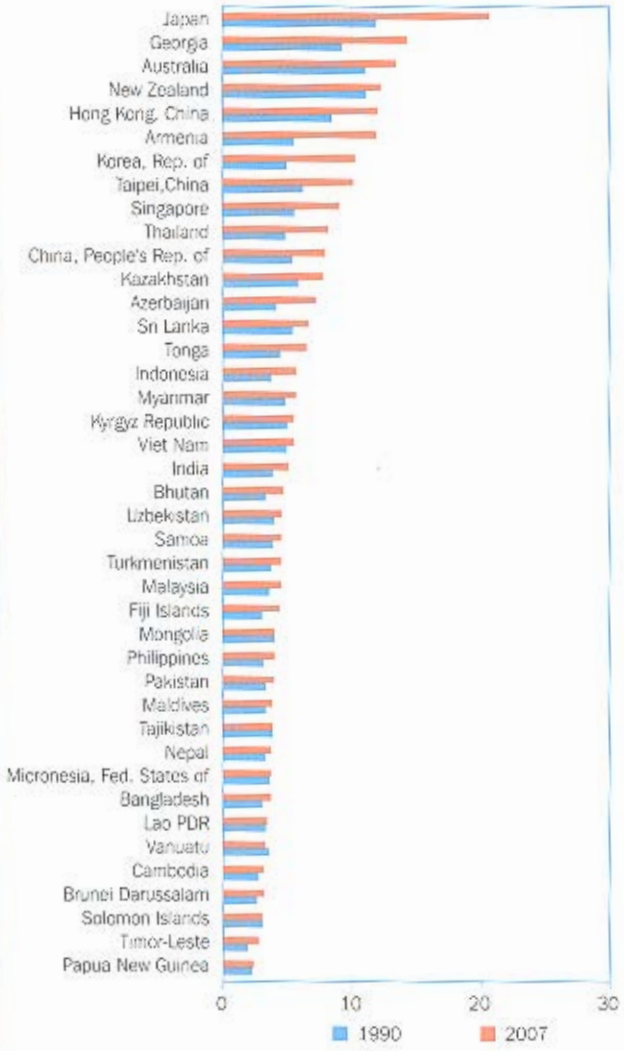


Source: Derived from Table 1.1 and International Data Base (US Census Bureau 2009).

Population aging is becoming a problem in several countries in the Asia and Pacific region. Figure 1.2 shows the percentage of the population aged 65 years or over in 1990 and 2007. A high percentage of the population over 65 years causes problems of "aging". With fewer persons of working age supporting a growing number of retirees, pension funds may become exhausted and health and social welfare systems come under strain. In addition, elderly people are usually dis-savers, hence, national savings ratios may fall and lead to lower investment.

With more than 20% of its population aged 65 years or more, Japan is already experiencing problems of aging, and in a number of economies such as Armenia; Georgia; Hong Kong, China; Republic of Korea; and Taipei,China, the proportions of the population 65 years or over have grown from below 10% in 1990 to above 10% in 2007. While these proportions are still relatively low in most cases, two recent ADB working papers have warned against complacency. United Nations population projections show that by 2025 the 65+ years age group will exceed 15% of the population in Armenia; Georgia; Hong Kong, China; Republic of Korea; and Singapore. Projections to 2050 suggest that the 65+ years age group will by then exceed 15% in a further nine countries—Azerbaijan, PRC, Indonesia, Malaysia, Mongolia, Myanmar, Sri Lanka, Thailand, and Viet Nam.

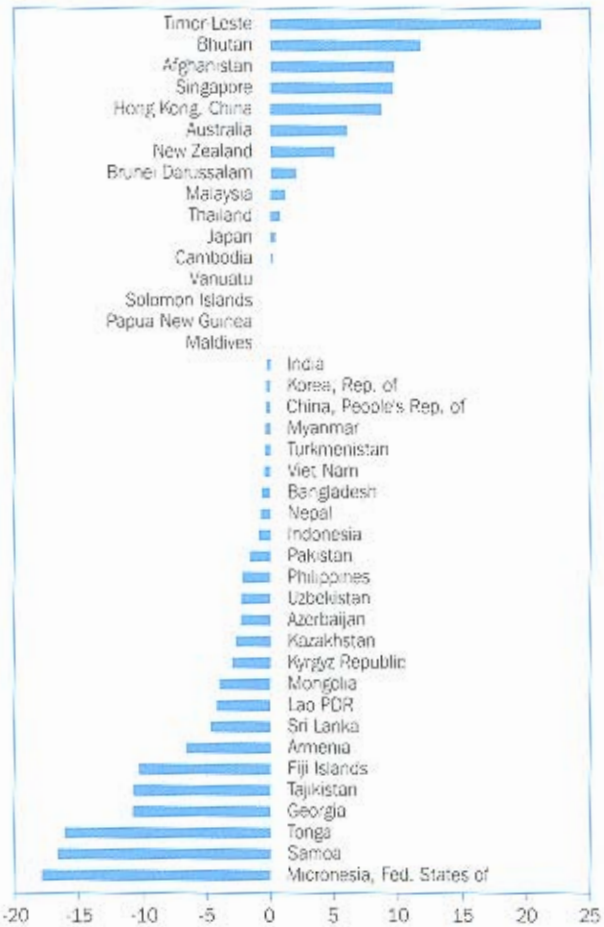
Figure 1.2 **Population Aged 65 Years and Over, 1990 and 2007**
(percent of total population)



Source: Table 1.6.

International migration—some gainers but more losers. Net migration rates are shown in Figure 1.3. Bars on the right indicate net inward migration and bars on the left represent net outward migration. Seven economies report annual net gains from migration of over five per 1,000 population during the 2000–2005 period: Afghanistan; Australia; Bhutan; Hong Kong, China; New Zealand; Singapore; and Timor-Leste. Economies with high net outward migration are predominantly Pacific economies. Federated States of Micronesia, Samoa, and Tonga had average annual net outward migration of over 15 per 1,000 inhabitants.

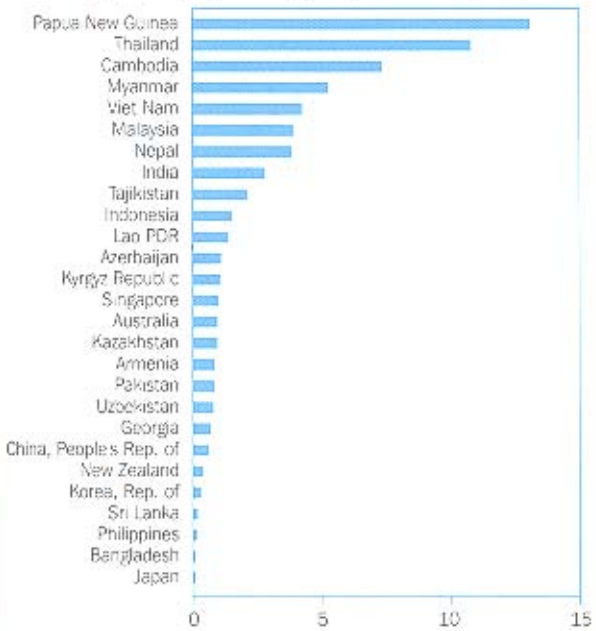
Figure 1.3 **Net Migration Rate, 2000–2005**
(per 1,000 population)



Source: Table 1.3.

The prevalence rate of adults living with HIV is particularly high in six countries. Figure 1.4 shows the number of adults living with HIV per thousand population aged 15 years and above. Rates are particularly high in Papua New Guinea and in five countries of Southeast Asia—Cambodia, Malaysia, Myanmar, Thailand, and Viet Nam. Among the five most populous countries, India has the highest rate with about three per thousand, Indonesia is next with 1.7 per thousand, while Bangladesh, PRC, and Pakistan all report less than one.

Figure 1.4 **Adults Living with HIV, 2007**
(per 1,000 population aged 15 years and over)



Sources: Derived from Tables 1.1, 1.4, and 1.22.

There is room for improvement in the quality of life. The overall quality of life in each country is measured by the Human Development Index (HDI) of the United Nations Development Programme (UNDP). This is an index constructed by combining proxies for three important aspects of human welfare: health, education, and a decent standard of living. Health is represented by life expectancy, education by literacy and school enrollment, and standard of living by GDP per capita.

UNDP currently calculates the HDI for 179 economies and publishes an annual ranking. The latest (2006) is shown in Box 1.1. Seven of the 39 economies in the region for which the HDI is available are in the top quarter of the global league table but 27, well over half, are ranked in the lower half. These include the five most populous countries—PRC (94), followed by Indonesia (109), India (132), Pakistan (139), and Bangladesh (147). Their low rankings are chiefly attributable to low per capita GDP although in some cases low life expectancies are also a factor.

Box 1.1 **Asia and the Pacific Economies Ranked by the Human Development Index, 2006**
(Out of 179 Economies)

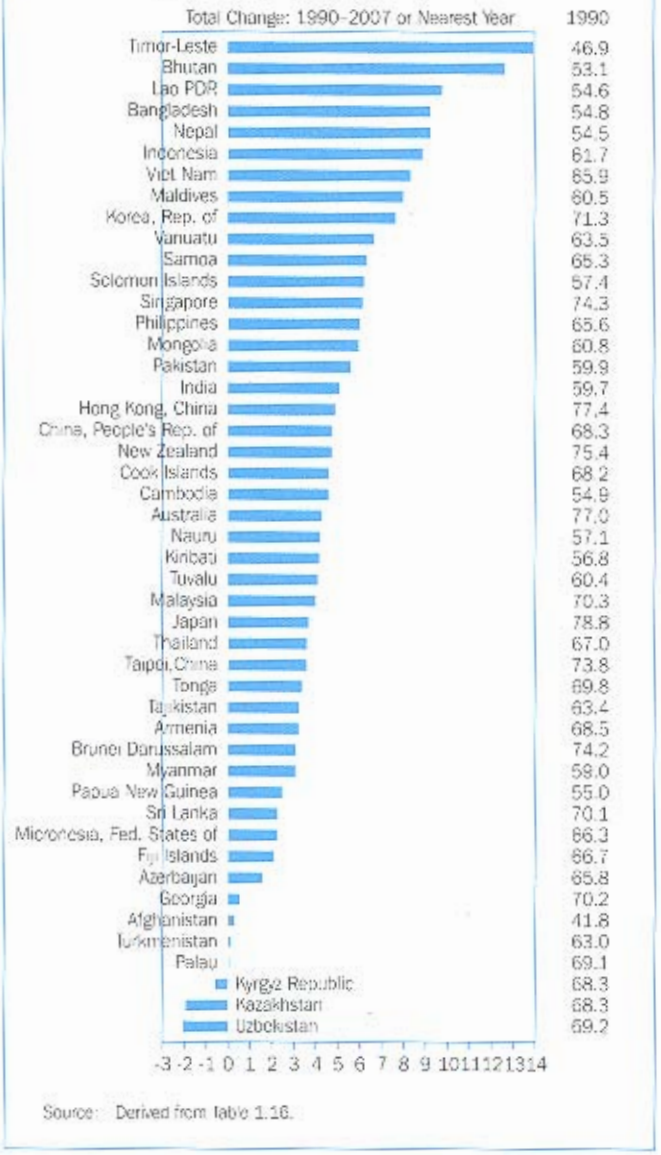
Australia	4	Turkmenistan	109
Japan	8	Indonesia	109
New Zealand	20	Mongolia	112
Hong Kong, China	22	Viet Nam	114
Korea, Rep. of	25	Uzbekistan	119
Brunei Darussalam	27	Kyrgyz Republic	122
Singapore	28	Vanuatu	123
Malaysia	63	Tajikistan	124
Kazakhstan	71	Bhutan	132
Thailand	81	India	132
Armenia	83	Lao PDR	133
Tonga	85	Solomon Islands	134
Georgia	93	Myanmar	135
China, People's Rep. of	94	Cambodia	136
Samoa	96	Pakistan	139
Azerbaijan	97	Nepal	145
Maldives	99	Bangladesh	147
Philippines	102	Papua New Guinea	149
Fiji Islands	103	Timor-Leste	158
Sri Lanka	104		

Source: Table 1.15.

Good gains in life expectancy have been achieved in many countries. Table 1.16 shows life expectancy at birth. In 2007, for both genders together, these ranged from over 80 years in Australia; Hong Kong, China; Japan; New Zealand; and Singapore to under 60 years in Afghanistan, Cambodia, and Papua New Guinea. Long life expectancy is associated with low rates of infant mortality. For this reason, life expectancy is often used as an indicator of the efficiency of a country's health care system. In countries with good ante- and post-natal health care and wide coverage of immunization programs, life expectancies are generally high.

Figure 1.5 shows the increase in life expectancy at birth from 1990 to 2007 (in a few cases data are only available up to 2005 or 2006). Increases of 9 years or more were recorded by five relatively poor economies, Bangladesh, Bhutan, Lao People's Democratic Republic, Nepal, and Timor-Leste. These economies all started with rather low life expectancy in 1990; economies where life expectancy was already high in 1990—such as Australia; Hong Kong, China; Japan; New Zealand; and Singapore—recorded lower gains over the period. At the other end of the scale, gains of less than 1 year or actual declines are shown for Afghanistan, Georgia, Kazakhstan, Kyrgyz Republic, Palau, Uzbekistan, and Turkmenistan. Five of these were members of the former Soviet Union and life expectancies in these economies suffered from deterioration in health services following the collapse of the Soviet Union and, in some cases, a rise in destructive lifestyles associated with alcohol and tobacco consumption.

Figure 1.5 **Life Expectancy at Birth (Years)**



Source: Derived from table 1.16.

Data Issues and Comparability

Demographic data are either based on vital registration records or on censuses and surveys. In many of the developing countries of the region, vital registration records are incomplete and cannot be used for statistical purposes. Population censuses are conducted every 10 years in most countries, and United Nations agencies provide technical assistance where it is required. Census data are generally reliable and comparable among countries, but estimates for intercensal years are generally less reliable and may be based on household surveys, partial registration records, or obtained by statistical interpolation.

The statistics on the numbers of people living with HIV are estimates based on methods and on parameters developed by the UNAIDS Reference Group on HIV/AIDS Estimates, Modelling and Projections. The estimates are presented together with ranges, called "plausibility bounds"; the wider the bounds, the greater the uncertainty surrounding an estimate.

Table 1.1 Mid-year population (million) [a]

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia	**213.1**	**216.8**	**220.6**	**224.5**	**228.5**	**232.7**	**236.5**	**240.7**	**245.0**	**249.6**	**253.8**	**258.1**	**262.3**	**266.6**
Afghanistan	19.4	19.7	20.1	20.5	20.9	21.3	21.7	22.1	22.5	23.2	23.6	24.1	24.5	25.0
Armenia	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Azerbaijan	7.7	7.8	7.8	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.4	8.5	8.6	8.7
Georgia	4.8	4.7	4.6	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.4	4.4	4.4
Kazakhstan	15.8	15.6	15.3	15.1	14.9	14.9	14.9	14.9	14.9	15.0	15.1	15.3	15.5	15.7
Kyrgyz Republic	4.6	4.6	4.7	4.8	4.8	4.9	4.9	5.0	5.0	5.1	5.1	5.2	5.2	5.3
Pakistan	124.5	127.5	130.6	133.6	136.6	139.8	142.4	145.3	148.2	151.1	154.0	156.8	159.6	162.4
Tajikistan	5.7	5.7	5.8	5.9	6.1	6.2	6.3	6.4	6.6	6.7	6.9	7.0	7.1	7.3
Turkmenistan	4.5	4.6	4.8	4.9	5.1	5.3	5.5	5.8	6.1	6.5	6.6	6.7	6.8	6.9
Uzbekistan	22.9	23.3	23.7	24.0	24.4	24.7	25.1	25.5	25.8	26.2	26.6	27.0	27.4	27.8
East Asia	**1286.0**	**1299.6**	**1312.7**	**1324.6**	**1335.5**	**1345.7**	**1355.1**	**1363.8**	**1371.9**	**1379.9**	**1387.8**	**1395.0**	**1402.2**	**1409.3**
China, People's Rep. of	1211.2	1223.9	1236.3	1247.6	1257.9	1267.4	1276.3	1284.5	1292.3	1299.9	1307.6	1314.5	1321.3	1328.0
Hong Kong, China	6.2	6.4	6.5	6.5	6.6	6.7	6.7	6.7	6.7	6.8	6.8	6.9	6.9	7.0
Korea, Rep. of	45.1	45.5	46.0	46.3	46.6	47.0	47.4	47.6	47.9	48.0	48.1	48.3	48.5	48.6
Mongolia	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.7
Taipei,China	21.3	21.4	21.6	21.8	22.0	22.2	22.3	22.5	22.6	22.6	22.7	22.8	22.9	23.0
South Asia	**1079.9**	**1101.6**	**1122.2**	**1143.8**	**1165.4**	**1186.0**	**1207.7**	**1226.2**	**1245.8**	**1265.3**	**1283.9**	**1303.5**	**1322.0**	**1340.6**
Bangladesh	118.8	120.8	122.6	124.5	126.3	128.1	129.9	131.8	133.4	135.2	137.0	138.8	140.6	142.4
Bhutan	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
India	923.0	942.0	960.0	979.0	998.0	1016.0	1035.0	1051.0	1068.0	1085.0	1101.0	1118.0	1134.0	1150.0
Maldives	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nepal	20.1	20.5	21.0	21.5	22.0	22.6	23.2	23.7	24.2	24.7	25.3	25.9	26.4	27.0
Sri Lanka	17.3	17.5	17.7	17.9	18.2	18.5	18.7	19.0	19.3	19.5	19.7	19.9	20.0	20.2
Southeast Asia	**478.5**	**486.3**	**494.2**	**503.0**	**510.7**	**517.9**	**525.8**	**533.8**	**541.8**	**549.7**	**557.9**	**566.0**	**574.2**	**583.1**
Brunei Darussalam [b]	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Cambodia	10.5	11.0	11.6	12.1	12.4	12.6	12.8	13.1	13.3	13.3	13.5	13.6	13.8	14.0
Indonesia	194.8	197.0	199.3	201.6	203.9	205.8	208.6	211.4	214.3	217.1	219.9	222.7	225.6	228.5
Lao PDR	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.9	6.0
Malaysia	20.7	21.2	21.8	22.3	22.9	23.5	24.0	24.5	25.1	25.6	26.1	26.6	27.2	27.7
Myanmar	44.7	45.6	46.4	48.2	49.1	50.1	51.1	52.2	53.2	54.3	55.4	56.5	57.5	58.8
Philippines	68.4	70.0	71.6	73.3	75.0	76.9	78.5	80.2	81.9	83.6	85.3	87.0	88.7	90.5
Singapore	3.5	3.7	3.8	3.9	4.0	4.0	4.1	4.2	4.1	4.2	4.3	4.4	4.6	4.8
Thailand	59.4	60.0	60.6	61.2	61.8	62.2	62.7	63.1	63.7	64.2	64.8	65.2	65.8	66.5
Viet Nam	72.0	73.2	74.3	75.5	76.6	77.6	78.7	79.7	80.9	82.0	83.1	84.1	85.2	86.2
The Pacific	**6.8**	**6.9**	**7.0**	**7.1**	**7.0**	**8.0**	**8.1**	**8.4**	**8.6**	**8.8**	**9.0**	**9.3**	**9.5**	**9.7**
Cook Islands	19.4	20.0	18.2	17.3	16.4	17.9	18.1	18.4	18.4	20.3	20.2	20.8	21.1	21.2
Fiji Islands	768.0	775.1	787.7	794.6	801.9	807.2	810.0	811.5	816.4	821.6	825.1	829.5	833.9	838.0
Kiribati	77.7	79.1	80.5	81.9	83.4	84.5	85.9	87.4	88.9	90.4	92.5	94.2	96.1	98.0
Marshall Islands	48.0	48.7	49.3	50.0	50.8	50.7	50.6	50.4	51.0	51.5	52.1	52.7	53.3	53.9
Micronesia, Fed. States of	105.8	106.0	106.3	106.5	106.8	107.0	107.3	107.5	107.6	107.8	107.9	108.0	108.0	108.0
Nauru	10.0	10.0	10.0	10.0	10.0	10.0	10.1	10.1	10.1	10.4	10.5	9.1	9.2	9.2
Palau	17.2	17.6	18.1	18.5	18.9	19.1	19.3	19.4	19.6	19.7	19.9	20.0	20.2	20.3
Papua New Guinea	4080.0	4160.0	4240.0	4320.0	4360.0	5190.0	5340.0	5520.0	5620.0	5770.0	5930.0	6100.0	6300.0	6458.0
Samoa	167.3	168.8	170.4	171.9	173.5	175.1	176.7	177.2	177.7	178.2	178.7	179.2	180.0	180.8
Solomon Islands	353.2	366.1	379.9	394.2	409.0	420.5	432.3	444.4	456.8	469.6	482.8	496.3	510.2	524.0
Timor-Leste	832.0	871.0	881.0	890.0	715.0	779.0	787.0	886.0	904.0	952.0	983.0	1015.0	1047.6	1081.0
Tonga	97.5	97.8	98.2	98.6	99.0	99.4	99.9	100.3	100.7	101.1	101.6	102.0	102.4	102.8
Tuvalu	9.2	9.3	9.3	9.4	9.4	9.5	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9
Vanuatu	168.4	172.9	177.4	182.0	186.7	191.7	196.9	202.2	206.9	212.3	217.8	223.5	229.4	235.4
Developed Member Countries	**147.2**	**147.8**	**148.4**	**148.9**	**149.4**	**149.9**	**150.4**	**151.0**	**151.6**	**152.0**	**152.3**	**152.6**	**153.0**	**153.3**
Australia	18.1	18.3	18.5	18.7	18.9	19.2	19.4	19.7	19.9	20.1	20.4	20.7	21.0	21.4
Japan	125.5	125.8	126.1	126.4	126.6	126.8	127.1	127.4	127.7	127.8	127.8	127.8	127.8	127.7
New Zealand	3.7	3.7	3.8	3.8	3.8	3.9	3.9	3.9	4.0	4.1	4.1	4.2	4.2	4.2
TOTAL DMCs	**3064.3**	**3111.2**	**3156.7**	**3203.0**	**3247.1**	**3290.3**	**3333.2**	**3372.9**	**3413.0**	**3453.4**	**3492.4**	**3531.9**	**3570.2**	**3609.3**
TOTAL REGIONAL MEMBERS	**3211.8**	**3259.3**	**3305.3**	**3352.3**	**3396.8**	**3440.5**	**3484.0**	**3524.3**	**3565.0**	**3605.7**	**3645.1**	**3685.0**	**3723.7**	**3763.1**
WORLD	**5693.8**	**5774.3**	**5853.9**	**5932.3**	**6009.7**	**6086.0**	**6162.5**	**6238.2**	**6312.8**	**6387.5**	**6462.2**	**6538.0**	**6614.8**	**6691.3**

a Except for Pacific developing member countries where units are in thousands.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, International Data Base (US Census Bureau 2009).

Population

Table 1.2 Growth rates in population
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.0	1.6	2.1	1.7	2.0
Armenia	...	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.1	-0.0	0.1	0.1	0.1	0.2	0.2
Azerbaijan	1.2	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.8	0.9	1.0	1.1	1.1	1.1
Georgia	-2.8	-2.5	-2.5	-1.2	-0.8	-0.8	-0.8	0.7	-0.7	-0.6	0.1	1.8	-0.1	0.3
Kazakhstan	-2.0	-1.5	-1.6	-1.7	-1.0	-0.3	-0.2	0.0	0.3	0.6	0.9	1.1	1.1	1.2
Kyrgyz Republic	1.0	1.5	1.5	1.6	1.4	1.1	0.8	0.8	0.9	1.1	0.9	1.0	0.7	1.0
Pakistan	2.5	2.4	2.4	2.3	2.3	2.3	1.9	2.1	2.0	1.9	1.9	1.8	1.8	1.7
Tajikistan	1.1	1.2	1.5	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2
Turkmenistan	3.0	2.5	2.8	3.0	3.6	3.7	4.2	5.1	5.7	6.2	1.4	1.3	1.3	2.5
Uzbekistan	2.0	1.8	1.6	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5
East Asia														
China, People's Rep. of	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5
Hong Kong, China	2.0	4.5	0.8	0.8	1.0	0.9	0.7	0.4	-0.2	0.8	0.4	0.6	1.0	0.7
Korea, Rep. of	1.0	1.0	0.9	0.7	0.7	0.8	0.7	0.6	0.5	0.4	0.2	0.3	0.3	0.3
Mongolia	1.4	1.8	1.5	1.1	1.3	1.7	1.2	1.6	0.8	1.2	1.2	1.2	1.9	1.5
Taipei,China	0.9	0.8	0.9	0.9	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4
South Asia														
Bangladesh	1.6	1.7	1.5	1.5	1.4	1.4	1.4	1.3	1.4	1.3	1.3	1.3	1.3	1.3
Bhutan	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.9	1.9	1.9
India	2.0	2.1	1.9	2.0	1.9	1.8	1.9	1.5	1.6	1.6	1.5	1.5	1.4	1.4
Maldives	2.0	2.1	2.2	2.2	1.9	1.5	2.2	1.7	1.6	1.5	1.5	1.8	2.0	1.5
Nepal	1.0	2.4	2.4	2.4	2.4	2.4	2.6	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Sri Lanka	1.1	1.2	1.2	1.3	1.5	1.4	1.4	1.5	1.3	1.1	1.1	1.1	0.6	0.9
Southeast Asia														
Brunei Darussalam [a]	4.0	3.1	1.1	2.6	2.4	2.5	2.5	3.4	1.6	2.9	2.9	3.5	1.8	2.1
Cambodia	5.2	5.4	5.5	4.2	1.8	1.8	1.8	2.4	1.7	-0.3	1.3	1.3	1.3	1.3
Indonesia	1.7	1.2	1.2	1.2	1.2	0.9	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Lao PDR	-0.3	1.8	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	1.8	2.2	2.1	2.2
Malaysia	2.8	2.4	2.8	2.6	2.6	2.5	2.2	2.2	2.1	2.1	2.2	2.0	2.0	2.1
Myanmar	1.9	1.9	1.8	3.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.7	2.3
Philippines	2.3	2.3	2.3	2.3	2.3	2.5	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
Singapore	3.1	4.1	3.4	3.5	0.8	1.7	2.7	0.9	0.2	1.3	2.4	3.2	4.3	5.5
Thailand	1.2	1.0	1.0	1.0	1.0	0.7	0.7	0.8	0.8	0.9	0.9	0.7	0.8	1.1
Viet Nam	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.5	1.4	1.3	1.2	1.2	1.2
The Pacific														
Cook Islands	-0.5	3.1	-9.0	-4.9	-5.2	9.1	1.1	1.7	0.0	10.3	-0.5	3.0	1.4	0.5
Fiji Islands	1.2	0.9	1.6	0.9	0.9	0.7	0.3	0.2	0.6	0.6	0.4	0.5	0.5	0.5
Kiribati	1.5	1.8	1.8	1.8	1.8	1.3	1.7	1.7	1.7	1.7	-2.4	1.8	2.0	2.0
Marshall Islands	1.5	1.5	1.2	1.5	1.5	-0.1	-0.3	-0.3	1.1	1.1	1.1	1.1	1.2	1.1
Micronesia, Fed. States of	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	-0.0
Nauru	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	3.2	1.1	13.5	0.7	0.6
Palau	2.7	2.1	2.6	2.4	2.1	1.3	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.4
Papua New Guinea	2.0	2.0	1.9	1.9	0.9	19.0	2.9	3.4	1.8	2.7	2.8	2.9	3.3	2.5
Samoa	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.3	0.3	0.3	0.3	0.3	0.5	0.5
Solomon Islands	3.8	3.7	3.8	3.8	3.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7
Timor-Leste	1.7	4.7	1.1	1.0	13.7	9.0	1.0	12.6	2.0	5.3	3.3	3.3	3.2	3.2
Tonga	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Tuvalu	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Vanuatu	2.6	2.7	2.6	2.6	2.6	2.7	2.7	2.7	2.3	2.6	2.6	2.6	2.6	2.6
Developed Member Countries														
Australia	1.2	1.3	1.1	1.0	1.1	1.2	1.4	1.2	1.2	1.2	1.3	1.5	1.5	1.7
Japan	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.0	-0.0	0.0	-0.1
New Zealand	1.5	1.6	1.3	0.9	0.5	0.6	0.6	1.8	2.0	1.5	1.1	1.2	1.0	0.4
TOTAL DMCs	1.6	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.1
TOTAL REGIONAL MEMBERS	1.6	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1
WORLD	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: ADB staff estimates based on country sources and International Data Base (US Census Bureau 2009) data.

Table 1.3 **Migration and urbanization**

	Net International Migration Rate [a] (per 1,000 population)				Urban Population (as percent of total population)			
	1985–1990	1990–1995	1995–2000	2000–2005	1990	1995	2000	2008
Developing Member Countries								
Central and West Asia								
Afghanistan	23.1	42.9	-4.1	9.7	16.7	18.1	19.8	21.2
Armenia	-4.0	-29.5	-14.3	-6.6	...	66.3	64.8	64.1
Azerbaijan	-4.4	-3.1	-3.2	-2.4	53.7	52.3	50.9	51.8
Georgia	-2.4	-21.3	14.4	-10.8	...	52.9 (1997)	52.0	52.6
Kazakhstan	-7.4	-18.6	-17.1	2.7	57.2 (1991)	55.7	56.3	53.0
Kyrgyz Republic	-7.4	-12.2	-1.1	-3.0	37.6	35.6	34.7	34.7
Pakistan	1.4	-4.3	-0.1	-1.6	30.8 (1991)	33.7	33.0	35.3
Tajikistan	-3.4	-11.3	-11.6	-10.8	31.3	27.4	26.6	26.3
Turkmenistan	-2.0	2.5	-2.3	-0.4	45.1	45.3	45.8	48.2 (2007)
Uzbekistan	-4.7	-3.1	-3.4	-2.3	40.3	38.3	37.2	36.7 (2006)
East Asia								
China, People's Rep. of	-0.1	-0.2	-0.2	-0.3	26.4	29.0	36.2	45.7
Hong Kong, China	0.9	10.1	9.3	8.7	99.5	100.0	100.0	100.0 (2007)
Korea, Rep. of	-0.9	-0.5	-0.3	-0.3	73.8	78.2	79.6	81.2 (2007)
Mongolia	3.2	-5.2	-7.4	-4.0	54.6	51.6	57.2	61.8
Taipei,China [b]	...	...	...	...	50.6	53.1	55.8	58.6
South Asia								
Bangladesh	-0.2	-0.4	-0.5	-0.7	...	...	23.4 (2001)	25.4
Bhutan	0.6	-38.3	0.1	11.7	...	21.0 (1996)	21.0	30.9 (2005)
India	-0.1	-0.2	-0.3	-0.2	25.6	26.6	27.7	29.4
Maldives	0.2	...	...	...	26.0	25.6	27.0	35.0 (2006)
Nepal	-1.6	-1.0	-0.9	-0.8	8.9	10.9	13.4	16.8 (2007)
Sri Lanka	-1.7	-2.9	-4.3	-4.7	17.2	16.4	15.7	15.1 (2006)
Southeast Asia								
Brunei Darussalam [c]	4.7	2.6	2.2	2.0	65.8	68.6	71.1	74.4 (2007)
Cambodia	3.4	2.8	1.3	0.2	...	14.8 (1998)	16.0 (2001)	17.9
Indonesia	-0.5	-0.8	-0.9	-0.9	30.9	35.9	42.1	43.1 (2005)
Lao PDR	0.0	-1.4	-3.5	-4.2	15.4	17.4	22.0	29.7 (2007)
Malaysia	1.8	3.0	4.5	1.2	51.1 (1991)	54.7	62.0	63.5
Myanmar	-0.7	-0.6	0.0	-0.4	24.9	26.1	28.0	31.9 (2007)
Philippines	-2.6	-2.8	-2.5	-2.2	48.8	54.0	58.5	64.2 (2007)
Singapore	9.7	15.4	19.6	9.6	100.0	100.0	100.0	100.0
Thailand	0.0	0.6	1.7	0.7	18.0	18.0	19.0	33.8
Viet Nam	-0.8	-0.7	-0.5	-0.5	19.5	20.7	24.2	28.1
The Pacific								
Cook Islands	...	...	...	...	58.5 (1991)	58.8 (1996)	67.6 (2001)	70.2 (2003)
Fiji Islands	-19.5	-9.3	-10.7	-10.3	41.6	45.5	48.3	50.7
Kiribati	...	...	...	...	35.1	36.5	43.5	43.6 (2005)
Marshall Islands	...	...	...	...	65.1	66.7	68.4	70.7 (2007)
Micronesia, Fed. States of	-5.4	-4.4	-25.4	-17.9	25.8	25.1	22.3	22.5 (2007)
Nauru	...	...	...	...	100.0	100.0	100.0	100.0 (2005)
Palau [d]	...	...	...	...	69.4	71.4	69.5	77.4 (2005)
Papua New Guinea	...	...	...	...	15.0	14.1	13.2	12.6 (2007)
Samoa	-25.2	-15.8	-16.2	-16.6	21.2	21.5	21.9	22.8 (2007)
Solomon Islands	...	...	...	...	13.7	14.7	15.7	17.6 (2007)
Timor-Leste	0.4	...	-40.8	21.2	20.8	22.5	24.3	26.9 (2007)
Tonga	-20.4	-18.0	-19.5	-16.1	22.7	22.9	23.2	24.5 (2007)
Tuvalu	...	...	...	...	40.7	44.0	46.0	48.1 (2005)
Vanuatu	-4.6	-1.1	-7.9	...	18.7	20.2	21.7	24.3 (2007)
Developed Member Countries								
Australia	6.9	5.9	5.0	6.0	85.4	86.1	87.2	88.6 (2007)
Japan	0.3	0.4	0.4	0.4	63.1	64.6	65.2	66.3 (2007)
New Zealand	1.1	5.3	2.1	5.1	84.7	85.3	85.7	86.4 (2007)

a Refers to annual average.
b For urban population, refers to localities of 100,000 or more inhabitants.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
d For urban population, includes Koror and Airai States only. The US Census Bureau defines "Urban" as places with 2,500 persons or more.

Sources: Country sources, *Statistical Yearbook for Asia and the Pacific 2008* (United Nations ESCAP), World Development Indicators Online (World Bank 2009), World Urbanization Prospects: The 2007 Revision Population Database (United Nations Population Division).

Population

Table 1.4 **Population aged 0–14 years**
(as percent of total population)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan	44.1	...	...	...	...	...	43.5	...	43.0	43.0	43.0	46.0	46.0	47.0
Armenia	30.4	29.5	29.0	28.4	27.6	26.8	25.9	24.9	23.8	22.8	21.8	20.8	20.0	19.3
Azerbaijan	34.3	34.0	33.6	33.1	32.5	31.8	31.0	29.9	28.8	27.6	26.4	25.3	24.2	23.3
Georgia	24.6	23.6	23.3	22.9	22.5	22.1	21.6	21.1	20.5	20.0	19.4	18.9	18.4	17.8
Kazakhstan	31.5	29.8	29.4	29.0	28.7	28.2	27.6	27.0	26.2	25.4	24.8	24.2	23.9	23.7
Kyrgyz Republic	37.6	37.6	37.2	36.8	36.2	35.6	34.9	34.1	33.3	32.5	31.7	31.0	30.4	29.8
Pakistan	44.0	44.3	44.0	43.6	43.1	42.5	41.8	40.9	40.0	39.0	38.0	37.2	36.4	35.7
Tajikistan	43.2	43.7	43.6	43.4	43.2	42.8	42.4	41.9	41.3	40.7	40.0	39.4	38.7	38.0
Turkmenistan	40.5	39.5	39.0	38.4	37.8	37.0	36.2	35.3	34.4	33.5	32.7	31.8	30.9	30.1
Uzbekistan	40.9	40.4	39.9	39.4	38.7	38.0	37.2	36.5	35.8	34.8	34.0	33.2	32.4	31.6
East Asia														
China, People's Rep. of	27.7	26.6	26.4	26.1	25.8	25.4	24.9	24.3	23.7	22.9	22.2	21.6	21.1	20.6
Hong Kong, China	21.5	19.4	18.9	18.4	17.8	17.3	16.9	16.5	16.1	15.8	15.5	15.1	14.8	14.4
Korea, Rep. of	25.8	23.4	22.9	22.4	21.8	21.3	20.8	20.4	20.0	19.6	19.1	18.6	18.1	17.6
Mongolia	41.7	38.9	38.2	37.3	36.5	35.5	34.5	33.3	32.2	31.0	29.9	28.9	28.0	27.1
Taipei,China	27.1	23.8	23.1	22.6	22.0	21.4	21.1	20.8	20.4	19.8	19.3	18.7	18.1	17.6
South Asia														
Bangladesh	40.7	39.6	39.2	38.7	38.2	37.7	37.2	36.8	36.4	36.0	35.6	35.2	34.7	34.2
Bhutan	42.6	43.6	43.4	42.9	42.2	41.3	40.2	38.9	37.4	35.9	34.4	33.0	31.7	30.6
India	37.8	36.6	36.4	36.0	35.7	35.3	35.0	34.6	34.2	33.8	33.4	33.0	32.5	32.1
Maldives	46.5	45.3	44.5	43.7	42.6	41.5	40.3	39.1	37.8	36.4	35.2	34.0	32.9	32.0
Nepal	41.9	41.8	41.7	41.6	41.4	41.2	40.9	40.6	40.3	39.9	39.4	39.0	38.5	37.9
Sri Lanka	32.0	29.5	29.0	28.5	27.9	27.4	26.8	26.3	25.7	25.2	24.6	24.2	23.7	23.4
Southeast Asia														
Brunei Darussalam [a]	34.5	33.0	32.6	32.3	32.0	31.6	31.3	30.9	30.6	30.3	30.0	29.6	29.2	28.8
Cambodia	44.7	46.3	45.8	45.0	43.9	42.9	41.9	40.9	40.1	39.3	38.4	37.6	36.7	35.8
Indonesia	35.8	33.0	32.5	31.9	31.3	30.8	30.3	29.9	29.5	29.1	28.7	28.4	28.0	27.7
Lao PDR	44.7	44.6	44.5	44.3	44.1	43.8	43.4	42.8	42.2	41.4	40.6	39.8	38.9	38.1
Malaysia	37.4	36.1	35.6	35.1	34.5	34.0	33.5	33.0	32.6	32.2	31.8	31.4	31.0	30.5
Myanmar	35.6	33.1	32.5	32.0	31.4	30.8	30.2	29.6	29.0	28.4	27.8	27.3	26.7	26.3
Philippines	40.9	39.5	39.1	38.8	38.4	38.1	37.8	37.4	37.1	36.8	36.5	36.2	35.8	35.5
Singapore	21.5	22.3	22.3	22.3	22.2	22.0	21.8	21.5	21.1	20.7	20.2	19.5	18.8	18.0
Thailand	28.5	25.8	25.4	24.9	24.4	24.0	23.6	23.1	22.7	22.3	22.0	21.7	21.4	21.2
Viet Nam	38.9	37.0	36.4	35.8	35.1	34.3	33.5	32.8	32.0	31.2	30.4	29.6	28.9	28.1
The Pacific														
Cook Islands	36.9	...	...	...	...	...	34.1	34.1	35.0	28.0	28.0	34.0	30.0	31.0
Fiji Islands	37.9	35.7	35.3	35.0	34.6	34.3	34.1	33.8	33.6	33.4	33.2	32.9	32.6	32.2
Kiribati	40.3	...	...	...	...	...	41.2	39.0	38.7	40.0	38.0	38.0	39.0	36.0
Marshall Islands	51.0	...	...	...	...	...	41.6	41.6	44.0	43.0	41.0	40.0	38.0	38.0
Micronesia, Fed. States of	44.1	43.4	42.9	42.2	41.5	40.8	40.1	39.7	39.3	39.1	38.8	38.6	38.3	38.0
Nauru	41.8	...	...	...	...	...	39.0	39.0	39.0	39.0	38.0	39.0	39.0	39.0
Palau	30.3	...	...	...	...	...	23.8	23.8	23.8	27.0	24.0	24.0	26.0	26.0
Papua New Guinea	41.7	41.4	41.4	41.4	41.4	41.3	41.3	41.2	41.1	41.0	40.8	40.8	40.3	40.0
Samoa	40.9	39.3	39.4	39.8	40.2	40.6	40.9	41.0	41.1	41.1	41.0	40.8	40.5	40.1
Solomon Islands	45.3	43.6	43.3	43.0	42.6	42.3	42.0	41.7	41.4	41.1	40.8	40.5	40.1	39.7
Timor-Leste	39.9	41.7	43.1	45.0	47.0	48.6	49.4	49.2	48.2	46.9	45.8	45.0	44.7	44.6
Tonga	39.4	40.0	39.8	39.5	39.1	38.7	38.3	38.1	37.9	37.8	37.7	37.5	37.2	36.8
Tuvalu	34.7	...	...	...	...	...	33.3	33.3	34.0	34.0	36.0	36.0	36.0	34.0
Vanuatu	43.9	43.4	43.3	43.0	42.8	42.5	42.1	41.7	41.3	40.8	40.3	39.8	39.3	38.8
Developed Member Countries														
Australia	21.9	21.5	21.4	21.3	21.1	20.9	20.7	20.5	20.2	20.0	19.8	19.5	19.3	19.0
Japan	18.4	16.0	15.6	15.3	15.1	14.8	14.6	14.5	14.3	14.1	14.0	13.9	13.8	13.7
New Zealand	23.4	23.1	23.0	23.0	22.9	22.9	22.7	22.5	22.3	22.0	21.7	21.5	21.2	20.9

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); Population Data Sheet Online (ESCAP various years); for Taipei,China: Monthly Bulletin of Statistics Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw).

Table 1.5 **Population aged 15–64 years**
(as percent of total population)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan [a]	53.0	...	...	...	...	...	52.0	...	54.0	54.0	54.0	51.0	50.0	49.0
Armenia	64.0	62.1	62.2	62.5	63.0	63.5	64.1	64.6	65.2	65.7	66.4	67.1	67.9	68.8
Azerbaijan	61.5	61.2	61.4	61.7	62.0	62.5	63.2	63.9	64.8	65.7	66.6	67.6	68.5	69.4
Georgia	66.1	65.1	65.1	65.3	65.5	65.7	65.9	66.1	66.2	66.3	66.5	66.8	67.3	67.8
Kazakhstan	62.7	63.1	63.4	63.9	64.4	65.0	65.5	66.1	66.5	67.0	67.4	67.8	68.2	68.5
Kyrgyz Republic	57.4	57.0	57.3	57.8	58.4	59.0	59.7	60.3	61.0	61.7	62.4	63.1	63.8	64.6
Pakistan	52.7	52.2	52.5	52.8	53.3	53.9	54.6	55.4	56.3	57.2	58.1	58.9	59.7	60.4
Tajikistan	53.0	52.5	52.6	52.9	53.3	53.7	54.2	54.6	55.1	55.6	56.1	56.8	57.4	58.2
Turkmenistan	55.7	56.3	56.8	57.3	58.0	58.7	59.5	60.2	61.0	61.8	62.7	63.6	64.5	65.4
Uzbekistan	55.1	55.4	55.8	56.3	57.0	57.7	58.4	59.1	59.8	60.5	61.3	62.1	62.9	63.8
East Asia														
China, People's Rep. of	66.8	67.4	67.4	67.5	67.7	67.9	68.2	68.7	69.2	69.7	70.3	70.7	71.1	71.4
Hong Kong, China	70.0	71.0	71.2	71.5	71.7	72.0	72.2	72.3	72.4	72.6	72.7	72.9	73.2	73.5
Korea, Rep. of	69.2	70.8	71.0	71.3	71.5	71.7	71.8	71.9	71.9	71.8	71.9	71.9	72.0	72.2
Mongolia	54.3	57.3	58.1	58.9	59.7	60.6	61.6	62.7	63.9	65.1	66.2	67.2	68.1	68.8
Taipei,China	66.7	68.6	69.0	69.3	69.8	70.1	70.3	70.4	70.6	70.9	71.2	71.6	71.9	72.2
South Asia														
Bangladesh	56.2	57.3	57.7	58.1	58.6	59.0	59.5	59.9	60.2	60.6	60.9	61.3	61.7	62.1
Bhutan	54.1	52.5	52.7	53.0	53.6	54.4	55.4	56.7	58.1	59.6	61.1	62.4	63.6	64.7
India	58.3	59.2	59.4	59.6	59.9	60.2	60.4	60.7	61.0	61.4	61.7	62.0	62.4	62.8
Maldives	50.2	51.2	51.9	52.8	53.8	54.8	56.0	57.2	58.5	59.8	61.0	62.2	63.2	64.2
Nepal	54.7	54.8	54.9	55.0	55.1	55.3	55.6	55.9	56.2	56.6	57.0	57.4	57.8	58.3
Sri Lanka	62.8	64.5	64.9	65.3	65.7	66.2	66.7	67.2	67.8	68.4	68.9	69.3	69.7	69.9
Southeast Asia														
Brunei Darussalam [b]	62.9	64.4	64.6	64.9	65.2	65.5	65.8	66.1	66.4	66.6	66.9	67.3	67.6	68.0
Cambodia	52.6	50.9	51.4	52.2	53.2	54.2	55.2	56.1	56.9	57.7	58.5	59.3	60.1	60.9
Indonesia	60.4	62.7	63.2	63.6	64.0	64.4	64.8	65.1	65.4	65.6	65.9	66.1	66.3	66.6
Lao PDR	51.9	52.1	52.2	52.3	52.5	52.8	53.2	53.8	54.4	55.1	55.9	56.7	57.5	58.4
Malaysia	58.9	60.2	60.6	61.1	61.7	62.2	62.7	63.0	63.4	63.6	63.9	64.3	64.6	65.0
Myanmar	59.5	61.7	62.2	62.7	63.2	63.7	64.3	64.8	65.4	66.0	66.6	67.1	67.7	68.1
Philippines	55.9	57.3	57.6	57.9	58.2	58.5	58.7	59.0	59.2	59.5	59.8	60.0	60.3	60.6
Singapore	72.9	71.5	71.3	71.1	71.1	71.0	71.1	71.1	71.2	71.4	71.6	72.0	72.4	73.0
Thailand	66.6	68.4	68.7	69.0	69.3	69.5	69.7	69.9	70.1	70.3	70.4	70.5	70.6	70.7
Viet Nam	56.2	57.9	58.4	59.0	59.6	60.3	61.0	61.7	62.5	63.3	64.0	64.8	65.6	66.3
The Pacific														
Cook Islands [a]	58.4	...	...	...	...	...	60.9	60.9	60.0	65.0	65.0	60.0	59.0	57.0
Fiji Islands	59.0	61.2	61.5	61.8	62.1	62.3	62.4	62.6	62.6	62.7	62.8	62.9	63.1	63.3
Kiribati [a]	56.2	...	...	...	...	...	55.4	59.1	59.3	57.0	58.0	58.0	56.0	59.0
Marshall Islands [a]	46.1	...	...	...	...	...	55.7	55.7	53.0	55.0	57.0	58.0	58.0	58.0
Micronesia, Fed. States of	52.3	53.1	53.6	54.2	54.9	55.6	56.1	56.5	56.9	57.1	57.3	57.6	57.9	58.2
Nauru [a]	56.8	...	...	...	...	...	59.0	59.0	60.0	60.0	60.0	60.0	58.0	58.0
Palau [a]	63.6	...	...	...	...	...	70.8	70.8	70.8	68.0	71.0	71.0	67.0	66.0
Papua New Guinea	56.1	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.6	56.7	56.8	57.0	57.3	57.6
Samoa	55.2	56.4	56.3	56.0	55.5	55.1	54.8	54.6	54.4	54.4	54.5	54.7	54.9	55.3
Solomon Islands	51.7	53.4	53.7	54.1	54.4	54.8	55.1	55.4	55.7	55.9	56.3	56.6	56.9	57.3
Timor-Leste	58.1	56.0	54.6	52.7	50.6	48.9	48.1	48.3	49.2	50.5	51.6	52.3	52.6	52.6
Tonga	56.2	55.0	55.1	55.3	55.6	55.9	56.1	56.2	56.2	56.1	56.1	56.1	56.3	56.6
Tuvalu [a]	59.4	...	...	...	...	...	57.8	57.8	57.8	60.0	58.0	58.0	55.0	58.0
Vanuatu	52.5	53.1	53.3	53.5	53.8	54.1	54.5	55.0	55.4	55.9	56.4	56.9	57.4	57.9
Developed Member Countries														
Australia	66.9	66.6	66.6	66.6	66.7	66.8	66.9	67.0	67.1	67.2	67.3	67.4	67.4	67.5
Japan	69.6	69.5	69.3	69.1	68.8	68.5	68.2	67.8	67.5	67.1	66.8	66.4	66.0	65.6
New Zealand	65.5	65.4	65.4	65.4	65.4	65.4	65.5	65.7	65.8	66.0	66.2	66.4	66.5	66.7

a For 2006–2007, refers to 15–60 years age group.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); Population Data Sheet Online (ESCAP various years); for Taipei,China: Monthly Bulletin of Statistics Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw/).

Population

Table 1.6 Population aged 65 years and over
(as percent of total population)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan [a]	2.9	...	...	...	...	...	4.5	...	3.0	3.0	3.0	3.0	4.0	4.0
Armenia	5.6	8.4	8.8	9.1	9.4	9.7	10.0	10.5	11.0	11.5	11.9	12.1	12.1	11.9
Azerbaijan	4.2	4.9	5.0	5.2	5.4	5.6	5.9	6.2	6.5	6.7	7.0	7.2	7.2	7.2
Georgia	9.3	11.3	11.6	11.8	12.0	12.2	12.5	12.8	13.3	13.7	14.1	14.3	14.4	14.3
Kazakhstan	5.9	7.1	7.2	7.1	6.9	6.8	6.8	7.0	7.3	7.6	7.9	8.0	8.0	7.8
Kyrgyz Republic	5.0	5.4	5.5	5.5	5.4	5.4	5.5	5.6	5.7	5.8	5.9	5.9	5.8	5.6
Pakistan	3.3	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.8	3.8	3.9	3.9	3.9	4.0
Tajikistan	3.8	3.8	3.8	3.7	3.5	3.5	3.5	3.5	3.6	3.7	3.8	3.9	3.9	3.8
Turkmenistan	3.8	4.2	4.2	4.2	4.3	4.3	4.4	4.4	4.5	4.6	4.7	4.7	4.6	4.5
Uzbekistan	4.0	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.5	4.6	4.7	4.7	4.7	4.6
East Asia														
China, People's Rep. of	5.4	6.0	6.2	6.3	6.5	6.7	6.8	7.0	7.2	7.3	7.5	7.7	7.8	7.9
Hong Kong, China	8.5	9.6	9.9	10.2	10.4	10.7	11.0	11.2	11.4	11.7	11.8	12.0	12.1	12.1
Korea, Rep. of	5.0	5.8	6.1	6.4	6.7	7.0	7.4	7.7	8.2	8.6	9.0	9.4	9.8	10.2
Mongolia	4.0	3.7	3.7	3.8	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.0
Taipei,China	6.2	7.6	7.9	8.1	8.3	8.4	8.6	8.8	9.0	9.2	9.5	9.7	10.0	10.2
South Asia														
Bangladesh	3.0	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.5	3.5	3.6	3.7
Bhutan	3.3	3.8	4.0	4.1	4.2	4.3	4.4	4.4	4.5	4.5	4.6	4.6	4.7	4.8
India	3.9	4.2	4.3	4.3	4.4	4.5	4.6	4.7	4.7	4.8	4.9	5.0	5.0	5.1
Maldives	3.3	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.8
Nepal	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.7
Sri Lanka	5.4	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.6	6.7
Southeast Asia														
Brunei Darussalam [b]	2.7	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.2	3.2
Cambodia	2.7	2.8	2.8	2.8	2.9	2.9	2.9	3.0	3.0	3.0	3.1	3.1	3.2	3.3
Indonesia	3.8	4.2	4.4	4.5	4.6	4.7	4.9	5.0	5.1	5.3	5.4	5.5	5.6	5.8
Lao PDR	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Malaysia	3.7	3.7	3.7	3.8	3.8	3.8	3.9	3.9	4.0	4.1	4.3	4.4	4.4	4.5
Myanmar	4.9	5.2	5.3	5.3	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.6	5.6
Philippines	3.2	3.2	3.3	3.3	3.4	3.4	3.5	3.6	3.6	3.7	3.8	3.8	3.9	4.0
Singapore	5.6	6.2	6.4	6.6	6.7	6.9	7.2	7.4	7.7	7.9	8.2	8.5	8.8	9.0
Thailand	4.9	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.4	7.6	7.8	8.0	8.2
Viet Nam	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.6
The Pacific														
Cook Islands [a]	4.7	...	...	...	...	...	5.0	5.0	5.0	7.0	7.0	6.0	11.0	12.0
Fiji Islands	3.1	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.5
Kiribati [a]	3.5	...	...	...	...	...	3.4	1.9	2.0	4.0	4.0	4.0	5.0	5.0
Marshall Islands [a]	2.9	...	...	...	...	...	2.7	2.7	3.0	2.0	2.0	2.0	4.0	4.0
Micronesia, Fed. States of	3.6	3.5	3.6	3.6	3.6	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.7
Nauru [a]	1.4	...	...	...	...	...	2.0	2.0	1.0	2.0	2.0	1.0	3.0	3.0
Palau [a]	6.1	...	...	...	...	...	5.4	5.4	5.4	5.0	5.0	5.0	7.0	8.0
Papua New Guinea	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4
Samoa	3.9	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.5	4.5	4.6	4.6	4.6
Solomon Islands	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0
Timor-Leste	2.0	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.8
Tonga	4.5	5.0	5.1	5.2	5.3	5.4	5.6	5.7	5.9	6.1	6.3	6.4	6.5	6.6
Tuvalu [a]	5.9	...	...	...	...	...	8.9	8.9	8.2	7.0	6.0	6.0	9.0	8.0
Vanuatu	3.6	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Developed Member Countries														
Australia	11.2	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.7	12.8	12.9	13.1	13.3	13.5
Japan	12.0	14.6	15.1	15.6	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.3	20.8
New Zealand	11.1	11.5	11.6	11.6	11.7	11.7	11.8	11.8	11.9	12.0	12.0	12.2	12.3	12.4

a For 2006–2007, refers to 60 and over years age group.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); Population Data Sheet Online (ESCAP various years); for Taipei,China: Monthly Bulletin of Statistics Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw).

Table 1.7 Age dependency ratio

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan [a]	88.7	...	...	...	...	...	92.3	...	85.2	85.2	85.2	96.1	100.0	104.1
Armenia	58.2	60.9	60.8	60.0	58.8	57.4	56.0	54.7	53.4	52.1	50.7	49.1	47.3	45.4
Azerbaijan	62.6	63.4	62.9	62.2	61.2	59.9	58.3	56.5	54.4	52.3	50.1	48.0	45.9	44.0
Georgia	51.4	53.7	53.6	53.3	52.7	52.1	51.7	51.3	51.1	50.8	50.4	49.7	48.7	47.5
Kazakhstan	59.5	58.5	57.6	56.5	55.2	53.9	52.6	51.4	50.3	49.3	48.4	47.6	46.7	45.9
Kyrgyz Republic	74.1	75.4	74.5	73.1	71.3	69.5	67.6	65.8	64.0	62.2	60.3	58.5	56.6	54.8
Pakistan	89.9	91.5	90.6	89.3	87.6	85.6	83.2	80.6	77.7	74.8	72.1	69.6	67.5	65.7
Tajikistan	88.6	90.6	90.0	89.0	87.6	86.2	84.7	83.1	81.6	80.0	78.2	76.2	74.1	71.9
Turkmenistan	79.4	77.6	76.2	74.5	72.5	70.3	68.2	66.0	63.8	61.7	59.5	57.4	55.2	53.0
Uzbekistan	81.5	80.6	79.3	77.5	75.4	73.3	71.2	69.1	67.1	65.2	63.2	61.1	58.9	56.8
East Asia														
China, People's Rep. of	49.6	48.4	48.3	48.0	47.7	47.3	46.6	45.7	44.6	43.4	42.3	41.4	40.6	40.0
Hong Kong, China	42.8	40.9	40.4	39.9	39.4	38.9	38.6	38.3	38.0	37.8	37.6	37.2	36.7	36.1
Korea, Rep. of	44.6	41.3	40.8	40.3	39.9	39.5	39.3	39.2	39.2	39.2	39.2	39.0	38.8	38.5
Mongolia	84.2	74.4	72.1	69.8	67.4	64.9	62.2	59.4	56.5	53.7	51.1	48.8	46.9	45.3
Taipei,China	49.9	45.8	44.9	44.2	43.3	42.6	42.3	42.1	41.7	41.0	40.5	39.7	39.1	38.4
South Asia														
Bangladesh	77.8	74.4	73.3	72.0	70.7	69.4	68.1	67.1	66.1	65.1	64.2	63.2	62.1	61.1
Bhutan	84.8	90.3	89.9	88.7	86.6	83.8	80.4	76.4	72.1	67.8	63.8	60.3	57.3	54.7
India	71.6	69.0	68.4	67.7	67.0	66.2	65.5	64.7	63.8	63.0	62.1	61.2	60.2	59.2
Maldives	99.3	95.1	92.5	89.4	86.0	82.3	78.5	74.7	70.9	67.3	63.9	60.9	58.2	55.8
Nepal	82.7	82.6	82.3	81.9	81.4	80.7	79.9	79.0	77.9	76.8	75.6	74.3	72.9	71.5
Sri Lanka	59.7	55.0	54.0	53.1	52.1	51.1	50.0	48.8	47.5	46.3	45.1	44.2	43.5	43.0
Southeast Asia														
Brunei Darussalam [b]	59.2	55.4	54.7	54.0	53.3	52.6	52.0	51.3	50.7	50.1	49.4	48.7	47.9	47.1
Cambodia	90.1	96.4	94.5	91.8	88.0	84.4	81.2	78.3	75.7	73.3	70.9	68.6	66.4	64.2
Indonesia	65.6	59.5	58.3	57.2	56.1	55.2	54.3	53.6	52.9	52.3	51.8	51.3	50.7	50.2
Lao PDR	92.5	92.0	91.7	91.2	90.4	89.3	87.9	86.0	83.8	81.4	78.9	76.4	73.8	71.2
Malaysia	69.7	66.2	65.0	63.6	62.1	60.8	59.6	58.6	57.8	57.1	56.4	55.6	54.8	53.9
Myanmar	68.2	62.1	60.8	59.6	58.3	57.0	55.6	54.2	52.8	51.5	50.1	48.9	47.8	46.8
Philippines	79.0	74.5	73.6	72.8	71.9	71.1	70.3	69.5	68.8	68.1	67.3	66.6	65.9	65.1
Singapore	37.1	39.9	40.3	40.6	40.7	40.8	40.7	40.6	40.4	40.1	39.7	39.0	38.1	37.0
Thailand	50.1	46.1	45.5	44.9	44.4	43.9	43.4	43.0	42.6	42.3	42.0	41.8	41.6	41.5
Viet Nam	78.0	72.6	71.1	69.5	67.7	65.8	63.9	62.0	60.0	58.1	56.1	54.3	52.5	50.9
The Pacific														
Cook Islands [a]	71.2	...	...	...	...	...	64.2	64.2	66.7	53.8	53.8	66.7	69.5	75.4
Fiji Islands	69.4	63.5	62.6	61.8	61.2	60.6	60.2	59.9	59.7	59.5	59.2	58.9	58.4	57.9
Kiribati [a]	77.9	...	...	...	...	...	80.5	69.3	68.6	77.2	72.4	72.4	78.6	69.5
Marshall Islands [a]	116.9	...	...	...	...	...	79.5	79.5	88.7	81.8	75.4	72.4	72.4	72.4
Micronesia, Fed. States of	91.1	88.4	86.7	84.6	82.2	80.0	78.2	76.9	75.9	75.2	74.5	73.7	72.7	71.7
Nauru [a]	76.1	...	...	...	...	...	69.5	69.5	66.7	68.3	66.7	66.7	72.4	72.4
Palau [a]	57.2	...	...	...	...	...	41.2	41.2	41.2	47.1	40.8	40.8	49.3	51.5
Papua New Guinea	78.2	77.1	77.1	77.1	77.1	77.0	77.0	76.9	76.7	76.4	76.0	75.3	74.5	73.6
Samoa	81.1	77.2	77.6	78.7	80.1	81.4	82.5	83.3	83.7	83.8	83.5	83.0	82.0	80.8
Solomon Islands	93.3	87.3	86.2	85.0	83.8	82.6	81.6	80.6	79.7	78.7	77.8	76.8	75.7	74.6
Timor-Leste	72.1	78.6	83.3	89.9	97.6	104.4	108.0	107.2	103.2	98.1	93.9	91.2	90.2	90.1
Tonga	78.0	81.7	81.4	80.7	79.7	78.8	78.2	78.0	78.1	78.3	78.4	78.1	77.6	76.8
Tuvalu [a]	68.4	...	...	...	...	...	73.0	73.0	73.0	68.3	72.4	72.4	81.8	72.4
Vanuatu	90.5	88.3	87.6	86.8	85.8	84.7	83.4	82.0	80.4	78.8	77.2	75.7	74.2	72.8
Developed Member Countries														
Australia	49.4	50.2	50.2	50.1	49.9	49.7	49.4	49.2	49.0	48.8	48.6	48.4	48.3	48.2
Japan	43.7	43.9	44.3	44.8	45.4	46.1	46.7	47.4	48.2	49.0	49.8	50.7	51.6	52.6
New Zealand	52.7	52.9	52.9	53.0	52.9	52.8	52.6	52.3	51.9	51.5	51.0	50.6	50.3	50.0

a For 2006–2007, the ratios are calculated by dividing population aged 0–14 and 60 and over by population aged 15–60 years.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: ADB staff estimates.

Labor Force and Employment

Table 1.8 Labor force participation rate
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	74.2	73.5	70.8	65.6	63.9	61.4	58.7	62.7	61.4	58.6	57.7	55.9	54.5	...
Azerbaijan	85.8	86.5	85.7	82.9	78.3	76.4	74.7	80.6	78.2	76.4	74.7	74.7	73.7	72.7
Georgia	...	...	...	65.0	66.0	65.0	66.0	65.0	66.2	64.9	64.0	62.2	63.3	62.6
Kazakhstan	66.8	68.7	68.8	65.9	66.0	66.0	70.2	70.1	70.0	69.9	69.4	69.7	70.4	71.1
Kyrgyz Republic	...	...	...	...	...	62.6	...	64.4	...	63.7	...	65.5	...	...
Pakistan	41.3	41.3	43.0	43.3	43.3	42.8	43.3	43.3	43.3	43.7	43.7	46.0	45.2	45.2
Tajikistan	70.9	65.4	62.9	61.3	57.3	55.3	55.4	53.4	53.0	56.0	55.0	54.0	52.3	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	62.0	61.6	61.3	61.3	61.3	61.4	61.5	61.7	61.4	61.3	60.9	61.2	61.2	60.9
Korea, Rep. of	61.9	62.1	62.5	60.6	60.6	61.0	61.4	62.0	61.5	62.1	62.0	61.9	61.8	61.5
Mongolia	68.5	68.0	67.4	67.0	66.7	62.9	62.2	62.7	64.5	64.4	63.5	64.4	64.2	63.5
Taipei,China	58.7	58.4	58.3	58.0	57.9	57.7	57.2	57.3	57.3	57.7	57.8	57.9	58.3	58.3
South Asia														
Bangladesh	...	52.0	...	...	...	54.9	...	...	57.3	...	...	58.5	...	...
Bhutan	...	...	...	...	...	...	56.5	...	62.9	54.4	...	61.8	67.3	...
India	...	...	...	...	...	37.6	...	...	...	...	39.2	...	...	...
Maldives	51.3	...	...	...	...	54.8	...	...	...	...	...	64.1	...	...
Nepal	...	...	...	...	85.9	...	70.9	...	...	...	...	...	...	...
Sri Lanka	47.9	48.6	48.7	51.7	50.7	50.3	48.8	50.3	48.9	48.6	48.3	51.2	49.8	50.2
Southeast Asia														
Brunei Darussalam [a]	66.5	...	...	...	64.9	65.5	67.9	69.8	69.8	69.9	70.0	68.4	67.8	67.8
Cambodia	59.2	65.4	65.8	55.5	66.1	65.2	71.7	...	...	74.6	...	...	...	...
Indonesia	...	66.9	66.3	66.9	67.2	67.8	68.6	67.8	67.8	67.6	66.8	66.2	66.6	67.2
Lao PDR	...	...	...	...	...	...	84.8	85.1	84.4	...	65.7	...	...	...
Malaysia	64.7	66.3	65.6	64.3	64.2	65.4	64.9	64.4	65.2	64.4	63.3	63.1	63.2	62.6
Myanmar	...	...	...	...	...	...	63.6	63.8	64.3	64.6	65.0	65.4	66.0	...
Philippines	65.8	66.7	66.1	65.9	66.4	64.9	67.1	67.4	66.7	67.5	64.5	64.6	63.2	63.7
Singapore [b]	61.9	64.6	63.7	63.1	64.1	63.2	64.4	63.6	63.2	63.3	63.0	65.0	65.0	65.6
Thailand	74.5	73.9	73.5	72.1	71.6	71.5	71.9	71.9	72.2	72.4	72.5	72.2	72.4	72.6
Viet Nam	...	...	...	...	...	49.6	50.2	50.7	51.1	51.8	52.5	51.1	51.2	55.5
The Pacific														
Cook Islands	...	...	...	...	...	...	69.0	...	...	...	...	...	...	...
Fiji Islands	...	59.4	...	...	...	...	...	...	...	...	...	...	55.0	...
Kiribati	...	...	...	...	...	80.9	...	...	...	...	63.6	...	...	...
Marshall Islands	...	...	...	...	51.2	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	...
Micronesia, Fed. States of	...	...	...	...	...	58.6	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	76.7	...	...	...	...	...	...	78.7	...	...
Palau	69.1	...	...	...	...	67.5	...	...	...	...	69.1	...	...	...
Papua New Guinea	...	...	...	...	...	72.5	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	50.5	...	...	...	...	50.0	...	...
Solomon Islands	...	...	...	...	35.2	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	58.4	...	...	...	...	...	...	63.6	...	...	56.6	...	...
Tuvalu	...	...	...	...	...	...	...	58.2	...	...	...	...	...	...
Vanuatu	...	...	...	...	78.2	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	63.6	63.5	63.2	63.2	63.0	63.3	63.3	63.4	63.6	63.5	64.4	64.8	65.2	65.4
Japan	63.4	63.5	63.7	63.3	62.9	62.4	62.0	61.2	60.8	60.4	60.4	60.4	60.4	60.2
New Zealand	65.0	65.9	65.7	65.3	65.4	65.4	66.0	66.7	66.4	67.0	67.8	68.4	68.6	68.6

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Refers to Singapore residents only.

Sources: Country sources, International Labour Organization LabORSTA Online (laborsta.ilo.org), Secretariat of the Pacific Community (www.spc.int/prism), United Nations Economic Commission for Europe Statistical Database (www.unece.org/stats).

Table 1.9 **Unemployment rate**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	3.4	3.4	3.4	3.4	...	...	...	...
Armenia [a]	6.7	9.3	10.8	9.4	11.2	11.7	10.4	10.8	10.1	9.6	8.2	7.5	7.0	6.3
Azerbaijan [b]	0.8	0.9	1.0	1.1	1.2	1.2	1.3	10.6	9.7	8.4	7.6	6.8	6.5	6.1
Georgia	...	...	...	14.5	13.8	10.3	11.1	12.6	11.5	12.6	13.8	13.6	13.3	16.5
Kazakhstan	11.0	13.0	13.0	12.7	13.5	12.8	10.4	9.3	8.8	8.4	8.1	7.8	7.3	6.6
Kyrgyz Republic	5.7	7.8	5.7	5.9	7.2	7.5	7.8	8.6	9.9	8.5	8.1	8.3	8.1	...
Pakistan	5.4	5.4	6.1	5.9	5.9	7.8	7.8	8.3	8.3	7.7	7.7	6.2	5.3	5.2
Tajikistan [a]	2.0	2.6	2.8	3.2	3.0	2.7	2.3	2.5	2.4	2.0	1.9	2.2	2.3	2.4
Turkmenistan	...	...	1.9	2.0	2.1	2.4	2.6	2.5	2.6	2.6	...	...	...	...
Uzbekistan [a]	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.2	0.2	0.2
East Asia														
China, People's Rep. of [c]	2.9	3.0	3.1	3.1	3.1	3.1	3.6	4.0	4.3	4.2	4.2	4.1	4.0	4.2
Hong Kong, China	3.2	2.8	2.2	4.7	6.2	4.9	5.1	7.3	7.9	6.8	5.6	4.8	4.0	3.6
Korea, Rep. of	2.1	2.0	2.6	7.0	6.3	4.1	4.0	3.3	3.6	3.7	3.7	3.5	3.2	3.2
Mongolia	5.5	6.7	7.7	5.9	4.7	4.6	4.6	3.4	3.5	3.6	3.3	3.2	2.8	2.8
Taipei,China	1.8	2.6	2.7	2.7	2.9	3.0	4.6	5.2	5.0	4.4	4.1	3.9	3.9	4.1
South Asia														
Bangladesh	...	3.5	...	...	...	4.3	...	...	4.3	...	...	4.2	...	...
Bhutan	...	...	...	1.2	1.1	...	1.9	...	1.8	2.5	3.1	3.1	3.7	...
India	...	...	...	...	...	2.7	...	...	...	...	3.1	...	...	...
Maldives	0.8	...	...	...	...	2.0	...	...	...	...	...	14.4	...	...
Nepal	...	4.5	...	...	...	...	8.8	...	...	...	...	...	...	...
Sri Lanka	12.3	11.3	10.5	9.2	8.9	7.6	7.9	8.8	8.4	8.3	7.7	6.5	6.0	5.2
Southeast Asia														
Brunei Darussalam [d]	4.9	...	...	...	4.5	4.7	7.2	3.5	4.5	3.5	4.3	4.0	3.4	3.7
Cambodia	2.5	0.9	0.7	5.3	0.6	2.5	1.8	...	...	0.0	...	...	...	...
Indonesia	7.2	4.9	4.7	5.5	6.4	6.1	8.1	9.1	9.6	9.9	11.2	10.3	9.8	8.4
Lao PDR	3.6	...	...	...	...	...	5.0	5.0	5.1	...	1.4	...	...	...
Malaysia	3.1	2.5	2.4	3.2	3.4	3.0	3.5	3.5	3.6	3.5	3.5	3.3	3.2	3.3
Myanmar	4.2	4.1	4.1	4.1	4.1	...	4.0	4.0	4.0	4.0	4.0	4.0	4.0	...
Philippines	9.5	8.6	8.8	10.3	9.8	11.2	11.1	11.4	11.4	11.8	7.8	7.9	6.3	6.8
Singapore	2.7	2.4	1.9	2.5	3.6	4.4	2.7	4.2	4.5	4.4	4.2	3.4	2.9	2.8
Thailand	1.7	1.5	1.5	4.4	4.2	3.6	3.3	2.4	2.2	2.1	1.8	1.5	1.4	1.4
Viet Nam	...	...	...	4.5	4.4	2.3	2.5	2.2	2.2	2.1	2.5	2.3	2.0	2.4
The Pacific														
Cook Islands	...	13.0	...	...	...	...	13.1	...	...	...	...	...	...	...
Fiji Islands	5.4	5.8	7.2	8.3	9.0	8.4	9.9	9.3	6.8	7.2	7.7	8.3	8.6	8.6
Kiribati	0.2	...	...	...	...	1.6	...	...	...	...	8.1	...	...	...
Marshall Islands	...	34.3	34.8	30.6	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	...
Micronesia, Fed. States of	...	...	...	...	...	22.0	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	7.0	...	...	...	...	2.3	..	...	...	...	4.2	...	...	...
Papua New Guinea	...	...	...	...	...	2.8	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	4.4	...	6.6	7.0	5.6	1.3	1.3	1.3
Solomon Islands	...	...	...	...	31.9	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	..	...	...	...	...	...	...	...	...	...
Tonga	...	13.3	...	...	...	...	...	...	5.2	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	6.5	...	16.3	...	...	...	...
Vanuatu	...	...	...	...	1.6	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	8.2	8.2	8.3	7.7	6.9	6.3	6.8	6.4	5.9	5.4	5.0	4.8	4.4	4.2
Japan	3.2	3.4	3.4	4.1	4.7	4.7	5.0	5.4	5.3	4.7	4.4	4.1	3.9	4.0
New Zealand	6.3	6.1	6.6	7.4	6.8	6.0	5.3	5.2	5.3	3.9	3.7	3.8	3.6	4.1

a Based on officially registered unemployed only.
b Based on International Labour Organization's methodology starting 2002.
c Refers to urban areas only.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, *Key Indicators of the Labour Market* (ILO 2009).

Labor Force and Employment

Table 1.10 **Unemployment rate of 15–24-year-olds** (percent)

	Total		Female		Male	
	1990	2007	1990	2007	1990	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	...	...	...	...	...	...
Armenia	...	48.2 (2001)	...	56.4 (2001)	...	41.9 (2001)
Azerbaijan	18.4 (1999)	14.0	19.9 (1999)	10.4	17.0 (1999)	18.2
Georgia	24.6 (1999)	31.5	24.8 (1999)	36.8	24.4 (1999)	28.1
Kazakhstan	...	14.3 (2004)	...	15.7 (2004)	...	13.1 (2004)
Kyrgyz Republic	...	14.6 (2006)	...	16.2 (2006)	...	13.6 (2006)
Pakistan	5.1	7.5	1.3	8.9	5.7	7.1
Tajikistan	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...
East Asia						
China, People's Rep. of	...	...	...	...	...	...
Hong Kong, China	3.4	9.0	3.3	7.2	3.6	11.0
Korea, Rep. of	7.0	8.9	5.5	7.2	9.5	11.4
Mongolia	...	20.0 (2003)	...	20.7 (2003)	...	19.5 (2003)
Taipei,China	5.1	11.8 (2008)	...	...	...	...
South Asia						
Bangladesh	2.5 (1989)	9.3 (2005)	2.3 (1989)	13.6 (2005)	2.8 (1989)	8.0 (2005)
Bhutan	...	6.3 (2005)	...	7.2 (2005)	...	5.5 (2005)
India	8.3 (1994)	10.5 (2004)	8.0 (1994)	10.8 (2004)	8.4 (1994)	10.4 (2004)
Maldives	1.9 (1995)	22.2 (2006)	2.9 (1995)	30.5 (2006)	1.4 (1995)	15.5 (2006)
Nepal	7.3 (1996)	3.0 (1999)	...	2.2 (1999)	...	4.0 (1999)
Sri Lanka	33.3	21.2	46.9	28.1	22.8	17.1
Southeast Asia						
Brunei Darussalam [a]	...	...	...	...	...	...
Cambodia	...	12.2 (1998)	...	12.0 (1998)	...	12.3 (1998)
Indonesia	8.9 (1989)	25.1	8.9 (1989)	27.3	9.0 (1989)	23.8
Lao PDR	...	5.0 (1995)	...	3.9 (1995)	...	6.4 (1995)
Malaysia	8.7 (1998)	10.9	8.8 (1998)	11.5	8.6 (1998)	10.5
Myanmar	...	...	...	...	...	...
Philippines	15.4	14.9	19.2	16.5	13.1	13.9
Singapore	2.9	8.9	2.9	11.1	2.8	6.9
Thailand	4.3	4.5	4.2	4.3	4.3	4.6
Viet Nam	3.1 (1996)	4.6 (2004)	2.9 (1996)	4.9 (2004)	3.4 (1996)	4.4 (2004)
The Pacific						
Cook Islands	14.9 (1991)	24.0 (2001)	18.5 (1991)	26.4 (2001)	12.5 (1991)	22.1 (2001)
Fiji Islands	18.3 (1986)	13.1 (1996)	34.3 (1986)	16.7 (1996)	12.9 (1986)	11.3 (1996)
Kiribati	3.6	2.4 (2000)	2.5	2.3 (2000)	4.7	2.0 (2000)
Marshall Islands	28.7 (1988)	62.6 (1999)	31.6 (1988)	67.0 (1999)	27.5 (1988)	59.8 (1999)
Micronesia, Fed. States of	32.7 (1994)	35.2 (2000)	44.3 (1994)	35.5 (2000)	24.7 (1994)	35.0 (2000)
Nauru	29.3 (1992)	...	38.3 (1992)	...	22.9 (1992)	...
Palau	17.4	5.7 (2000)	17.2	6.0 (2000)	17.6	5.5 (2000)
Papua New Guinea	21.1	13.6 (2001)	16.6	9.5 (2001)	24.2	17.4 (2001)
Samoa	...	12.2 (2001)	...	15.4 (2001)	...	10.6 (2001)
Solomon Islands	...	46.0 (1999)	...	48.8 (1999)	...	44.4 (1999)
Timor-Leste	...	...	...	...	...	...
Tonga	30.3 (1996)	11.9 (2003)	27.0 (1996)	15.1 (2003)	32.0 (1996)	9.9 (2003)
Tuvalu	...	31.2 (2002)	...	43.3 (2002)	...	22.5 (2002)
Vanuatu	...	3.1 (2000)	...	2.1 (2000)	...	4.0 (2000)
Developed Member Countries						
Australia [b]	13.0	9.4	12.8	9.3	13.2	9.4
Japan [c]	4.3	7.7	4.1	7.1	4.5	8.3
New Zealand [d]	14.1	9.7	13.2	9.8	14.8	9.6

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b From 1993 excludes Jervis Bay Territory.
c Excludes seasonal workers. Data are averages of monthly estimates.
d Excludes Chathams, Antarctic Territory, and other minor offshore islands. Data are averages of quarterly estimates.

Sources: *Key Indicators of the Labour Market* (ILO 2009); The Pacific Islands Regional Millennium Development Goals Report 2004 (www.spc.int/mdgs/); World Development Indicators Online (World Bank 2009); for Taipei,China: Social Indicators Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw/).

Table 1.11 **Employment in agriculture**
(percent of total employment)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	69.7	69.6	69.6	69.6	...	...	...
Armenia	37.4	40.8	41.3	42.5	43.3	44.4	45.1	45.3	46.0	46.9	46.2	46.2	46.0
Azerbaijan	30.8	31.8	29.0	30.8	42.3	41.0	40.0	40.2	40.0	39.5	39.3	39.1	38.7
Georgia	...	...	...	48.5	52.2	52.1	52.8	53.8	54.9	54.0	54.3	55.3	53.4
Kazakhstan	...	21.3	24.0	25.1	21.9	31.5	35.3	35.3	35.0	33.2	32.2	31.1	31.2
Kyrgyz Republic	47.0	47.1	48.3	49.1	52.4	53.1	52.9	52.7	43.2	38.9	38.5	36.3	34.5
Pakistan	46.8	46.8	44.1	47.3	47.2	48.4	48.4	42.1	42.1	43.1	43.1	43.4	43.7
Tajikistan	59.1	59.3	63.9	60.7	64.4	65.0	66.6	67.6	67.6	66.6	67.5	67.0	66.5
Turkmenistan	44.8	45.6	46.5	48.3	45.0	47.6	48.4	48.7	48.2	48.2	...	...	...
Uzbekistan	41.2	40.9	40.7	39.4	36.2	34.4	33.5	32.6	31.9	31.0	29.1	...	...
East Asia													
China, People's Rep. of	52.2	50.5	49.9	49.8	50.1	50.0	50.0	50.0	49.1	46.9	44.8	42.6	40.8
Hong Kong, China	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Korea, Rep. of	11.8	11.1	10.8	12.0	11.3	10.6	10.0	9.3	8.8	8.1	7.9	7.7	7.4
Mongolia	46.1	46.5	48.9	49.7	49.5	48.6	48.3	44.9	41.8	40.2	39.9	38.8	37.7
Taipei,China	10.5	10.1	9.6	8.8	8.2	7.8	7.5	7.5	7.3	6.6	5.9	5.5	5.3
South Asia													
Bangladesh	...	48.9	...	...	...	50.8	...	...	51.7	...	...	48.1	...
Bhutan	...	...	...	...	...	...	...	...	...	...	...	62.8	66.6
India	...	...	...	...	...	59.9	...	...	...	...	56.1	...	...
Maldives	22.2	...	...	...	...	13.7	...	...	...	...	...	3.8	...
Nepal	...	...	...	...	76.1	...	65.7	...	...	...	...	...	...
Sri Lanka	36.7	37.4	36.2	39.3	36.3	36.0	32.6	34.5	34.0	33.5	30.7	32.2	31.3
Southeast Asia													
Brunei Darussalam [a]	2.5	...	...	...	...	...	1.4	...	...	...	...	...	...
Cambodia	81.4	78.1	78.8	76.8	76.3	73.7	70.2	70.0	64.8	60.3	60.3	60.3	59.1
Indonesia	44.0	44.0	40.7	45.0	43.2	45.3	43.8	44.3	46.4	43.3	45.0	42.2	43.7
Lao PDR	...	...	...	...	...	...	82.7	82.4	82.2	...	78.5	...	...
Malaysia	20.0	19.4	17.3	18.8	18.4	16.7	15.1	14.9	14.3	14.6	14.6	14.6	14.8
Myanmar	64.1	63.4	62.7	...	...	...	...	...	...	...	...	...	...
Philippines	43.4	42.8	39.5	37.9	38.8	37.1	37.2	37.0	36.6	36.0	36.0	35.8	36.1
Singapore	0.2	0.2	1.0	0.9	0.9	0.0	0.9	0.8	0.9	0.8	...	1.3	1.1
Thailand	46.7	45.2	44.9	44.5	45.0	44.2	42.4	42.5	41.0	39.3	38.6	39.7	39.5
Viet Nam	71.3	70.7	70.1	69.5	68.9	64.4	63.6	58.7	56.9	58.7	57.2	55.4	53.8
The Pacific													
Cook Islands	...	11.5	...	...	...	...	7.2	...	...	...	...	...	...
Fiji Islands	...	1.8	1.7	2.0	1.5	1.6	1.5	1.5	1.4	1.3	1.4	1.3	1.3
Kiribati [b]	1.3	...	...	...	...	0.6	...	...	...	...	...	...	...
Marshall Islands	...	20.9	21.7	20.2	20.7	20.5	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	52.1	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	9.3	...	...	...	...	7.1	...	...	...	...	7.8	...	...
Papua New Guinea	...	...	...	...	...	72.3	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	26.0	25.7	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	33.8	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries													
Australia	4.9	5.0	5.1	4.9	4.9	4.9	4.8	4.4	3.9	3.7	3.6	3.4	3.3
Japan	5.7	5.5	5.3	5.3	5.2	5.1	4.9	4.7	4.6	4.5	4.4	4.3	4.2
New Zealand	9.7	9.5	8.7	8.5	9.5	8.7	9.1	8.8	9.4	7.5	7.1	7.1	7.2

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Refers to cash work and unpaid village work for 1995, 2000, and 2005.

Sources: Country sources, *Key Indicators of the Labour Market* (ILO 2008).

Labor Force and Employment

Table 1.12 **Employment in industry**
(percent of total employment)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	...	...	..	...	...	...	...
Armenia	20.5	17.8	16.7	15.7	15.0	14.1	13.4	13.7	13.2	12.9	12.8	12.9	15.1
Azerbaijan [a]	9.7	7.7	6.6	6.8	5.9	5.6	5.5	5.7	5.7	5.9	6.0	6.0	6.1
Georgia	...	...	...	7.3	6.8	6.3	5.8	4.9	5.0	5.3	3.8	4.9	5.2
Kazakhstan	...	16.1	14.2	14.1	14.7	13.9	12.4	12.3	12.2	12.1	12.3	12.2	12.1
Kyrgyz Republic [a]	16.5	14.6	13.5	12.8	11.6	10.5	10.3	10.3	15.0	17.6	17.6	19.4	20.3
Pakistan [a]	10.6	10.6	11.3	10.3	10.3	11.6	11.5	11.4	13.9	13.8	13.8	13.9	13.7
Tajikistan [a]	14.2	14.4	12.1	11.1	10.1	9.0	8.5	8.2	6.1	5.6	5.7	5.5	5.3
Turkmenistan [a]	10.1	10.3	11.2	12.5	12.0	13.0	13.5	14.2	13.8	13.8	...	...	...
Uzbekistan [a]	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.8	13.0	13.2	...	...
East Asia													
China, People's Rep. of	21.0	20.8	20.4	17.9	17.5	17.3	17.3	17.7	...	...	...	...	...
Hong Kong, China	27.0	25.6	24.2	22.6	21.1	20.3	19.5	18.4	17.0	15.5	15.0	14.7	14.2
Korea, Rep. of	33.4	32.6	31.4	28.0	27.5	28.1	27.5	27.3	27.6	27.5	26.8	26.3	25.9
Mongolia	17.9	17.5	16.7	15.8	15.5	14.1	13.7	14.3	15.6	16.1	16.8	...	...
Taipei,China	38.7	37.5	38.2	37.9	31.3	31.2	29.9	35.2	34.8	35.2	35.8	36.6	36.8
South Asia													
Bangladesh	...	9.6	...	...	...	10.3	...	...	13.7	...	14.5	...	...
Bhutan	...	...	...	...	...	...	...	...	...	...	17.2	...	...
India	...	...	...	...	...	16.3	...	...	...	...	18.8	...	...
Maldives	23.9	...	...	...	...	19.0	...	...	23.4	...	...	24.3	...
Nepal	...	...	..	...	9.8	...	13.4	...	...	...	...	...	...
Sri Lanka	22.2	22.0	24.2	21.9	21.9	23.6	23.9	22.4	23.0	24.1	25.6	26.6	26.6
Southeast Asia													
Brunei Darussalam [a, b]	8.9	...	...	...	...	...	11.2	...	...	...	...	...	...
Cambodia [a]	2.3	3.8	3.4	3.4	4.8	7.0	8.9	8.9	9.3	9.7	9.7	9.7	8.7
Indonesia [a]	13.4	13.5	13.9	12.1	13.8	13.5	13.3	13.9	13.2	12.9	13.7	13.1	13.2
Lao PDR	...	...	...	...	...	...	8.7	9.0	9.3	...	...	...	...
Malaysia	23.7	23.2	23.8	22.5	23.0	23.8	23.6	22.0	21.9	20.6	20.2	20.7	19.1
Myanmar	9.1	9.5	9.7	...	...	...	...	...	...	...	...	...	...
Philippines	10.6	10.3	10.8	10.6	10.3	10.4	10.3	9.9	9.9	10.1	9.9	9.7	9.5
Singapore	31.0	30.2	30.2	29.5	28.9	33.8	25.8	25.1	25.0	24.0	...	22.1	22.6
Thailand [a]	15.1	14.1	13.8	14.3	14.1	15.0	15.5	15.4	15.8	15.9	16.0	15.6	15.7
Viet Nam [a]	8.6	8.9	9.0	9.1	9.2	10.1	10.9	11.1	12.1	12.5	12.9	13.9	14.5
The Pacific													
Cook Islands [a]	...	5.8	...	...	...	...	6.0	...	...	...	...	...	...
Fiji Islands	...	31.4	32.8	33.8	34.0	30.7	31.1	31.3	30.1	30.1	30.3	30.7	30.7
Kiribati [a]	0.3	...	...	...	...	0.4	...	...	...	...	...	...	...
Marshall Islands [a]	...	8.8	8.7	7.1	7.9	7.8	...	...	...	...	...	...	...
Micronesia, Fed. States of [a]	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau [a]	1.0	...	...	...	...	0.7	...	...	...	...	2.8	...	...
Papua New Guinea	...	...	...	...	...	3.6	...	...	..	...	...	...	...
Samoa [a]	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	12.4	12.3	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga [a]	...	22.9	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	..	...	...	...	...	...	...
Developed Member Countries													
Australia	22.9	22.4	22.1	21.8	21.3	21.8	20.9	21.0	21.0	21.2	21.1	21.2	21.2
Japan	33.6	33.3	33.1	32.0	31.7	31.2	30.5	29.7	29.3	28.4	27.9	28.0	27.9
New Zealand	25.1	24.8	27.9	24.0	22.9	23.2	22.8	22.6	22.3	22.7	22.0	22.3	21.9

a Refers to manufacturing and mining. Also includes construction sector for Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, *Key Indicators of the Labour Market* (ILO 2008).

Table 1.13 **Employment in services**
(percent of total employment)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	41.2	40.5	41.2	41.0	40.8	40.8	40.6	41.0	40.9	40.2	41.0	40.9	38.9
Azerbaijan	35.8	37.7	42.3	46.6	48.5	48.1	49.2	48.3	48.7	48.5	48.6	47.9	48.8
Georgia	...	...	...	41.1	38.2	37.9	37.8	38.0	36.5	36.9	36.2	35.5	36.0
Kazakhstan	...	...	...	...	53.2	...	48.1	48.2	47.8	49.1	...	...	...
Kyrgyz Republic	36.1	38.3	38.2	37.9	36.1	36.5	36.7	38.9	41.7	43.5	43.9	44.3	...
Pakistan	34.6	34.6	36.9	35.6	35.6	33.5	33.5	37.1	37.1	36.6	36.6	...	35.4
Tajikistan	21.6	21.5	29.1	...	...	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	34.9	35.1	34.9	34.5	35.2	...	...	...	...	...	...	...	...
East Asia													
China, People's Rep. of	12.2	12.7	13.1	12.8	12.9	12.7	12.7	16.1	...	...	...	...	...
Hong Kong, China	72.4	74.0	75.5	77.1	78.6	79.4	80.4	81.3	82.7	84.2	84.7	85.1	85.6
Korea, Rep. of	54.7	56.1	57.7	59.9	61.1	61.2	62.5	63.3	63.5	64.3	65.1	65.9	66.6
Mongolia	35.9	36.0	34.3	34.4	35.0	37.2	38.0	40.7	42.6	43.7	43.3	...	...
Taipei,China	50.7	52.4	52.3	53.2	61.8	62.3	63.8	57.3	57.9	58.2	58.3	57.9	57.9
South Asia													
Bangladesh	...	25.0	...	...	...	23.5	...	...	34.6	...	37.4	...	...
Bhutan	..	..	..	..	..	..	..	..	..	..	39.2	..	..
India	..	..	..	..	..	23.7	..	..	..	..	25.1	..	..
Maldives	50.4	..	..	..	..	50.2	..	..	56.6	..	..	59.8	..
Nepal	...	...	...	...	14.0	...	20.1	...	...	...	...	...	...
Sri Lanka	41.1	40.6	39.6	38.8	41.8	40.3	43.5	43.1	43.0	42.4	43.7	41.2	42.1
Southeast Asia													
Brunei Darussalam [a]	...	...	...	...	...	...	77.2	...	...	...	...	...	...
Cambodia	...	...	...	18.0	...	17.7	19.1	...	...	8.6	...	...	...
Indonesia	37.6	37.9	39.8	38.8	38.9	37.3	37.5	36.9	36.2	38.7	38.0	37.6	...
Lao PDR	...	...	...	...	...	...	8.6	8.6	8.6	...	...	...	...
Malaysia	47.7	48.4	49.0	49.4	49.9	49.5	51.7	53.1	53.7	55.3	55.6	55.1	56.7
Myanmar	...	...	24.9	25.1	...	...	...	...	...	...	...	...	..
Philippines	40.3	41.6	42.9	44.4	45.9	46.5	47.0	47.2	47.1	47.5	48.1	48.5	48.8
Singapore	67.9	69.4	68.8	69.6	70.2	65.5	73.3	74.0	74.1	75.2	...	76.7	76.2
Thailand	29.4	30.3	31.1	32.2	34.4	33.5	35.1	34.0	35.3	37.1	37.1	37.0	37.0
Viet Nam	...	19.4	22.0	23.7	23.0	22.3	22.1	23.3	23.9	24.7	...	...	...
The Pacific													
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	66.8	65.5	64.3	64.5	67.7	67.4	67.2	68.5	68.6	68.4	68.0	68.0
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	59.4	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	22.7	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	37.3	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	..	...	...	...
Developed Member Countries													
Australia	72.2	72.5	72.7	73.3	73.7	73.3	74.2	74.5	75.0	74.8	75.0	75.0	75.1
Japan	60.4	60.8	61.1	62.1	62.5	63.1	63.9	64.8	65.1	66.0	66.4	66.6	66.7
New Zealand	65.2	65.3	67.3	67.2	67.5	67.6	67.8	68.5	69.4	69.6	70.7	70.1	70.5

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: *Key Indicators of the Labour Market* (ILO 2009), country sources.

Poverty Indicators

Table 1.14 **Poverty and inequality**

	Proportion of Population Below $2 (PPP) a Day (percent)		Income Ratio of Highest 20% to Lowest 20% [a]		Gini Coefficient	
	1995	Latest year	1995	Latest year	1995	Latest year
Developing Member Countries						
Central and West Asia						
Afghanistan	...	...	...	...	...	...
Armenia	48.8 (1998)	43.5 (2003)	5.8 (1998)	5.0 (2003)	0.360 (1998)	0.338 (2003)
Azerbaijan	39.5	0.3 (2005)	6.1	2.3 (2005)	0.350	0.168 (2005)
Georgia	13.1 (1996)	30.4 (2005)	7.1 (1996)	8.7 (2005)	0.371 (1996)	0.408 (2005)
Kazakhstan	18.8 (1996)	17.2 (2003)	6.3 (1996)	5.6 (2003)	0.353 (1996)	0.339 (2003)
Kyrgyz Republic	30.1 (1993)	51.9 (2004)	22.7 (1993)	5.1 (2004)	0.537 (1993)	0.329 (2004)
Pakistan	83.3 (1996)	60.3 (2004)	3.9 (1996)	4.5 (2004)	0.287 (1996)	0.312 (2004)
Tajikistan	78.5 (1999)	50.9 (2004)	5.0 (1999)	5.4 (2004)	0.315 (1999)	0.336 (2004)
Turkmenistan	49.7 (1998)	...	7.9 (1998)	...	0.408 (1998)	...
Uzbekistan	53.6 (1998)	76.7 (2003)	12.7 (1998)	6.1 (2003)	0.454 (1998)	0.367 (2003)
East Asia						
China, People's Rep. of [b]	78.6 (1993)	36.3 (2005)	7.6 (1993)	8.3 (2005)	0.407 (1993)	0.415 (2005)
Hong Kong, China	...	...	9.6 (1996)	...	0.434 (1996)	...
Korea, Rep. of	...	...	4.7 (1998)	...	0.316 (1998)	...
Mongolia	43.5	49.1 (2005)	5.5	5.6 (2005)	0.332	0.330 (2005)
Taipei,China	...	...	5.4 (1993)	6.1 (2003)	0.313 (1993)	0.339 (2003)
South Asia						
Bangladesh	79.5	80.3 (2005)	4.8	4.3 (2005)	0.330	0.332 (2005)
Bhutan	...	49.5 (2003)	...	9.9 (2003)	...	0.468 (2003)
India [b]	81.7 (1993)	75.6 (2005)	4.9 (1993)	5.6 (2005)	0.329 (1993)	0.368 (2005)
Maldives	...	...	...	...	...	...
Nepal	88.1	77.6 (2003)	6.2	8.9 (2003)	0.377	0.473 (2003)
Sri Lanka	46.7	39.7 (2002)	5.3	7.1 (2002)	0.344	0.411 (2002)
Southeast Asia						
Brunei Darussalam [c]	...	...	...	...	...	...
Cambodia	77.9 (1994)	68.2 (2004)	5.8 (1994)	6.9 (2007)	0.318 (1994)	0.407 (2007)
Indonesia [b]	84.6 (1993)	53.8 (2005)	5.2 (1993)	6.7 (2005)	0.344 (1993)	0.394 (2005)
Lao PDR	84.8 (1992)	76.9 (2002)	4.3 (1992)	4.9 (2002)	0.304 (1992)	0.326 (2002)
Malaysia	11.0	7.8 (2004)	7.7 (1993)	6.9 (2004)	0.485 (1993)	0.379 (2004)
Myanmar	...	...	...	...	...	...
Philippines	52.6 (1994)	45.0 (2006)	8.3 (1994)	9.0 (2006)	0.429 (1994)	0.440 (2006)
Singapore	...	...	9.8 (1998)	...	0.425 (1998)	...
Thailand	25.6 (1992)	11.5 (2004)	9.4 (1992)	8.0 (2004)	0.462 (1992)	0.425 (2004)
Viet Nam	85.7 (1993)	48.4 (2006)	5.4 (1993)	6.4 (2006)	0.357 (1993)	0.378 (2006)
The Pacific						
Cook Islands	...	...	...	...	...	...
Fiji Islands	...	...	9.8 (1990)	...	0.490 (1990)	...
Kiribati	...	...	5.7 (1996)	...	...	...
Marshall Islands	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	8.9 (1998)	...	0.408 (1998)	...
Nauru	...	...	...	...	...	...
Palau	...	...	...	...	...	...
Papua New Guinea	57.4 (1996)	...	12.6 (1996)	...	0.509 (1996)	...
Samoa	...	...	...	8.1 (2002)	...	0.430 (2002)
Solomon Islands	...	...	...	...	...	...
Timor-Leste	...	77.5 (2001)	...	6.6 (2001)	...	0.395 (2001)
Tonga	...	...	...	7.7 (2001)	...	0.420 (2001)
Tuvalu	...	...	7.0 (1994)	10.0 (2004)	0.430 (1994)	...
Vanuatu	...	...	...	2.1 (1998)	...	...
Developed Member Countries						
Australia	...	...	7.0 (1994)	...	0.352 (1994)	...
Japan	...	...	3.4 (1993)	...	0.249 (1993)	...
New Zealand	...	...	6.8 (1997)	...	0.362 (1997)	...

a Derived from income or expenditure share of the highest 20% and lowest 20% groups.
b Values are weighted average of urban and rural.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: PovcalNet Database Online (World Bank 2009), World Development Indicators Online (World Bank 2009), Secretariat of the Pacific Community (www.spc.int/prism), ADB staff estimates.

Table 1.15 **Human development index**

	1990	1995	2000	2003	2004	2005	2006	Rank in 2006 [a]
Developing Member Countries								
Central and West Asia								
Afghanistan	...	...	...	...	...	...	...	...
Armenia	0.732	0.695	0.735	0.752	0.759	0.767	0.777	83
Azerbaijan	...	...	0.705	0.725	0.730	0.742	0.758	97
Georgia	...	...	0.733	0.747	0.751	0.759	0.763	93
Kazakhstan	0.776	0.728	0.746	0.779	0.789	0.799	0.807	71
Kyrgyz Republic	...	...	0.679	0.689	0.692	0.692	0.694	122
Pakistan	0.443	0.463	...	0.518	0.526	0.548	0.562	139
Tajikistan	0.709	0.642	0.648	0.669	0.676	0.680	0.684	124
Turkmenistan	...	...	...	...	...	0.727	0.728	108
Uzbekistan	...	...	0.682	0.691	0.695	0.698	0.701	119
East Asia								
China, People's Rep. of	0.607	0.655	0.718	0.738	0.744	0.754	0.762	94
Hong Kong, China	...	...	...	...	...	0.938	0.942	22
Korea, Rep. of	...	...	...	0.911	0.917	0.922	0.928	25
Mongolia	...	...	0.676	0.698	0.709	0.714	0.720	112
Taipei,China	...	...	...	...	...	...	...	...
South Asia								
Bangladesh	0.390	0.414	0.489	0.500	0.504	0.517	0.524	147
Bhutan	...	...	...	0.585	0.591	0.600	0.613	131
India	0.494	0.517	0.561	0.576	0.585	0.600	0.609	132
Maldives	...	0.681	0.719	0.733	0.738	0.737	0.749	99
Nepal	0.407	0.436	0.492	0.501	0.503	0.521	0.530	145
Sri Lanka	0.684	0.701	0.723	0.726	0.729	0.739	0.742	104
Southeast Asia								
Brunei Darussalam [b]	0.879	0.889	0.905	0.910	0.912	0.917	0.919	27
Cambodia	...	...	0.511	0.534	0.554	0.566	0.575	136
Indonesia	0.623	0.657	0.671	0.709	0.714	0.719	0.726	109
Lao PDR	...	0.516	0.583	0.582	0.588	0.601	0.608	133
Malaysia	0.736	0.766	0.797	0.807	0.812	0.819	0.823	63
Myanmar	0.485	0.507	0.551	0.571	0.576	0.581	0.585	135
Philippines	0.694	0.711	0.725	0.734	0.739	0.743	0.745	102
Singapore	0.850	0.883	0.907	0.911	0.913	0.916	0.918	28
Thailand	0.692	0.721	0.750	0.764	0.772	0.782	0.786	81
Viet Nam	0.587	0.645	0.688	0.703	0.709	0.714	0.718	114
The Pacific								
Cook Islands	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	0.743	0.743	103
Kiribati	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	0.513	0.514	0.514	0.516	149
Samoa	0.693	0.711	0.736	0.752	0.753	0.758	0.760	96
Solomon Islands	...	...	...	...	0.584	0.588	0.591	134
Timor-Leste	...	...	...	...	...	0.486	0.483	158
Tonga	...	...	0.760	0.775	0.770	0.772	0.774	85
Tuvalu	...	...	...	...	...	...	...	...
Vanuatu	...	...	0.648	0.671	0.674	0.680	0.686	123
Developed Member Countries								
Australia	0.900	0.935	0.951	0.959	0.962	0.963	0.965	4
Japan	0.916	0.930	0.941	0.948	0.951	0.953	0.956	8
New Zealand	0.881	0.909	0.927	0.939	0.941	0.943	0.944	20

a Rank among the 179 countries classified in UNDP's *Human Development Report 2008*.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: *Human Development Report 2008* (UNDP 2008).

Social Indicators

Table 1.16 **Life expectancy at birth**
(years)

	Both Sexes			Female			Male		
	1990	1995	2007	1990	1995	2007	1990	1995	2007
Developing Member Countries									
Central and West Asia									
Afghanistan	41.8	41.3 (2000)	42.1 (2006)	42.3	42.4 (2000)	42.6 (2006)	41.5	40.3 (2000)	41.7 (2006)
Armenia	68.5	69.6	71.7	71.5	73.0	75.1	65.6	66.3	68.4
Azerbaijan	65.8	66.0	67.4	69.6	69.8	71.2	62.2	62.4	63.8
Georgia	70.2	70.3	70.8	74.2	74.3	74.8	66.5	66.5	67.1
Kazakhstan	68.3	64.9	66.4	73.1	70.4	72.2	63.8	59.7	60.9
Kyrgyz Republic	68.3	65.8	67.7	72.6	70.4	72.1	64.2	61.4	63.5
Pakistan	59.9	61.5	65.5	60.1	61.9	65.8	59.7	61.1	65.2
Tajikistan	63.4	63.9	66.7	66.1	66.5	69.4	60.9	61.3	64.1
Turkmenistan	63.0	63.1	63.2	67.1	67.4	67.5	59.2	59.0	59.0
Uzbekistan	69.2	66.3	67.1	72.4	69.6	70.4	66.1	63.2	64.0
East Asia									
China, People's Rep. of	68.3	69.8	73.0	69.7	71.3	74.8	66.9	68.4	71.3
Hong Kong, China	77.4	78.7	82.3	80.3	81.5	85.4	74.6	76.0	79.3
Korea, Rep. of	71.3	73.4	79.0	75.5	77.4	82.4	67.3	69.6	75.7
Mongolia	60.8	62.7	66.8	62.7	65.1	69.9	59.0	60.4	63.9
Taipei,China	73.8	74.5	77.4	76.8	77.7	80.8	71.3	71.9	74.6
South Asia									
Bangladesh	54.8	58.1	64.1	55.1	58.6	65.0	54.5	57.6	63.2
Bhutan	53.1	57.2	65.7	54.7	59.0	67.5	51.6	55.6	64.0
India	59.7	61.2	64.7	60.0	61.9	66.4	59.3	60.5	63.2
Maldives	60.5	62.5	68.5	59.2	61.5	69.5	61.8	63.5	67.6
Nepal	54.5	57.9	63.7	54.2	58.0	64.2	54.7	57.8	63.2
Sri Lanka	70.1	70.6	72.4	73.5	74.2	76.2	66.9	67.2	68.8
Southeast Asia									
Brunei Darussalam [a]	74.2	75.3	77.3	76.4	77.7	79.7	72.1	73.0	75.0
Cambodia	54.9	56.1	59.5	56.6	57.9	61.9	53.3	54.3	57.3
Indonesia	61.7	64.7	70.6	63.5	66.6	72.7	60.0	62.9	68.7
Lao PDR	54.6	58.1	64.4	55.8	59.3	65.8	53.4	56.9	63.0
Malaysia	70.3	71.5	74.3	72.5	73.9	76.7	68.2	69.2	72.0
Myanmar	59.0	60.0	62.1	61.1	62.5	65.3	57.0	57.6	59.1
Philippines	65.6	67.7	71.7	67.8	69.9	73.9	63.6	65.7	69.5
Singapore	74.3	76.4	80.5	76.9	78.7	82.9	71.9	74.2	78.2
Thailand	67.0	67.6	70.6	70.6	72.2	75.0	63.6	63.3	66.5
Viet Nam	65.9	69.5	74.2	67.7	71.3	76.2	64.1	67.8	72.3
The Pacific									
Cook Islands	68.2	70.8 (2000)	72.8 (2006)	70.3	73.4 (2000)	73.4 (2006)	66.4	68.3 (2000)	70.7 (2006)
Fiji Islands	66.7	66.8	68.8	68.8	69.0	71.1	64.6	64.7	66.6
Kiribati	56.8	59.4	60.9 (2005)	59.1	62.0	63.1 (2005)	54.6	57.0	58.9 (2005)
Marshall Islands	71.0	69.1	65.2 (2000)	73.3	71.1	67.8 (2000)	68.8	67.1	62.8 (2000)
Micronesia, Fed. States of	66.3	66.8	68.5	68.8	67.4	69.3	65.7	66.3	67.7
Nauru	57.1	60.8 (2000)	61.3 (2006)	60.6	63.9 (2000)	64.3 (2006)	54.6	58.2 (2000)	58.7 (2006)
Palau	69.1	71.8	69.1 (2005)	75.0	76.9	72.1 (2005)	63.4	67.0	66.3 (2005)
Papua New Guinea	55.0	56.2	57.4	57.8	59.1	60.4	52.3	53.4	54.6
Samoa	65.3	67.7	71.6	68.7	71.0	74.9	62.1	64.5	68.5
Solomon Islands	67.4	59.8	63.6	57.8	60.3	64.5	57.0	59.3	62.7
Timor-Leste	46.9	52.3	60.8	47.7	53.1	61.7	46.1	51.6	60.0
Tonga	69.8	70.8	73.2	71.1	71.8	74.3	68.6	69.7	72.3
Tuvalu	60.4	63.0 (2000)	64.5 (2006)	60.8	63.4 (2000)	65.1 (2006)	60.0	62.9 (2000)	64.0 (2006)
Vanuatu	63.5	65.7	70.1	65.0	67.3	72.1	62.0	64.2	68.3
Developed Member Countries									
Australia	77.0	77.8	81.3	80.2	80.8	83.7	74.0	75.0	79.0
Japan	78.8	79.5	82.5	81.9	82.8	86.0	75.9	76.4	79.2
New Zealand	75.4	76.7	80.1	78.4	79.5	82.2	72.5	74.1	78.2

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); Statistical Information System Online (WHO 2009); for Taipei,China: Statistical Yearbook Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw/).

Table 1.17 **Births, deaths, and reproduction**

	Crude Birth Rate (per 1,000 people)			Crude Death Rate (per 1,000 people)			Total Fertility Rate (births per woman)		
	1990	1995	2007	1990	1995	2007	1990	1995	2007
Developing Member Countries									
Central and West Asia									
Afghanistan	52.0	...	48.0	23.0	...	20.0	8.0	...	7.1
Armenia	20.5	15.7	12.5	7.7	8.4	9.6	2.5	2.0	1.7
Azerbaijan	25.9	18.9	17.8	6.1	6.7	6.2	2.7	2.3	2.0
Georgia	15.9	13.0	10.8	9.3	10.0	11.8	2.1	1.7	1.4
Kazakhstan	21.7	16.7	19.7	7.7	10.2	10.3	2.7	2.3	2.4
Kyrgyz Republic	29.3	26.0	23.3	7.0	8.2	7.4	3.7	3.3	2.7
Pakistan	41.2	35.5	27.2	10.6	9.2	7.1	6.1	5.3	3.9
Tajikistan	38.4	34.5	27.3	8.1	8.2	6.4	5.1	4.5	3.3
Turkmenistan	33.8	27.7	21.8	8.3	8.1	8.2	4.2	3.4	2.5
Uzbekistan	33.7	29.8	21.0	6.1	6.4	5.3	4.1	3.6	2.4
East Asia									
China, People's Rep. of	21.1	17.1	12.1	6.7	6.6	6.8	2.1	1.8	1.7
Hong Kong, China	12.0	11.2	10.2	5.2	5.1	5.7	1.3	1.3	1.0
Korea, Rep. of	15.4	16.0	10.1	5.8	5.4	5.0	1.6	1.7	1.3
Mongolia	31.6	24.4	21.7	8.8	7.9	6.2	4.0	2.8	1.9
Taipei,China	17.0	15.5	9.0	5.0	5.6	6.0	1.8	1.8	1.1
South Asia									
Bangladesh	34.9	31.1	24.8	11.9	10.0	7.5	4.3	3.7	2.8
Bhutan	37.6	31.8	18.5	13.6	11.0	7.2	5.7	4.7	2.2
India	30.2	28.3	23.5	9.7	9.0	7.5	4.0	3.6	2.7
Maldives	38.7	30.6	23.4	9.3	7.9	5.7	6.0	4.5	2.8
Nepal	38.4	35.9	28.1	12.8	10.7	7.7	5.1	4.6	3.0
Sri Lanka	20.8	19.1	19.0	6.5	6.8	5.8	2.5	2.3	1.9
Southeast Asia									
Brunei Darussalam [a]	27.8	26.3	21.5	3.4	3.0	2.8	3.2	2.9	2.3
Cambodia	42.8	35.6	26.4	12.3	10.9	9.0	5.7	4.9	3.2
Indonesia	25.6	22.9	18.7	8.6	7.6	6.3	3.1	2.7	2.2
Lao PDR	42.5	37.2	26.8	12.9	10.5	7.1	6.1	5.2	3.2
Malaysia	29.7	25.8	20.6	5.3	4.8	4.5	3.7	3.2	2.6
Myanmar	26.8	23.4	18.2	10.5	10.0	9.7	3.4	2.8	2.1
Philippines	32.6	30.1	25.8	6.7	5.8	4.8	4.3	3.9	3.2
Singapore	18.4	15.7	10.0	4.8	4.8	4.5	1.9	1.7	1.3
Thailand	19.2	17.5	14.6	7.4	7.8	8.5	2.1	1.9	1.9
Viet Nam	29.9	24.1	18.8	7.8	6.2	5.1	3.6	2.8	2.1
The Pacific									
Cook Islands	28.0	21.2 (2000)	21.0	8.0	7.9 (2000)	6.0	3.3	...	2.6 (2005)
Fiji Islands	28.3	26.3	21.1	6.1	6.2	6.6	3.4	3.3	2.8
Kiribati	32.2	32.0	26.6 (2005)	10.5	9.0	8.7 (2005)	4.0	4.5	3.4 (2005)
Marshall Islands	34.7	27.5	41.8 (1999)	4.7	4.1	4.9 (1999)	5.9	5.8	5.7 (2002)
Micronesia, Fed. States of	33.5	31.8	25.9	6.5	6.3	6.1	5.0	4.6	3.7
Nauru	23.0	22.9 (2000)	21.0 (2004)	4.0	5.1	6.0 (2004)	4.9	3.7 (2000)	3.9 (2005)
Palau	21.6	23.2	12.9 (2006)	7.7	8.4	7.2 (2006)	2.8	2.9	1.5 (2000)
Papua New Guinea	36.8	36.8	29.6	11.0	10.4	9.6	4.8	4.7	3.8
Samoa	33.7	32.3	24.7	6.8	6.5	5.4	4.7	4.7	3.9
Solomon Islands	39.4	37.3	30.5	10.8	9.3	7.2	5.8	5.2	3.9
Timor-Leste	43.1	44.7	42.1	17.4	13.7	8.9	5.5	6.5	6.5
Tonga	30.1	27.9	25.6	5.9	5.8	5.7	4.6	4.2	3.8
Tuvalu	25.0	...	27.0 (2004)	11.0	...	10.0 (2004)	...	3.2 (1997)	3.7
Vanuatu	36.7	34.9	28.8	7.3	6.8	5.0	4.9	4.7	3.7
Developed Member Countries									
Australia	15.4	14.2	13.6	7.0	6.9	6.6	1.9	1.8	1.9
Japan	10.0	9.5	8.8	6.7	7.4	8.7	1.5	1.4	1.3
New Zealand	17.5	16.0	15.1	8.1	7.5	6.7	2.2	2.0	2.2

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009), Secretariat of the Pacific Community (www.spc.int/prism/); for Taipei,China: Statistical Yearbook Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw/).

Social Indicators

Table 1.18 **Primary education completion rate**
(percent)

	Both Sexes		Female		Male	
	2000	2006	2000	2006	2000	2006
Developing Member Countries						
Central and West Asia						
Afghanistan	...	37.7 (2005)	...	20.8 (2005)	...	53.5 (2005)
Armenia	100.5 (2001)	97.5 (2007)	100.9 (2001)	99.5 (2007)	100.1 (2001)	95.8 (2007)
Azerbaijan	89.5	113.3 (2007)	90.0	112.8 (2007)	89.0	113.9 (2007)
Georgia	101.3	84.7	101.4	86.3	101.1	83.1
Kazakhstan	94.4	104.5 (2008)	94.9	105.1 (2008)	93.9	103.9 (2008)
Kyrgyz Republic	94.6	94.7 (2007)	94.0	94.0 (2007)	95.2	95.4 (2007)
Pakistan	...	61.8	...	52.9	...	70.2
Tajikistan	94.9	94.8 (2007)	89.7	103.7	100.0	108.3
Turkmenistan	...	...	...	...	...	...
Uzbekistan	95.4	97.5 (2007)	95.3	96.3 (2007)	95.5	98.5 (2007)
East Asia						
China, People's Rep. of	105.2 (1991)	100.9 (2007)	...	100.6 (2007)	...	101.2 (2007)
Hong Kong, China	106.8 (2003)	101.7 (2005)	104.9 (2003)	99.4 (2005)	108.7 (2003)	103.9 (2005)
Korea, Rep. of	98.0	100.6	98.2	95.1	97.8	106.9
Mongolia	87.2	110.4 (2007)	90.5	113.1 (2007)	84.0	107.8 (2007)
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	77.4	71.9 (2004)	80.0	74.2 (2004)	74.5	69.7 (2004)
Bhutan	52.4	83.3 (2008)	48.6	86.2 (2008)	56.2	80.3 (2008)
India	72.3	85.7	64.3	83.1	79.7	88.0
Maldives	147.3 (2003)	114.1 (2007)	151.6 (2003)	110.9 (2007)	143.2 (2003)	117.1 (2007)
Nepal	65.6	78.2 (2008)	56.8	77.5 (2008)	73.9	78.8 (2008)
Sri Lanka	106.1 (2001)	106.2	105.5 (2001)	106.8	106.6 (2001)	105.6
Southeast Asia						
Brunei Darussalam [a]	121.7	107.4 (2007)	121.3	109.0 (2007)	122.0	105.9 (2007)
Cambodia	47.2	85.1 (2007)	41.2	84.7 (2007)	53.0	85.4 (2007)
Indonesia	95.3 (2001)	98.8	95.7 (2001)	98.9	94.9 (2001)	98.7
Lao PDR	68.4	76.9 (2007)	62.5	72.3 (2007)	74.1	81.4 (2007)
Malaysia	94.0 (1999)	98.3 (2005)	93.4 (1999)	98.1 (2005)	94.6 (1999)	98.4 (2005)
Myanmar	80.6	95.3	79.2	97.8	82.1	92.8
Philippines	89.5 (1999)	93.8	92.1 (1999)	97.5	86.9 (1999)	90.3
Singapore	...	...	...	...	...	...
Thailand	96.0 (1999)	101.1 (2007)	95.8 (1999)	103.6 (2007)	96.3 (1999)	98.7 (2007)
Viet Nam	95.9	...	93.5	...	98.3	...
The Pacific						
Cook Islands	87.9 (1999)	82.6 (2007)	85.9 (1999)	...	89.8 (1999)	...
Fiji Islands	100.4	98.1	99.5	97.8	101.3	98.4
Kiribati	98.9	124.8 (2005)	95.0	126.0 (2005)	102.5	123.7 (2005)
Marshall Islands	97.5 (1999)	90.7 (2007)	87.2 (1999)	92.3 (2007)	107.4 (1999)	89.2 (2007)
Micronesia, Fed. States of	...	...	...	...	...	...
Nauru	90.4 (2001)	79.0 (2007)	93.2 (2001)	79.7 (2007)	88.1 (2001)	78.3 (2007)
Palau	98.8	119.1 (2004)	90.4	...	106.7	...
Papua New Guinea	46.5 (1991)	...	41.9 (1991)	...	50.9 (1991)	...
Samoa	94.7	98.3 (2007)	96.1	98.2 (2007)	93.5	98.4 (2007)
Solomon Islands	72.1 (1991)	...	...	...	...	...
Timor-Leste	...	69.3 (2007)	...	69.2 (2007)	...	69.4 (2007)
Tonga	98.6 (1999)	99.9	101.4 (1999)	102.4	96.1 (1999)	97.7
Tuvalu	125.5	105.3	122.4	118.2	128.3	93.2
Vanuatu	86.2	86.5 (2004)	88.1	85.9 (2004)	84.4	87.0 (2004)
Developed Member Countries						
Australia	...	...	...	...	...	...
Japan	101.4 (1991)	...	101.6 (1991)	...	101.3 (1991)	...
New Zealand	100.0 (1991)	...	99.0 (1991)	...	100.9 (1991)	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009), Millennium Development Goal Database (UNSD 2009).

Table 1.19 **Adult literacy rate**
(15 years and over, percent)

	Both Sexes		Female		Male	
	1990	2007	1990	2007	1990	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	...	28.0 (2000)	...	12.6 (2000)	...	43.1 (2000)
Armenia	...	99.5	...	99.3	...	99.7
Azerbaijan	...	99.4	...	99.1	...	99.7
Georgia	...	...	...	...	...	...
Kazakhstan	...	99.6	...	99.5	...	99.8
Kyrgyz Republic	...	99.3	...	99.1	...	99.5
Pakistan	42.7 (1998)	54.9	29.0 (1998)	40.2	55.3 (1998)	68.7
Tajikistan	...	99.6	98.3 (1995)	99.5	99.3 (1995)	99.8
Turkmenistan	98.8 (1995)	99.5	...	99.3	...	99.7
Uzbekistan	...	96.9 (2000)	...	95.8 (2000)	...	98.0 (2000)
East Asia						
China, People's Rep. of	77.8	93.3	68.1	90.0	87.0	96.5
Hong Kong, China	...	...	...	...	...	...
Korea, Rep. of	...	...	...	...	...	...
Mongolia	...	97.3	...	97.7	...	96.8
Taipei,China	92.4	...	...	...	...	...
South Asia						
Bangladesh	35.3 (1991)	53.5	25.8 (1991)	48.0	44.3 (1991)	58.7
Bhutan	...	55.6	...	42.2	...	67.1
India	48.2 (1991)	66.0	33.7 (1991)	54.5	61.6 (1991)	76.9
Maldives	96.0	97.0	96.1	97.1	95.9	97.0
Nepal	33.0 (1991)	56.5	17.4 (1991)	43.6	49.2 (1991)	70.3
Sri Lanka	...	91.5	...	89.9	...	93.2
Southeast Asia						
Brunei Darussalam [a]	87.8 (1991)	94.9	82.5 (1991)	93.1	92.5 (1991)	96.5
Cambodia	67.3 (1998)	76.3	57.0 (1998)	67.7	79.5 (1998)	85.8
Indonesia	81.5	91.4	75.3	88.0	88.0	94.9
Lao PDR	60.3 (1995)	73.4	47.9 (1995)	66.6	73.5 (1995)	80.0
Malaysia	82.9 (1991)	91.9	77.3 (1991)	89.6	88.6 (1991)	94.2
Myanmar	...	89.9 (2000)	...	86.4 (2000)	...	93.9 (2000)
Philippines	93.6	93.4	93.2	93.7	94.0	93.1
Singapore	89.1	94.4	83.0	91.6	95.1	97.3
Thailand	...	94.1	...	92.6	...	95.9
Viet Nam	...	90.3 (1999)	...	86.9 (1999)	...	93.9 (1999)
The Pacific						
Cook Islands	...	99.0 (2001)	...	...	...	...
Fiji Islands	93.0 (1996)	92.9 (2004)	...	...	...	...
Kiribati	...	92.0 (2005)	...	...	...	...
Marshall Islands	97.0 (1999)	...	...	...	...	...
Micronesia, Fed. States of	...	93.0 (2000)	...	...	...	...
Nauru	...	99.0 (2003)	...	...	...	...
Palau	...	98.0 (2005)	...	...	...	...
Papua New Guinea	...	57.8	50.9 (2001)	53.4	...	62.1
Samoa	97.9 (1991)	98.7	97.4 (1991)	98.4	98.4 (1991)	98.7
Solomon Islands	68.0 (1999)	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...
Tonga	98.9 (1996)	99.2	99.0 (1996)	99.3	98.8 (1996)	99.2
Tuvalu	...	99.0 (2002)	...	...	...	...
Vanuatu	65.5 (1994)	78.1	62.5 (1994)	76.1	68.4 (1994)	80.0
Developed Member Countries						
Australia	...	...	...	...	...	...
Japan	...	...	...	...	...	...
New Zealand	...	...	...	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Institute for Statistics (UNESCO 2009); Education Indicators Online (Secretariat of the Pacific Community; www.spc.int/prism); for Taipei,China: Statistical Yearbook Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw/).

Social Indicators

Table 1.20 **Education resources**

	Primary Pupil–Teacher Ratio			Secondary Pupil–Teacher Ratio		
	1990	2000	2007	1990	2000	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	41.2	64.0	83.4 (2005)	24.8	...	...
Armenia	...	20.3 (2001)	19.3	9.5 (1995)	6.9 (2002)	7.8
Azerbaijan	...	18.7	13.4 (2005)	10.3 (1995)	7.8	8.4 (2005)
Georgia	17.2 (1991)	16.8	14.5 (2004)	6.7 (1995)	7.5	9.1 (2004)
Kazakhstan	21.6	18.7	16.6 (2008)	13.3	11.3	10.0 (2008)
Kyrgyz Republic	15.9	24.1	24.2	13.8	13.3	13.6
Pakistan	43.0	33.0	39.0 (2006)	19.5	...	41.9 (2004)
Tajikistan	21.3 (1991)	21.8	21.9 (2008)	10.6 (1995)	16.4	16.5
Turkmenistan	...	...	...	...	...	...
Uzbekistan	24.1	21.4	18.2	10.9	11.5	13.1
East Asia						
China, People's Rep. of	22.3	19.4 (2001)	18.3 (2006)	14.6	17.1	17.5 (2006)
Hong Kong, China	27.2	21.3	18.9	20.7 (1991)	...	17.5 (2006)
Korea, Rep. of	36.3	32.2	26.6 (2006)	27.7	22.1	18.0 (2006)
Mongolia	28.9	32.6	31.6	18.8	19.9	19.8
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	63.0	57.1	50.9 (2004)	27.4	38.4	27.4 (2004)
Bhutan	...	41.1	28.9 (2008)	...	32.5	23.7 (2008)
India	46.0	40.0	40.2 (2004)	28.7	33.6	32.7 (2004)
Maldives	...	22.7	14.5	...	15.3	13.7 (2003)
Nepal	39.2	42.6	37.8 (2008)	31.1	30.2	40.9 (2008)
Sri Lanka	29.0	26.3 (2001)	23.5 (2006)	19.1	19.6 (2002)	19.5 (2004)
Southeast Asia						
Brunei Darussalam [a]	15.3 (1991)	13.7	12.7	11.5 (1995)	10.9	10.8
Cambodia	35.0	50.1	50.9	20.1	18.5	26.8
Indonesia	23.3	22.4	20.3 (2006)	12.9	15.8	11.8 (2006)
Lao PDR	28.2	30.1	30.1	11.8	21.3	24.7 (2006)
Malaysia	20.4	19.6	16.9 (2005)	19.3	18.4	17.0 (2005)
Myanmar	44.9	32.8	29.1	...	31.9	32.8
Philippines	32.7	35.2 (2001)	34.6 (2006)	33.3	36.4 (2001)	37.3 (2006)
Singapore	25.8	25.6	22.6 (2006)	17.9 (1991)	19.4 (1999)	17.0 (2006)
Thailand	20.3	20.8	17.7	16.2	24.0 (2001)	21.0
Viet Nam	34.2	29.5	20.7 (2006)	18.0	28.0	22.7 (2006)
The Pacific						
Cook Islands	...	17.8	16.2	...	13.9	14.7
Fiji Islands	33.6	28.1	34.4	...	20.2	22.9
Kiribati	28.6	31.7	24.7 (2005)	12.2	17.6	17.0 (2005)
Marshall Islands	...	14.9 (1999)	16.9 (2003)	...	21.6 (1999)	16.7 (2003)
Micronesia, Fed. States of	...	...	16.6	...	...	...
Nauru	...	21.5	19.9	...	17.4	20.9
Palau	...	15.7	12.5 (2005)	...	15.1	...
Papua New Guinea	31.7	35.4	35.8 (2006)	21.7	...	...
Samoa	24.0	24.0	23.8	18.5 (1995)	21.2	20.8 (2004)
Solomon Islands	19.4	19.2 (1999)	...	...	10.1	...
Timor-Leste	...	50.8 (2001)	30.8	...	28.4 (2001)	23.7 (2005)
Tonga	24.0	22.1	22.3 (2006)	17.7	14.6	14.4 (2002)
Tuvalu	...	19.7	19.2 (2004)	...	...	...
Vanuatu	27.2	22.5	20.0 (2004)	15.8	24.7	13.9 (2002)
Developed Member Countries						
Australia	16.7 (1991)	17.9 (1999)	...	11.6	...	...
Japan	21.2	20.7	18.7 (2006)	17.1	14.0	12.4 (2006)
New Zealand	18.0	18.4	15.9 (2006)	15.4	15.5	14.7 (2006)

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009), Institute for Statistics Online (UNESCO 2009).

Table 1.21 **Health care resources**
(per 1,000 population)

	Physicians			Hospital Beds		
	1990	2000	2006	1990	2000	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	0.11	0.19 (2001)	0.20 (2005)	0.25	0.40 (2001)	0.42
Armenia	3.92	2.99	3.70	9.09	5.47	4.38
Azerbaijan	3.92	3.61	3.63	10.10	8.68	7.98
Georgia	4.93	4.73	4.65	9.80	4.77	3.31
Kazakhstan	3.98	3.29	3.88	13.67	7.19	8.08
Kyrgyz Republic	3.37	2.82	2.39	11.98	7.40	4.89
Pakistan	0.46	0.66 (2001)	0.80 (2005)	0.64	0.70 (2003)	1.00
Tajikistan	2.55	2.13	2.01	10.66	6.54	5.38
Turkmenistan	3.61	4.18 (2002)	2.49	11.48	7.11 (1997)	4.33 (2006)
Uzbekistan	3.39	2.95	2.65 (2005)	12.48	5.33	4.74
East Asia						
China, People's Rep. of	1.55	1.64	1.51 (2005)	2.58	2.52	2.23 (2006)
Hong Kong, China	1.20 (1993)	...	...	...	...	...
Korea, Rep. of	0.80	1.30	1.57 (2003)	3.10	6.10	8.64 (2006)
Mongolia	2.54	2.54 (1999)	2.63 (2002)	11.49 (1991)	7.50 (2002)	6.11
Taipei,China	1.09	1.50	1.77 (2007)	4.37	5.68	6.56
South Asia						
Bangladesh	0.18	0.23 (2001)	0.30 (2005)	0.30	0.30 (1999)	0.34 (2002)
Bhutan	0.33	0.05 (1999)	0.02 (2007)	0.85	1.60 (1999)	1.60 (2002)
India	0.48 (1992)	0.51 (1998)	0.60 (2004)	0.91 (1991)	...	0.90 (2003)
Maldives	0.07	0.78	0.92 (2004)	0.76	1.70	2.30 (2003)
Nepal	0.05	0.05 (2001)	0.21 (2004)	0.24	0.20 (1999)	0.15 (2002)
Sri Lanka	0.15 (1993)	0.43	0.55 (2004)	2.74	2.20 (1999)	3.10 (2002)
Southeast Asia						
Brunei Darussalam [a]	0.75 (1991)	1.01	1.14 (2002)	...	2.60	2.79 (2006)
Cambodia	0.11 (1992)	0.16	..	2.07	0.60 (2001)	0.10 (2004)
Indonesia	0.14	0.16	0.13 (2003)	0.67	0.60 (1998)	0.60 (2002)
Lao PDR	0.23	0.59 (1996)	0.35 (2004)	2.57	0.90 (2002)	1.20 (2005)
Malaysia	0.39	0.70	0.71 (2002)	2.13	1.80 (2001)	1.76
Myanmar	0.08	0.30	0.36 (2004)	0.64	0.70	0.63 (2002)
Philippines	0.12	0.59	1.15 (2002)	1.39	1.00 (2001)	1.06 (2006)
Singapore	1.27	1.35 (1999)	1.50 (2003)	3.61	2.90 (2001)	3.22
Thailand	0.23	0.37	...	1.63	2.20	2.23 (2002)
Viet Nam	0.40	0.52 (1999)	0.56 (2002)	3.83	2.40 (2001)	2.66 (2006)
The Pacific						
Cook Islands	...	..	...	...	...	...
Fiji Islands	0.47 (1992)	0.34 (1999)	0.45 (2003)	..	2.60 (1999)	2.09 (2005)
Kiribati	0.19	0.30 (1998)	0.23 (2004)	4.27	1.80 (1998)	1.51 (2005)
Marshall Islands	0.42 (1996)	0.47	...	2.27	2.10 (1999)	...
Micronesia, Fed. States of	0.45 (1993)	0.60	0.55 (2003)	...	2.80	3.31 (2006)
Nauru	...	...	1.00 (2004)	...	...	5.90 (2004)
Palau	1.11 (1998)	1.58	...	...	4.40 (1998)	4.99
Papua New Guinea	0.07	0.05	...	4.02	...	...
Samoa	0.36 (1992)	0.70 (1999)	0.28 (2003)	...	3.30	1.00 (2005)
Solomon Islands	0.16 (1992)	0.13 (1999)	0.13 (2003)	0.83	...	1.45 (2005)
Timor-Leste	...	...	0.10 (2004)	...	...	...
Tonga	0.51 (1991)	0.50	0.29 (2002)	...	3.20 (2001)	2.91 (2004)
Tuvalu	...	...	1.00 (2003)	...	...	5.60 (2001)
Vanuatu	0.10 (1991)	0.11 (1997)	0.14 (2004)	...	3.10 (2001)	4.10 (2005)
Developed Member Countries						
Australia	2.20	2.50	2.50 (2002)	9.20 (1991)	7.80	3.97 (2006)
Japan	1.70	1.90	2.12 (2004)	15.60 (1993)	14.70	13.98 (2006)
New Zealand	1.90	2.20	2.20 (2003)	8.50	6.20 (1998)	6.18 (2002)

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); Statistical Information System Online (WHO 2009); for Taipei,China: Statistical Yearbook Online (Directorate-General of Budget, Accounting and Statistics; eng.dgbas.gov.tw).

Social Indicators

Table 1.22 **Estimated number of adults living with HIV**
(aged 15 years and over, thousands)

	Total		Women	
	2001	2007	2001	2007
Developing Member Countries				
Central and West Asia				
Afghanistan	...	...	...	...
Armenia	1.8	2.4	<0.5	...
Azerbaijan	<0.5	7.8	...	1.3
Georgia	<0.5	2.7	<0.1	<1.0
Kazakhstan	3.4	12.0	<1.0	3.3
Kyrgyz Republic	1.0	4.2	...	1.1
Pakistan	50.0	94.0	13.0	27.0
Tajikistan	2.4	10.0	<0.5	2.1
Turkmenistan	...	<0.5	...	...
Uzbekistan	1.4	16.0	<0.5	4.6
East Asia				
China, People's Rep. of	470.0	690.0	120.0	200.0
Hong Kong, China	...	...	...	...
Korea, Rep. of	6.8	13.0	1.8	3.6
Mongolia	...	<1.0	...	<0.2
Taipei,China	...	...	...	...
South Asia				
Bangladesh	7.5	12.0	<0.1	2.0
Bhutan	...	<0.5	...	<0.1
India	2600.0	2300.0	1000.0	880.0
Maldives	...	...	...	...
Nepal	55.0	68.0	12.0	17.0
Sri Lanka	3.0	3.7	<1.0	1.4
Southeast Asia				
Brunei Darussalam [a]	...	...	...	...
Cambodia	120.0	70.0	31.0	20.0
Indonesia	93.0	270.0	10.0	54.0
Lao PDR	1.1	5.4	<0.5	1.3
Malaysia	43.0	79.0	10.0	21.0
Myanmar	290.0	240.0	97.0	100.0
Philippines	<1.0	8.2	<0.5	2.2
Singapore	2.9	4.1	<1.0	1.2
Thailand	650.0	600.0	240.0	250.0
Viet Nam	150.0	280.0	37.0	76.0
The Pacific				
Cook Islands	...	...	...	...
Fiji Islands	...	...	...	...
Kiribati	...	...	...	...
Marshall Islands	...	...	...	...
Micronesia, Fed. States of	...	...	...	...
Nauru	...	...	...	...
Palau	...	...	...	...
Papua New Guinea	9.8	53.0	3.4	21.0
Samoa	...	...	...	...
Solomon Islands	...	...	...	...
Timor-Leste	...	...	...	...
Tonga	...	...	...	...
Tuvalu	...	...	...	...
Vanuatu	...	...	...	...
Developed Member Countries				
Australia	14.0	18.0	<1.0	1.2
Japan	8.1	9.6	1.8	2.3
New Zealand	1.2	1.4	<0.2	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Report on the Global AIDS Epidemic (UNAIDS/WHO 2008. www.unaids.org/en/).

Economy and Output

The Asia and Pacific region accounts for almost one third of **global GDP**, and two thirds of **regional GDP** comes from the People's Republic of China (PRC), India, and Japan. Eight economies in the region have **per capita GDP** of $25,000 or more although most countries in the region are much poorer, with per capita GDP below $6,000. Three economies from Asia are among the 10 largest economies in the world. **GDP growth rates** in 2008 were mostly lower than the very high rates in 2007, but they continue to be substantially above the growth rates recorded by the industrialized countries of Western Europe and North America. In just over half of the economies in the region, **exports** as a percentage of GDP were actually higher in 2008 than those in 2007 but both the gains and losses were generally very small. Several Asian economies now have high **gross domestic saving** ratios.

Introduction

The first two tables in **economy and output** theme show total and per capita GDP. Purchasing power parities (PPPs) have been used to convert the data in national currencies to international dollars. The use of PPPs eliminates differences in price levels among countries so that comparisons are made in "real" terms. They reflect only differences in the volumes of goods and services produced and consumed in each country.

This theme also gives the standard range of macroeconomic statistics showing the industrial structure of GDP and its breakdown by final expenditure. Most of these tables are taken from the national accounts but there are also tables showing the growth of output indexes for agricultural and manufactured products.

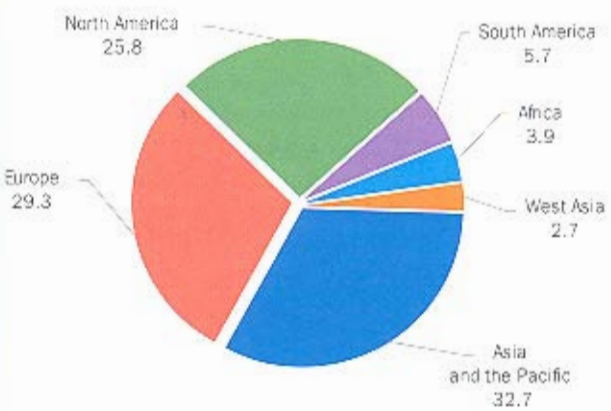
The current economic crisis erupted in the third quarter of 2008 and so is not yet reflected in the annual statistics shown under this theme.

Key Trends

How is global GDP distributed? Figure 2.1 divides the real GDP of the world economy for 2007 into six regions. Each country's GDP has been converted into a common currency using PPPs. The *world economy* is measured by the total GDP of 177 economies for which updated PPPs are available. *North America* includes Mexico and the Caribbean islands; while the *Asia and Pacific* region covers both developed and developing regional members of ADB.

Figure 2.1 shows that the Asia and Pacific region accounted for almost one third of global GDP. Europe accounted for close to 30%. North America accounted for about 26%, and Africa, South America, and West Asia together comprised only a little more than 12%.

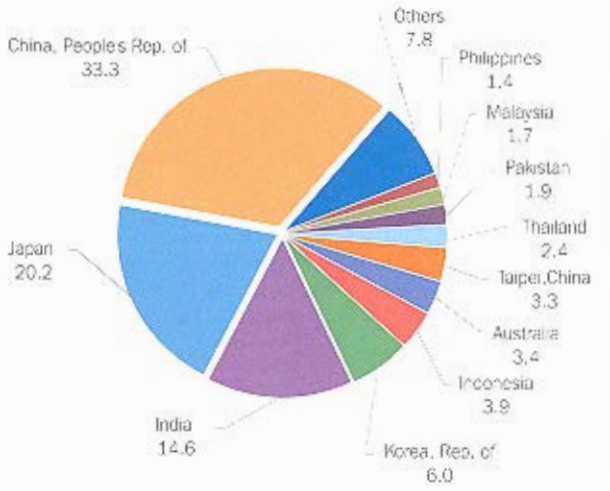
Figure 2.1 **Percentage Distribution of Global GDP at PPP, 2007**



Sources: Derived from Table 2.1 and World Development Indicators Online (World Bank 2009).

Two thirds of the region's GDP comes from just three countries—People's Republic of China (PRC), India, and Japan. Figure 2.2 shows the breakdown of total real GDP within the Asia and Pacific region in 2007. GDP has again been converted using PPPs. The PRC and Japan together accounted for over half of the total. India's share was also substantial at 15%, and the Republic of Korea accounted for a further 6%. Indonesia had a 4% share while Australia and Taipei,China each accounted for slightly over 3%.

Figure 2.2 **Percentage Distribution of GDP at PPP in the Asia and Pacific Region, 2007**



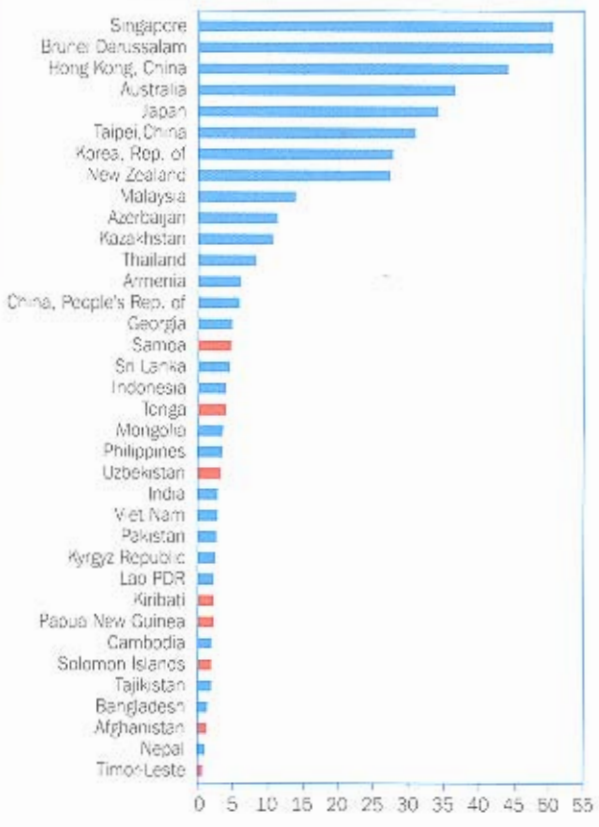
Source: Derived from Table 2.1.

"Real comparison" can only be made using PPPs. Figure 2.3 shows per capita GDP converted to a common currency using PPPs rather than exchange rates. Using PPPs eliminates differences due to differences in price levels so that comparisons reflect only differences in the volumes of goods and services for final use. The World Bank has made econometric estimates of PPPs for several ADB regional members that did not take part in the 2005 International Comparison Program to calculate PPPs. These are designated by red bars in Figure 2.3.

In the Asia and Pacific region, many countries are poor and a few are very rich. The 36 economies in Figure 2.3 can be divided into three groups. The first group comprises eight rich economies with per capita GDP in excess of $25,000: Australia; Brunei Darussalam; Hong Kong, China; Japan; New Zealand; Republic of Korea; Singapore; and Taipei,China. It is interesting to note that per capita GDP in Brunei Darussalam; Hong Kong, China; and Singapore exceeds that of the three developed member countries—Australia, Japan, and New Zealand. The richest economy, Singapore, has a per capita GDP that is 62 times that of Timor-Leste, the poorest economy.

Five economies fall into a middle-income group with per capita GDP between $6,000 and $14,000: Armenia, Azerbaijan, Kazakhstan, Malaysia, and Thailand. The remaining 23 economies of the region have per capita GDP below $6,000. The five most populous economies in the region fall into this last category: PRC ($5,958), Indonesia ($3,975), India ($2,923), Pakistan ($2,657), and Bangladesh ($1,501).

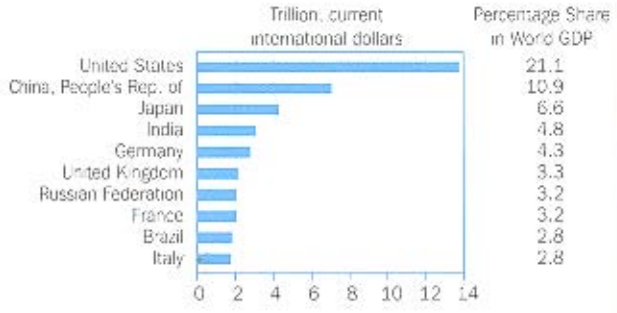
Figure 2.3 **Per Capita GDP in PPP terms, 2008 (thousand, current international dollars)**



Source: Table 2.2.

Three of the world's top 10 economies are from Asia. Figure 2.4 shows the top 10 economies in the world in terms of GDP at PPP for 2007. Three of the top 10 economies (PRC, Japan, and India) are from Asia. The largest economy, the United States, had a share of about 21%, which was nearly twice that of the next largest, the PRC. It is widely believed that Japan has the second largest economy after the United States. Figure 2.4 shows that when the comparison is made in real terms (using PPPs) PRC is substantially larger than Japan.

Figure 2.4 **Top Ten Economies in the World in terms of GDP at PPP, 2007**

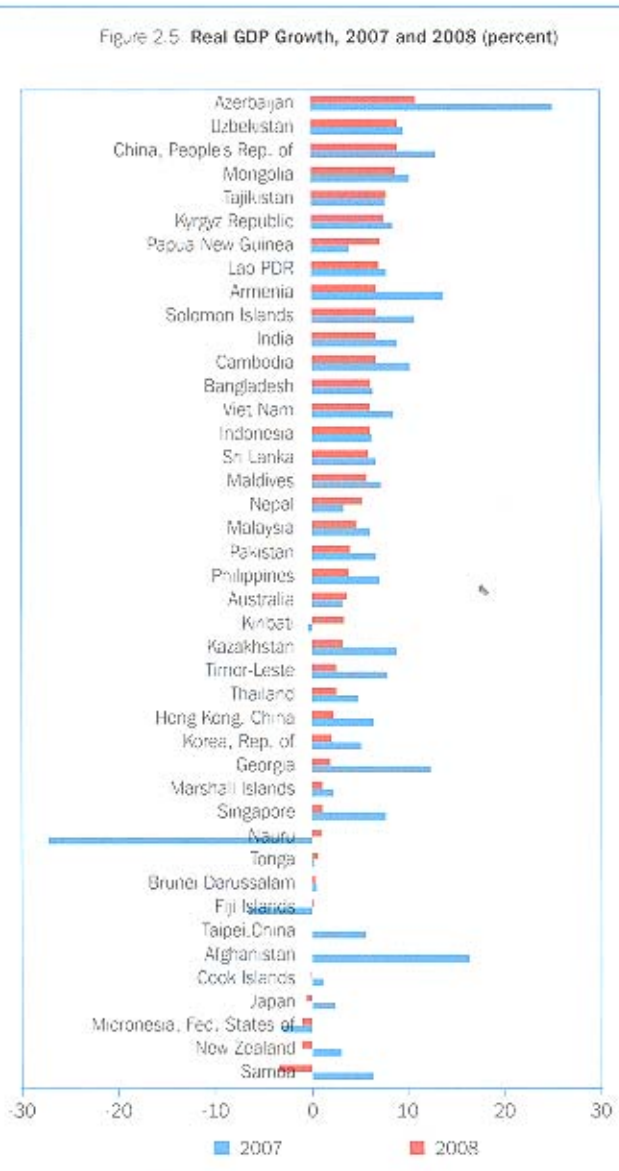


Sources: Derived from Table 2.1 and World Development Indicators Online (World Bank 2009).

GDP growth was down in 2008 but still high. Growth of GDP was exceptionally high in 2007 and most economies reported lower growth rates in 2008. Nevertheless, many economies in the region continue to report annual growth rates for GDP that are high by historical standards. They are also substantially higher than growth rates posted by the industrialized countries of Western Europe and North America. Figure 2.5 compares real GDP growth rates for 2007 and 2008.

Fifteen economies reported real GDP growth in excess of 6% including four of the most populous countries—Bangladesh, PRC, India, and Indonesia and a further five grew at between 4% and 6%. Rates of under 1% or actual declines were recorded by Afghanistan; Brunei Darussalam; Japan; New Zealand; Taipei,China; and five small economies in the Pacific. Particularly sharp declines in growth rates were recorded by Afghanistan; Armenia; Azerbaijan; Kazakhstan; Taipei,China; Georgia; Samoa; and Singapore.

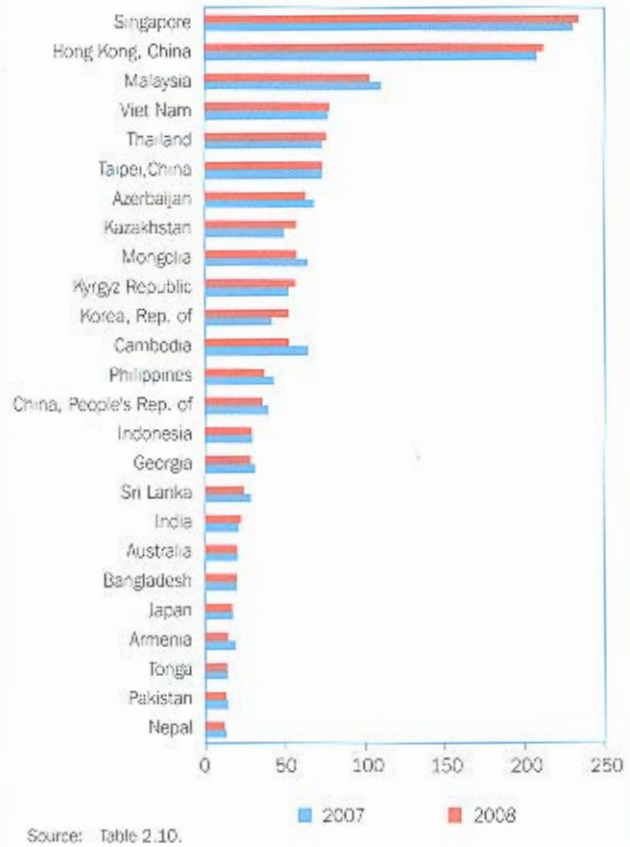
Figure 2.5 **Real GDP Growth, 2007 and 2008 (percent)**



Source: Table 2.13.

Exports held up well in 2008. In many Asian countries, GDP growth has been export-led. Figure 2.6 compares exports of goods and services as percentages of GDP in 2007 and 2008. The economic crisis is expected to slow export growth but the extent of the problem will only become apparent when data for 2009 become available. In just over half of the economies shown in Figure 2.6, exports of goods and services as a percentage of GDP in 2008 were actually higher than in 2007. However, the gains were rather small—as were the losses. The main exceptions were Cambodia, Malaysia, Mongolia, and Philippines, where export percentages fell by 5 points or more.

Figure 2.6 **Exports of Goods and Services as a percentage of GDP, 2007 and 2008**

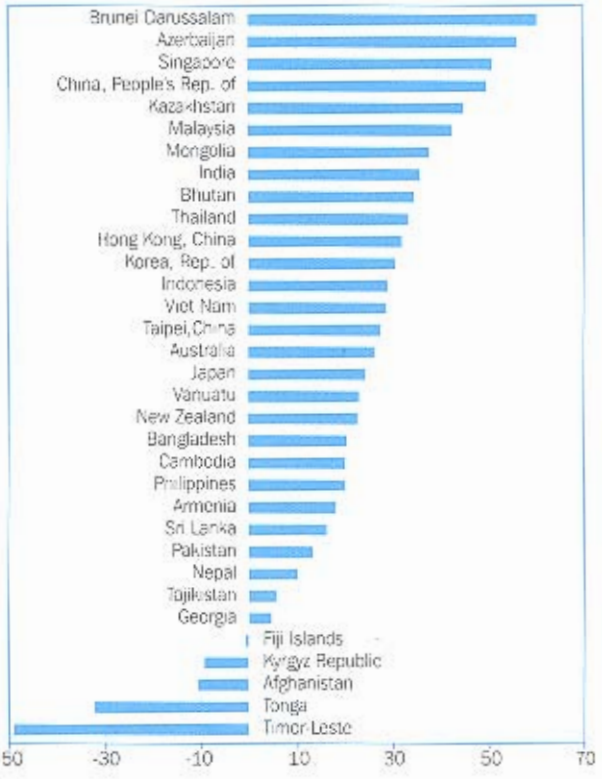


Source: Table 2.10.

Some Asian countries have high saving ratios. Gross domestic saving is that part of gross domestic product that is not used by government or households for their current consumption. Gross domestic saving is available for capital formation, to repay debts with the rest of the world, or to acquire foreign financial assets. The three developed member countries—Australia, Japan, and New Zealand have gross domestic saving ratios of between 20% and 30% and this is typical of most developed countries in Western Europe. Several Asian economies have ratios above 30%, with three exceeding 50%. These countries prefer to save for the future rather than to spend now.

In Figure 2.7, gross domestic saving is shown as a percentage of GDP averaged over the latest 3 years. Both PRC and India have domestic saving ratios in excess of 30%. Malaysia and Thailand are two other large countries with high domestic saving ratios.

Figure 2.7 **Gross Domestic Saving as a Percentage of GDP, Average of Latest Three Years**



Source: Table 2.12.

Data Issues and Comparability

The national accounts statistics are all compiled according to the United Nations System of National Accounts (SNA). Many countries still use the 1968 version of the SNA. Others have changed to the 1993 SNA or are in the process of doing so. The differences between the two systems are not significant for most countries when comparisons are made for GDP and its main components. The national accounts data can therefore be considered as reasonably comparable.

The PPPs for Asia were calculated as part of the global 2005 International Comparison Program (ICP) exercise coordinated by the World Bank. Extensive consultations were held with participating economies to ensure the comparability and reliability of the PPP calculations. PPPs for 2005 were directly calculated for 31 ADB regional members. For an additional 12 ADB regional members, PPPs were calculated by the ICP Global Office located at the Development Data Group of the World Bank, on the assumption that PPPs are a function of per capita gross national income calculated using the World Bank Atlas Method, and the proportion of children in secondary education.

Table 2.1 **Gross domestic product at PPP**
(current international dollars, million)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries									
Central and West Asia									
Afghanistan	...	...	15455	18945	19648	22411	25395	30751	31842
Armenia	6244	7008	8071	9397	10681	12560	14665	17133	19494
Azerbaijan	17732	19958	22459	25507	28916	37731	52347	71044	97438
Georgia	9782	10499	11268	12780	13918	15747	17767	20500	21403
Kazakhstan	71190	82747	92446	103197	116353	131766	150481	168202	165513
Kyrgyz Republic	6530	7043	7165	7832	8623	8887	9451	10660	13475
Pakistan	235963	246438	258837	277161	306141	340258	372660	403234	431341
Tajikistan	5475	6179	6859	7725	8783	9682	10750	11839	14288
Turkmenistan	...	...	...	...	...	20580	...	...	...
Uzbekistan	35602	37991	40202	42784	47125	50015	57952	65143	90065
East Asia									
China, People's Rep. of	2976464	3301194	3664595	4117005	4663035	5314365	6117734	7096660	7912850
Hong Kong, China	175649	180776	187326	197070	219896	243081	268238	292865	306696
Korea, Rep. of	805579	860434	936042	964110	1041067	1096741	1189366	1284289	1342782
Mongolia	3741	3947	4235	5287	6017	6662	7460	8441	9401
Taipei,China	447377	448192	477165	504417	550814	592261	640273	694768	711584
South Asia									
Bangladesh	111201	119885	127369	136921	149685	163729	180084	196751	213736
Bhutan	1416	1549	1748	1914	2104	2317	2538	3329	...
India	1544327	1664036	1756927	1944577	2166047	2445194	2766115	3096867	3361295
Maldives	836	885	960	1064	1198	1180	1429	1585	...
Nepal	21005	20988	21381	22698	24444	26022	27841	29536	31497
Sri Lanka	51994	52193	54178	58620	63587	69740	77454	84935	92031
Southeast Asia									
Brunei Darussalam [a]	14028	14760	15600	16395	16951	17567	18917	19540	20076
Cambodia	11410	12587	13697	15179	17230	20143	23016	26039	28421
Indonesia	495271	537801	558946	598152	646288	705159	767401	835901	908368
Lao PDR	6342	6877	7528	7998	8808	9687	11713	13067	14324
Malaysia	211503	217719	233470	252250	277100	301308	329153	357737	383116
Myanmar	23626	26936	30693	35670	41434	49207	...	...	...
Philippines	177830	185311	196943	211057	230971	250244	271993	299328	317258
Singapore	131351	131484	139770	147800	167660	186650	210199	235988	244177
Thailand	307515	321749	344789	377278	412739	445195	483537	520734	546420
Viet Nam	109711	120100	130876	143454	159071	178075	198801	221330	240390
The Pacific									
Cook Islands	...	...	...	...	...	...	...	...	...
Fiji Islands	2750	2873	3017	3112	3366	3476	3726	3395	...
Kiribati	148	149	173	182	181	209	204	217	229
Marshall Islands	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	275	282	289	304	302	310	313	311	...
Nauru	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...
Papua New Guinea	9347	9561	9893	10678	11392	11299	11979	13297	14577
Samoa	503	553	592	624	671	725	743	841	830
Solomon Islands	539	528	530	597	671	728	816	943	1029
Timor-Leste [b]	630	750	589	602	645	707	688	765	883
Tonga	277	307	318	334	358	351	377	387	399
Tuvalu	...	...	...	...	...	...	...	...	...
Vanuatu	587	586	552	582	632	695	769	930	...
Developed Member Countries									
Australia	491119	517361	550485	578202	614780	646551	687082	733902	778369
Japan	3246288	3330615	3417248	3510092	3710016	3872842	4080727	4293499	4363874
New Zealand	80176	84692	89182	93246	99055	102836	108915	114748	115637
DEVELOPING MEMBER COUNTRIES [c]	**8017723**	**8648096**	**9367353**	**10264868**	**11427599**	**12775095**	**14305408**	**16119741**	**17567153**
REGIONAL MEMBERS [c]	**11849335**	**12595525**	**13439867**	**14462803**	**15868401**	**17414892**	**19201049**	**21281431**	**22845109**

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.
c For reporting countries only.

Sources: ADB staff estimates using World Development Indicators Online (World Bank 2009), country sources, CEIC data, International Monetary Fund, and US Bureau of Economic Analysis.

National Accounts

Table 2.2 GDP per capita at PPP
(current international dollars)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries									
Central and West Asia									
Afghanistan	...	...	699	841	846	950	1054	1255	1274
Armenia	1938	2180	2513	2926	3323	3904	4553	5310	6027
Azerbaijan	2203	2460	2748	3098	3481	4496	6170	8279	11231
Georgia	2206	2385	2578	2943	3225	3644	4037	4665	4884
Kazakhstan	4783	5569	6222	6922	7757	8704	9829	10863	10560
Kyrgyz Republic	1336	1429	1443	1563	1703	1739	1832	2051	2567
Pakistan	1688	1731	1782	1870	2026	2210	2377	2527	2657
Tajikistan	885	979	1065	1175	1309	1413	1538	1658	1957
Turkmenistan	...	...	...	...	...	3122	...	..	...
Uzbekistan	1440	1515	1580	1656	1798	1881	2148	2380	3243
East Asia									
China, People's Rep. of	2348	2587	2853	3186	3587	4064	4654	5371	5958
Hong Kong, China	26354	26924	27778	29279	32416	35678	39118	42285	43954
Korea, Rep. of	17137	18169	19658	20145	21671	22783	24826	26504	27620
Mongolia	1552	1618	1708	2115	2378	2602	2880	3197	3508
Taipei,China	20166	20061	21242	22356	24322	26057	28053	30316	30942
South Asia									
Bangladesh	868	923	968	1026	1107	1195	1297	1398	1501
Bhutan	2379	2569	2862	3093	3356	3649	3924	5053	...
India	1520	1608	1672	1821	1996	2221	2474	2731	2923
Maldives	3084	3209	3420	3731	4140	4016	4780	5198	...
Nepal	931	907	903	938	988	1029	1076	1117	1165
Sri Lanka	2815	2786	2850	3045	3267	3546	3895	4245	4556
Southeast Asia									
Brunei Darussalam [a]	43190	44351	45322	46897	47126	47465	49392	50103	50442
Cambodia	907	983	1045	1139	1297	1497	1688	1885	2030
Indonesia	2406	2578	2644	2792	2977	3207	3445	3705	3975
Lao PDR	1252	1329	1424	1481	1595	1723	2038	2227	2387
Malaysia	9004	9068	9518	10070	10833	11531	12356	13167	13816
Myanmar	471	527	588	670	763	888	...	...	...
Philippines	2311	2360	2455	2578	2764	2935	3127	3374	3507
Singapore	32610	31775	33470	35919	40238	43755	47757	51429	50456
Thailand	4941	5134	5460	5927	6429	6874	7412	7919	8216
Viet Nam	1413	1526	1642	1773	1939	2143	2363	2599	2788
The Pacific									
Cook Islands	...	...	...	...	...	...	...	...	...
Fiji Islands	3407	3547	3717	3812	4097	4213	4491	4072	...
Kiribati	1757	1737	1985	2054	1999	2257	2170	2255	2338
Marshall Islands	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	2568	2626	2691	2823	2805	2876	2897	2879	...
Nauru	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...
Papua New Guinea	1801	1790	1792	1900	1974	1905	1964	2111	2257
Samoa	2875	3128	3342	3511	3767	4056	4148	4670	4592
Solomon Islands	1282	1222	1193	1307	1429	1508	1644	1848	1964
Timor-Leste [b]	809	953	665	666	678	720	678	730	817
Tonga	2784	3076	3169	3321	3522	3454	3692	3782	3881
Tuvalu	...	...	..	...	...	...	...	...	...
Vanuatu	3063	2978	2732	2814	2977	3190	3440	4052	...
Developed Member Countries									
Australia	25641	26650	28012	29062	30544	31702	33196	34923	36417
Japan	25593	26195	26814	27483	29039	30310	31942	33603	34173
New Zealand	20783	21825	22586	23154	24234	24878	26028	27138	27248
DEVELOPING MEMBER COUNTRIES [c]	**2495**	**2657**	**2845**	**3082**	**3392**	**3750**	**4153**	**4630**	**4994**
REGIONAL MEMBERS [c]	**3523**	**3699**	**3902**	**4152**	**4506**	**4893**	**5337**	**5855**	**6223**

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.
c For reporting countries only.

Sources: ADB staff estimates using World Development Indicators Online (World Bank 2009), country sources, CEIC data, International Monetary Fund, and US Bureau of Economic Analysis.

Table 2.3 **GNI per capita, Atlas method**
(current US dollars)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan [a]	...	...	...	...	...	...	...	113	182	203	257	311	349	...
Armenia	...	450	520	560	590	610	660	710	800	950	1160	1500	1960	2630
Azerbaijan	...	400	400	450	510	570	610	660	720	820	950	1270	1890	2640
Georgia	...	510	610	730	770	730	700	680	730	860	1050	1330	1670	2120
Kazakhstan	...	1280	1340	1390	1390	1290	1270	1350	1520	1800	2300	2940	3870	5020
Kyrgyz Republic	...	350	380	390	350	300	280	280	290	340	400	450	500	610
Pakistan	420	480	500	500	470	470	490	500	510	560	640	720	790	860
Tajikistan	...	200	170	170	180	180	160	170	170	210	270	330	390	460
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	580	600	610	620	650	630	580	450	420	460	530	610	730
East Asia														
China, People's Rep. of [c]	330	530	850	750	790	850	930	1000	1100	1270	1500	1740	2010	2370
Hong Kong, China	12660	23490	24040	25940	24880	25490	26570	25930	24870	25720	27490	28150	29530	31560
Korea, Rep. of	6000	10770	12070	12190	9200	9220	9800	10580	11280	12060	14040	15930	17780	19730
Mongolia	1230	400	470	510	460	420	410	440	490	560	690	810	1000	1290
Taipei,China [d]	8305	13078	13680	14030	12744	13702	14684	13085	13565	13970	15111	16065	16471	17230
South Asia														
Bangladesh	270	310	320	340	340	340	360	360	350	370	410	440	450	470
Bhutan	570	520	570	630	600	630	800	840	890	980	1110	1270	1420	1770
India	390	380	410	420	420	440	460	460	470	530	630	740	820	950
Maldives	...	...	...	1830	1930	2040	2140	2140	2200	2370	2580	2580	2970	3190
Nepal	210	200	210	220	210	210	220	230	230	250	270	300	320	350
Sri Lanka	470	700	750	800	820	840	880	830	860	950	1070	1200	1350	1540
Southeast Asia														
Brunei Darussalam [b]	12540	15800	16320	16310	14480	14060	14670	16010	17000	17590	19650	22540	26740	...
Cambodia	...	...	...	310	290	300	300	300	300	340	390	460	500	550
Indonesia	620	1010	1120	1120	670	590	590	740	810	920	1110	1250	1420	1650
Lao PDR	200	360	390	380	310	290	290	310	330	360	420	480	540	630
Malaysia	2390	4030	4480	4600	3630	3370	3450	3540	3780	4160	4740	5200	5710	6420
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	740	1040	1190	1230	1080	1050	1050	1050	1020	1070	1180	1270	1390	1820
Singapore	11860	23260	25130	27160	23490	22880	22970	21090	20870	22180	24330	26210	28930	32340
Thailand	1550	2820	3050	2800	2120	2010	2010	1960	1960	2140	2470	2700	2990	3400
Viet Nam	130	250	300	340	350	360	390	410	430	470	540	620	690	770
The Pacific														
Cook Islands [a]	3759	4814	4708	4757	4364	4929	4513	4777	5544	7765	8438	9110	8656	9986
Fiji Islands	1780	2480	2690	2620	2330	2390	2270	2170	2180	2430	3030	3560	3670	3750
Kiribati	730	960	910	1210	...	1140	1130	1140	1040	1050	1170	1340	1270	1120
Marshall Islands	...	...	...	...	2070	2280	2420	2580	2830	2840	2990	3150	3190	3240
Micronesia, Fed. States of	...	2170	2150	2090	2030	2020	2150	2090	2120	2250	2310	2350	2310	2280
Nauru [a]	...	...	...	...	...	...	...	...	...	...	2711	2382	2885	2314
Palau	...	5780	6380	6390	6120	6030	6260	6400	6150	6420	7190	7760	7960	8270
Papua New Guinea	830	1040	1020	930	780	690	620	550	510	500	570	680	730	850
Samoa	1070	1010	1360	1360	1350	1360	1390	1420	1450	1600	1900	2170	2430	2700
Solomon Islands	750	890	890	960	900	830	680	640	560	560	600	630	680	750
Timor-Leste	...	...	...	...	...	...	...	...	350	350	510	750	950	1510
Tonga	1230	1730	1900	1920	1760	1780	1640	1530	1510	1600	1850	1960	2320	2480
Tuvalu [a]	1055	1274	1347	1437	1385	1463	1295	1349	1531	1910	2220	2363	2387	2718
Vanuatu	1180	1240	1250	1280	1360	1300	1250	1210	1050	1150	1380	1590	1780	1840
Developed Member Countries														
Australia	17100	19000	20140	21500	21340	21060	20710	19690	19490	20630	24890	29470	33200	35760
Japan	26680	40350	41350	38610	32970	32350	34620	35120	33240	33420	36690	38940	38720	37790
New Zealand	12810	14760	16190	16540	15200	14530	13460	13280	13720	16240	20560	24110	24980	27080

a Based on GNI/GDP per capita and exchange rates derived from the country source.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009), ADB staff estimates derived from country sources.

National Accounts

Table 2.4 Agriculture value added
(percent of total value added)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	65.7	...	...	...	...	57.0	53.2	45.2	46.0	41.6	39.5	38.8	37.5	31.6
Armenia	40.8	35.9	31.2	33.4	28.9	25.2	27.9	25.7	23.4	24.4	20.6	20.2	19.8	17.4
Azerbaijan	26.9	27.4	21.7	18.8	19.1	17.0	16.0	15.1	13.4	11.7	9.8	7.4	6.9	6.2
Georgia	...	34.0	29.1	27.3	26.0	21.7	22.2	20.4	20.4	17.8	16.5	12.7	10.6	10.2
Kazakhstan	12.8	12.7	11.9	9.1	10.4	8.6	9.3	8.5	8.3	7.4	6.6	5.7	5.8	5.4
Kyrgyz Republic	43.1	49.4	44.2	39.2	37.6	36.6	37.0	37.3	36.7	32.8	31.3	32.0	30.2	28.8
Pakistan	26.1	25.5	26.7	27.3	27.0	25.9	24.1	23.4	23.4	22.2	21.5	20.4	20.5	20.2
Tajikistan	35.9	38.8	35.1	27.1	27.3	27.3	26.1	24.6	27.0	21.5	23.8	23.9	21.9	24.8
Turkmenistan	16.9	13.1	21.0	25.9	24.8	22.9	23.5	20.9	20.1	22.5	22.1	21.8	22.1	...
Uzbekistan	32.4	26.2	32.3	31.3	33.5	34.4	34.0	34.5	33.1	31.1	28.1	26.5	24.0	...
East Asia														
China, People's Rep. of	20.0	19.7	18.3	17.6	16.5	15.1	14.4	13.7	12.8	13.4	12.2	11.3	11.1	11.3
Hong Kong, China	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	...
Korea, Rep. of	6.3	6.0	5.4	5.1	5.2	4.6	4.4	4.0	3.7	3.7	3.3	3.2	2.9	2.5
Mongolia	38.0	43.8	35.9	37.5	37.0	29.1	24.9	20.5	20.7	22.2	21.9	19.5	20.5	18.8
Taipei,China	3.5	3.2	2.5	2.4	2.5	2.1	1.9	1.8	1.7	1.7	1.7	1.7	1.6	1.7
South Asia														
Bangladesh	26.4	25.7	25.8	25.4	26.2	25.5	24.1	22.7	21.8	21.0	20.1	19.6	19.2	19.0
Bhutan	34.0	33.1	33.0	31.9	29.4	28.4	27.0	26.9	25.8	25.4	23.6	22.8	19.2	...
India	26.5	27.4	26.1	26.0	25.0	23.4	23.2	20.9	21.0	19.2	19.1	18.2	18.1	17.6
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	38.9	38.6	38.6	37.0	38.1	37.8	37.0	37.9	37.0	36.4	35.7	34.1	33.0	33.1
Sri Lanka	19.5	19.0	18.4	18.9	18.9	17.6	16.8	16.0	14.7	14.2	13.5	13.0	13.2	15.2
Southeast Asia														
Brunei Darussalam [a]	1.2	1.1	1.2	1.4	1.2	1.0	1.1	1.1	1.2	1.1	0.9	0.7	0.7	...
Cambodia	49.6	46.5	46.3	46.3	43.5	37.9	36.7	32.9	33.6	31.2	32.4	31.7	31.9	32.5
Indonesia	17.1	16.7	16.1	18.1	19.6	15.6	15.6	15.5	15.2	14.3	13.1	13.0	13.7	14.4
Lao PDR	55.0	52.9	52.8	53.3	53.7	48.5	45.5	42.7	41.0	39.0	36.7	32.4	33.4	32.1
Malaysia	12.7	11.3	10.7	12.5	10.3	8.3	7.7	8.7	9.1	9.1	8.2	8.6	10.0	10.1
Myanmar	60.0	60.1	58.9	59.1	59.9	57.2	57.1	54.5	50.6	48.2	46.7	43.5	...	...
Philippines	21.6	20.6	18.9	16.9	17.1	15.8	15.1	15.1	14.6	15.1	14.3	14.2	14.2	14.9
Singapore	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Thailand	9.5	9.5	9.4	10.8	9.4	9.0	9.1	9.4	10.4	10.3	10.3	10.7	10.8	11.6
Viet Nam	27.2	27.8	25.8	25.8	25.4	24.5	23.2	23.0	22.5	21.8	21.0	20.4	20.3	22.1
The Pacific														
Cook Islands	9.5	11.0	11.6	14.3	14.6	13.0	11.2	12.0	14.9	13.3	12.4	11.3	11.9	11.7
Fiji Islands	18.8	18.9	16.5	16.0	18.6	16.5	14.3	14.8	14.3	14.0	13.9	12.4	13.1	...
Kiribati	29.0	26.9	25.2	25.2	25.3	22.0	22.1	24.0	25.4	26.1	24.2	23.7	24.9	26.4
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	9.6	11.8	10.6	13.8	...
Palau	5.9	3.9	3.0	3.0	4.1	3.9	3.9	3.3	3.4	3.3	3.5	3.5	3.5	...
Papua New Guinea	35.1	32.8	36.3	34.7	32.6	35.2	35.6	38.6	37.4	34.9	34.0	32.1	35.5	35.6
Samoa	18.4	18.8	20.9	19.0	16.9	16.7	14.8	14.4	12.3	13.2	12.3	11.2	10.9	10.6
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	29.5	30.4	33.7	41.1	43.2	25.8	24.1	32.1	32.7	33.5	33.5	35.7	31.5	...
Tonga	29.4	30.7	29.3	30.9	33.2	28.7	25.6	26.7	28.4	28.8	27.0	25.2	25.8	24.7
Tuvalu	24.0	25.1	24.0	21.2	20.1	17.3	17.4	15.9	...	...	...	...	...	...
Vanuatu	16.6	16.6	16.7	17.2	16.2	15.6	15.0	15.7	15.2	15.2	14.0	14.4	14.4	...
Developed Member Countries														
Australia	3.4	3.8	3.7	3.4	3.5	3.5	4.0	4.4	3.3	3.5	3.3	3.1	2.4	2.5
Japan	1.8	1.9	1.7	1.8	1.8	1.7	1.6	1.6	1.6	1.6	1.5	1.4	1.4	...
New Zealand	7.2	7.2	6.8	6.6	7.0	8.6	8.9	6.7	6.6	6.2	...	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.5 **Industry value added**
(percent of total value added)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	10.5	...	...	...	...	23.2	26.1	19.7	18.7	23.4	25.3	26.6	24.9	26.3
Armenia	30.9	31.7	32.3	30.1	31.6	34.8	32.5	34.5	38.3	40.6	44.7	44.1	43.6	44.5
Azerbaijan	32.9	38.6	39.8	36.2	40.5	45.1	46.8	49.9	52.3	54.3	63.2	68.0	70.0	69.4
Georgia	...	23.6	23.5	22.7	22.3	22.1	21.8	24.1	25.4	26.2	26.5	24.6	24.0	21.5
Kazakhstan	31.2	26.7	26.7	31.0	34.6	40.1	38.4	38.0	37.0	36.9	39.2	40.8	38.7	41.4
Kyrgyz Republic	19.4	18.3	22.7	22.8	26.8	31.3	28.7	23.1	22.1	23.8	22.0	19.6	18.7	19.1
Pakistan	23.8	24.2	23.5	23.8	23.7	23.3	24.0	23.9	23.9	27.0	27.1	26.9	26.9	26.8
Tajikistan	36.5	30.4	27.2	25.8	29.1	38.4	39.7	38.8	37.0	34.6	30.7	30.5	29.8	27.0
Turkmenistan	64.8	70.2	48.9	44.6	43.6	41.8	42.7	40.3	42.8	41.9	41.5	42.1	41.8	...
Uzbekistan	27.8	30.5	26.1	26.2	24.3	23.1	22.6	22.2	23.5	25.2	28.8	30.0	32.6	...
East Asia														
China, People's Rep. of	47.2	47.5	47.5	46.2	45.8	45.9	45.2	44.8	46.0	46.2	47.7	48.7	48.5	48.6
Hong Kong, China	15.2	14.7	14.0	14.2	13.8	13.4	12.6	11.7	10.8	10.0	9.3	8.8	7.7	...
Korea, Rep. of	41.9	41.3	41.1	40.7	40.2	38.1	36.6	36.2	36.7	38.1	37.7	37.2	37.1	37.1
Mongolia	27.5	21.3	26.2	20.7	20.7	21.9	22.0	22.8	25.7	29.2	33.5	40.4	39.7	38.1
Taipei,China	34.3	33.7	33.1	32.4	30.9	30.1	28.4	29.2	28.8	28.4	27.9	27.8	28.6	25.9
South Asia														
Bangladesh	24.6	24.9	25.1	25.8	25.2	25.3	25.9	26.4	26.3	26.6	27.2	27.9	28.4	28.5
Bhutan	34.8	34.5	34.6	34.0	36.6	35.5	37.5	38.3	39.1	37.6	37.1	38.0	46.5	...
India	27.8	27.0	26.8	26.1	25.3	26.2	25.3	26.5	26.2	28.2	28.8	29.5	29.5	29.0
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	17.7	17.8	17.8	17.5	17.0	17.3	16.9	17.1	17.2	16.8	16.6	16.2	16.1	15.7
Sri Lanka	29.3	29.0	29.1	29.1	29.3	29.9	30.6	30.0	30.5	30.4	32.2	32.6	31.8	30.6
Southeast Asia														
Brunei Darussalam [a]	54.3	56.3	56.1	51.5	55.2	63.7	60.0	60.7	64.1	67.9	71.6	73.2	71.0	...
Cambodia	14.8	15.7	17.1	17.4	19.1	23.0	23.6	25.6	26.3	27.2	26.4	27.6	26.8	22.4
Indonesia	41.8	43.5	44.3	45.2	43.4	45.9	46.8	44.5	43.7	44.6	46.5	46.9	46.8	48.1
Lao PDR	19.0	20.9	21.1	22.5	22.6	19.1	18.3	19.5	21.3	20.5	23.5	29.8	28.3	27.8
Malaysia	40.5	42.2	42.9	41.3	44.2	46.8	44.7	43.9	45.4	47.4	48.7	48.6	46.7	47.6
Myanmar	9.9	10.4	10.2	9.9	9.0	9.7	10.6	13.0	14.3	16.4	17.5	19.4	...	...
Philippines	32.1	32.1	32.1	31.5	30.6	32.3	31.6	31.8	31.9	31.7	31.9	31.7	31.6	31.6
Singapore	33.1	32.8	32.3	32.7	31.4	33.6	30.6	30.6	30.5	32.0	31.0	30.7	28.9	26.0
Thailand	40.7	40.8	40.2	39.6	40.9	42.0	42.1	42.4	43.6	43.4	44.0	44.4	44.7	45.1
Viet Nam	28.8	29.7	32.1	32.5	34.5	36.7	38.1	38.5	39.5	40.2	41.0	41.5	41.5	39.7
The Pacific														
Cook Islands	7.6	7.5	7.2	8.3	8.2	8.1	8.1	7.8	8.4	9.0	8.3	8.6	9.4	9.9
Fiji Islands	22.8	22.7	23.8	23.3	21.5	21.6	22.7	22.2	21.4	22.5	21.3	20.8	21.1	...
Kiribati	8.8	8.5	8.0	10.7	11.6	11.6	11.3	10.2	9.6	8.5	6.7	7.2	7.3	7.5
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	8.1	8.5	...
Palau	9.4	9.1	9.0	12.7	12.1	15.3	16.2	17.9	17.1	17.7	16.1	17.7	20.7	...
Papua New Guinea	33.3	36.1	30.9	32.3	35.7	40.7	39.8	37.3	39.6	42.1	44.3	47.0	44.2	44.1
Samoa	29.4	28.1	26.0	24.0	24.0	26.8	28.1	28.2	30.2	30.3	30.5	29.8	31.1	28.9
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	25.5	24.6	23.0	14.7	16.8	18.5	16.4	19.5	16.5	15.3	16.0	13.9	15.9	...
Tonga	17.9	17.9	15.7	15.4	15.8	16.6	15.4	15.1	14.6	14.8	15.0	14.4	13.9	13.8
Tuvalu	14.0	10.9	12.9	13.4	13.9	13.1	13.3	14.1	...	...	...	...	...	...
Vanuatu	11.5	10.4	8.5	8.6	9.1	9.3	9.1	9.3	8.8	8.6	8.8	8.6	8.8	...
Developed Member Countries														
Australia	29.0	28.4	27.6	27.7	27.1	26.9	26.1	25.8	26.4	26.1	26.8	28.0	29.0	29.1
Japan	32.9	33.0	32.8	32.0	31.4	31.1	29.8	29.1	29.0	29.3	29.1	28.9	28.5	...
New Zealand	25.9	25.7	25.5	24.3	24.6	24.5	23.8	24.3	23.9	24.6	...	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.6 Services value added
(percent of total value added)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	23.8	...	...	...	...	19.8	20.7	35.1	35.3	35.0	35.2	34.5	37.6	42.1
Armenia	28.3	32.4	36.5	36.5	39.5	40.0	39.6	39.9	38.4	35.1	34.6	35.6	36.6	38.1
Azerbaijan	40.2	33.9	38.5	44.9	40.4	37.9	37.2	35.1	34.4	34.0	27.0	24.6	23.0	24.4
Georgia	...	42.4	47.4	50.0	51.7	56.1	56.0	55.5	54.2	56.0	57.0	62.7	65.4	68.4
Kazakhstan	56.0	60.6	61.4	60.0	55.0	51.3	52.4	53.5	54.7	55.7	54.2	53.5	55.6	53.2
Kyrgyz Republic	37.5	32.2	33.1	38.0	35.5	32.1	34.3	39.5	41.2	43.4	46.7	48.4	51.1	52.1
Pakistan	50.1	50.4	49.8	48.9	49.2	50.7	51.9	52.8	52.7	50.8	51.4	52.8	52.6	53.0
Tajikistan	27.6	30.8	37.7	47.1	43.6	34.3	34.2	36.6	36.0	44.0	45.6	45.6	48.3	48.3
Turkmenistan	18.3	16.7	30.2	29.5	31.5	35.2	33.7	38.8	37.1	35.6	36.4	36.4	36.1	...
Uzbekistan	39.8	43.3	41.6	42.5	42.2	42.5	43.4	43.4	43.4	43.7	43.1	43.5	43.4	...
East Asia														
China, People's Rep. of	32.9	32.8	34.2	36.2	37.8	39.0	40.5	41.5	41.2	40.4	40.1	40.0	40.4	40.1
Hong Kong, China	84.7	85.2	85.9	85.7	86.1	86.5	87.3	88.3	89.2	89.9	90.6	91.2	92.3	...
Korea, Rep. of	51.8	52.8	53.4	54.2	54.5	57.3	59.0	59.8	59.6	58.1	59.0	59.7	60.0	60.3
Mongolia	34.5	34.9	37.9	41.8	42.3	49.0	53.1	56.7	53.6	48.6	44.6	40.1	39.8	43.1
Taipei,China	62.2	63.1	64.4	65.2	66.6	67.9	69.6	69.1	69.5	69.9	70.4	70.5	69.8	72.4
South Asia														
Bangladesh	48.1	48.5	48.1	48.7	48.7	49.2	50.0	50.9	52.0	52.4	52.6	52.5	52.4	52.5
Bhutan	31.2	32.4	32.4	34.1	34.1	36.2	35.5	34.8	35.1	37.0	39.2	39.2	34.3	...
India	45.7	45.6	47.1	47.9	49.7	50.5	51.5	52.7	52.8	52.6	52.2	52.4	52.4	53.4
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	43.4	43.6	43.6	45.5	44.9	44.9	46.1	45.1	45.9	46.8	47.7	49.7	50.9	51.2
Sri Lanka	51.3	52.0	52.5	52.0	51.8	52.5	52.6	54.0	54.9	55.4	54.3	54.4	55.1	54.1
Southeast Asia														
Brunei Darussalam [a]	44.6	42.6	42.7	47.0	43.6	35.3	38.8	38.2	34.6	31.0	27.5	26.1	28.3	...
Cambodia	35.5	37.7	36.6	36.3	37.5	39.1	39.7	41.5	40.1	41.7	41.2	40.8	41.3	45.1
Indonesia	41.1	39.9	39.6	36.7	37.0	38.5	37.6	40.1	41.1	41.0	40.3	40.1	39.5	37.5
Lao PDR	26.0	26.2	26.2	24.2	23.6	32.4	36.2	37.8	37.7	40.5	39.8	37.7	38.3	40.1
Malaysia	46.8	46.5	46.4	46.1	45.5	44.9	47.6	47.4	45.5	43.5	43.1	42.8	43.3	42.3
Myanmar	30.1	29.5	30.9	31.1	31.1	33.1	32.4	32.5	35.1	35.5	35.8	37.1	...	...
Philippines	46.3	47.3	49.0	51.6	52.3	52.0	53.2	53.1	53.4	53.2	53.8	54.2	54.2	53.5
Singapore	66.8	67.0	67.6	67.1	68.4	66.3	69.3	69.3	69.5	68.0	69.0	69.2	71.0	74.0
Thailand	49.7	49.7	50.4	49.6	49.7	49.0	48.7	48.1	46.0	46.3	45.8	45.0	44.6	43.3
Viet Nam	44.1	42.5	42.2	41.7	40.1	38.7	38.6	38.5	38.0	38.0	38.0	38.1	38.2	38.2
The Pacific														
Cook Islands	83.0	81.5	81.2	77.4	77.1	78.9	80.7	80.2	76.6	77.6	79.3	80.1	78.7	78.5
Fiji Islands	58.3	58.4	59.7	60.7	59.9	61.9	62.9	63.0	64.3	63.5	64.8	66.8	65.8	...
Kiribati	62.1	64.6	66.8	64.1	63.1	66.4	66.6	65.8	65.0	65.4	69.2	69.1	67.8	66.1
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	94.9	98.8	83.3	77.7	...
Palau	84.7	87.0	88.0	84.3	83.8	80.8	79.9	78.7	79.6	79.0	80.4	78.8	75.8	...
Papua New Guinea	31.7	31.2	32.7	32.9	31.7	24.1	24.5	24.1	23.0	23.0	21.7	20.9	20.3	20.2
Samoa	52.2	53.1	53.1	57.0	59.1	56.6	57.0	57.4	57.5	56.5	57.2	59.0	58.1	60.5
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	45.1	45.0	43.3	44.1	40.1	55.7	59.6	48.4	50.8	51.1	50.5	50.4	52.6	...
Tonga	52.8	51.4	54.9	53.8	51.0	54.7	59.0	58.2	57.0	56.4	58.0	60.4	60.3	61.5
Tuvalu	62.0	64.0	63.2	65.4	65.9	69.7	69.3	70.1	...	...	...	...	...	...
Vanuatu	71.9	73.1	74.7	74.2	74.7	75.1	75.9	75.0	76.0	76.2	77.1	76.6	76.8	...
Developed Member Countries														
Australia	67.6	67.8	68.8	68.9	69.5	69.6	69.9	69.8	70.4	70.4	70.0	68.9	68.6	68.4
Japan	65.3	65.2	65.5	66.2	66.8	67.2	68.6	69.3	69.4	69.1	69.4	69.7	70.1	...
New Zealand	66.9	67.0	67.6	69.1	68.4	66.9	67.2	69.0	69.5	69.2	...	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.7 Private consumption expenditure
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	111.5	126.4	122.0	105.1	98.4	98.1	...
Armenia	106.1	100.3	103.3	99.9	96.0	96.7	93.3	88.6	83.1	82.5	75.5	72.2	70.8	69.8
Azerbaijan	84.3	87.7	74.5	80.0	75.8	64.4	61.5	62.9	60.0	55.8	42.1	37.1	33.4	34.9
Georgia	...	105.3	102.0	84.1	81.2	90.5	79.5	77.8	72.3	73.2	86.9	78.7	70.7	73.3
Kazakhstan	71.1	67.3	70.5	73.3	72.4	61.9	57.9	54.6	54.5	53.5	49.9	45.7	45.1	42.9
Kyrgyz Republic	75.0	82.1	68.9	88.2	77.6	65.7	64.8	67.5	77.9	76.0	84.5	95.1	87.5	94.4
Pakistan	72.4	72.9	74.9	72.1	75.7	75.4	76.3	74.8	73.9	74.2	76.9	75.0	75.5	76.6
Tajikistan	60.5	59.0	60.0	68.9	72.0	87.7	84.3	80.8	78.5	74.0	81.1	82.9	84.2	...
Turkmenistan	60.6	49.2	68.4	65.6	50.7	41.7	45.0	46.4	51.7	52.1	47.5	50.5	50.0	...
Uzbekistan	50.6	55.2	60.8	59.6	62.1	61.9	61.6	60.2	55.7	51.7	50.9	...	...	...
East Asia														
China, People's Rep. of	46.7	47.7	46.8	46.5	46.7	46.2	44.9	43.7	41.8	39.9	38.9	38.0	36.4	36.1
Hong Kong, China	62.0	61.4	61.1	61.6	60.4	59.0	60.3	59.6	58.3	59.4	58.2	58.5	60.2	60.5
Korea, Rep. of	52.3	52.7	52.7	49.3	51.9	54.8	55.9	56.7	54.8	52.6	53.8	54.5	54.4	54.5
Mongolia	63.4	66.8	60.5	67.7	68.3	71.6	74.8	77.4	73.0	65.9	55.6	48.7	49.8	49.3
Taipei,China	58.2	58.5	58.6	58.8	59.7	60.7	62.1	61.1	60.4	60.7	61.3	60.2	58.9	61.4
South Asia														
Bangladesh	82.2	80.7	79.7	77.9	77.7	77.5	77.5	76.8	76.0	74.9	74.4	74.2	74.1	74.4
Bhutan	41.6	43.2	54.4	57.1	58.9	46.8	44.9	43.2	44.2	42.7	40.0	38.5	39.1	...
India	63.1	64.3	63.2	64.0	64.2	63.7	64.4	63.2	61.7	58.4	57.4	55.9	55.0	54.7
Maldives	36.8	35.0	36.4	35.0	35.2	32.9	31.9	30.5	28.8	26.6	44.8	...	...	...
Nepal	75.9	76.9	77.1	76.9	77.5	75.9	80.2	82.1	82.8	79.6	79.5	82.3	80.9	78.8
Sri Lanka	70.7	68.7	67.0	66.6	68.4	70.9	70.4	71.3	71.8	70.9	69.0	67.7	67.2	69.7
Southeast Asia														
Brunei Darussalam [a]	36.8	38.7	39.3	40.3	34.5	24.8	26.3	25.6	27.3	26.6	22.5	19.8	20.1	...
Cambodia	92.6	95.2	88.2	92.9	87.5	86.7	83.1	83.9	83.6	85.1	84.3	81.0	78.2	64.6
Indonesia	61.6	62.4	61.7	67.8	73.9	61.7	61.7	67.6	68.1	66.8	64.4	62.7	63.6	60.9
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	47.9	46.0	45.3	41.6	41.6	43.8	46.1	45.0	44.6	44.0	44.8	45.0	45.8	45.2
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	74.1	73.5	72.6	74.3	72.6	69.6	70.6	69.4	69.2	68.7	69.3	70.1	69.4	71.1
Singapore	42.3	41.6	41.0	40.0	42.2	42.2	46.0	46.6	46.1	42.4	40.6	39.5	38.6	41.0
Thailand	53.2	53.8	54.7	54.2	56.0	56.1	57.3	57.2	57.2	57.2	57.2	55.8	53.7	54.8
Viet Nam	73.6	74.4	71.8	70.9	68.6	66.5	64.9	65.1	66.3	65.1	63.5	63.3	64.8	67.3
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	59.6	58.7	58.8	54.0	49.9	57.0	55.5	52.8	51.1	49.1	48.3	45.4	48.1	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	42.7	48.9	58.3	59.3	69.8	44.6	47.7	55.4	50.4	52.4	48.0	47.1	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	...	...	...	81.1	98.0	111.6	99.8	109.3	109.4	111.2	99.3	92.3	89.1	...
Tonga	95.5	101.7	96.7	101.2	95.4	94.3	100.2	104.9	105.3	100.4	107.0	103.7	107.8	117.2
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	56.0	58.7	58.9	56.8	57.8	57.6	59.6	66.8	65.6	63.9	61.2	57.5	56.7	...
Developed Member Countries														
Australia	59.3	59.2	58.6	58.9	59.1	58.7	59.5	58.9	59.0	58.6	58.0	56.6	55.9	55.4
Japan	55.0	55.2	55.2	56.0	57.0	56.2	57.1	57.7	57.5	57.1	57.0	57.1	56.3	57.8
New Zealand	58.4	59.3	59.6	61.4	60.2	59.3	57.9	58.7	58.8	58.4	59.1	59.4	58.3	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.8 Government consumption expenditure
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	7.9	9.4	9.8	9.7	9.9	10.6	...
Armenia	11.3	11.3	11.5	11.3	12.2	12.2	11.5	10.5	10.4	10.2	10.5	10.1	10.6	12.3
Azerbaijan	12.8	12.0	12.6	15.2	15.6	15.2	13.6	12.4	12.4	12.9	10.4	8.5	9.7	9.0
Georgia	...	7.7	10.2	11.1	10.6	8.5	9.6	9.8	9.8	14.0	17.3	15.3	21.9	25.9
Kazakhstan	13.6	12.9	12.4	10.8	11.5	12.1	13.4	11.6	11.3	11.6	11.2	10.2	11.1	10.5
Kyrgyz Republic	19.5	18.5	17.3	17.9	19.1	20.0	17.5	18.6	16.8	18.2	17.5	18.0	17.1	16.5
Pakistan	11.7	12.6	11.9	11.3	10.4	8.6	7.8	8.7	8.8	8.2	7.8	10.8	9.2	12.4
Tajikistan	10.9	9.0	10.6	7.8	8.7	11.6	13.9	12.8	12.2	11.8	14.6	11.1	8.9	...
Turkmenistan	8.4	7.1	13.3	17.2	12.9	14.0	12.7	11.0	13.6	13.8	12.9	13.4	13.4	...
Uzbekistan	22.3	22.1	20.5	20.5	20.6	18.7	18.4	18.0	17.5	17.1	16.4	...	...	...
East Asia														
China, People's Rep. of	13.8	14.0	14.2	14.6	15.3	15.8	16.1	15.9	15.2	14.5	14.5	14.2	13.7	13.5
Hong Kong, China	8.4	8.4	8.3	9.0	9.5	9.1	9.9	10.3	10.5	9.9	8.8	8.3	8.1	8.3
Korea, Rep. of	11.2	11.6	11.6	12.8	12.3	12.0	12.7	12.6	13.0	13.3	13.9	14.5	14.7	15.3
Mongolia	13.1	14.4	13.7	18.0	17.1	18.0	19.5	19.1	14.8	14.5	12.4	11.4	13.0	15.0
Taipei,China	15.0	15.1	15.3	15.2	14.1	13.9	14.2	13.9	13.9	13.2	13.1	12.6	12.1	12.6
South Asia														
Bangladesh	4.6	4.4	4.4	4.7	4.6	4.6	4.5	5.0	5.3	5.5	5.5	5.5	5.5	5.3
Bhutan	18.6	21.1	22.1	20.1	18.6	21.5	21.1	20.4	20.1	20.6	21.7	21.6	18.8	...
India	10.9	10.7	11.4	12.3	12.9	12.6	12.4	11.9	11.3	10.7	10.5	10.2	10.1	11.6
Maldives	16.8	15.9	17.7	18.3	20.6	22.9	23.2	23.2	21.8	24.2	22.2	...	...	...
Nepal	9.2	9.2	8.9	9.3	8.9	8.9	8.1	8.4	8.7	8.6	8.9	8.7	9.2	10.0
Sri Lanka	14.7	14.5	14.2	13.7	13.4	13.7	13.1	12.7	12.2	12.6	13.1	15.4	15.3	16.2
Southeast Asia														
Brunei Darussalam [a]	26.8	25.2	25.2	29.9	28.6	25.8	29.4	27.2	24.1	22.1	18.4	18.1	20.8	...
Cambodia	4.9	5.8	5.5	4.8	4.9	5.2	5.3	7.6	7.3	6.3	5.8	5.3	5.7	5.1
Indonesia	7.8	7.6	6.8	5.7	6.6	6.5	6.7	7.3	8.1	8.3	8.1	8.6	8.3	8.4
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	12.4	11.1	10.8	9.8	11.0	10.2	12.0	13.0	13.0	12.6	12.3	11.9	12.2	12.5
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	11.4	11.9	13.2	13.3	13.1	13.1	12.2	11.5	11.1	10.1	9.7	9.8	9.8	9.7
Singapore	8.5	9.3	9.2	10.0	10.0	10.8	12.1	12.3	12.0	10.8	10.6	10.6	9.7	10.7
Thailand	9.9	10.2	10.1	11.1	11.5	11.3	11.3	11.1	10.7	11.1	11.9	11.8	12.2	11.9
Viet Nam	8.2	8.4	8.1	7.6	6.8	6.4	6.3	6.2	6.3	6.4	6.2	6.0	6.1	6.2
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	16.1	15.9	16.8	17.4	15.9	17.2	17.4	16.9	16.7	15.7	15.5	15.9	16.4	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	17.1	19.9	19.3	18.1	16.9	16.6	16.2	16.7	13.9	16.6	16.1	16.8	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	...	...	...	15.0	15.0	35.2	39.8	47.8	51.7	51.5	47.5	53.8	65.5	...
Tonga	19.0	15.5	16.4	15.9	14.8	15.1	22.3	20.6	19.0	18.0	17.9	22.7	23.6	21.7
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	27.1	29.5	20.8	20.8	23.0	23.1	22.5	23.7	21.7	19.7	18.6	18.6	18.0	...
Developed Member Countries														
Australia	18.4	18.3	18.0	18.0	18.4	18.2	18.2	18.0	18.0	17.9	18.1	17.9	17.8	17.7
Japan	15.1	15.3	15.3	15.9	16.5	16.9	17.5	18.0	18.1	18.0	18.1	17.9	17.9	18.5
New Zealand	17.5	17.3	18.1	18.0	18.3	17.5	17.4	17.2	17.4	17.6	18.1	18.6	18.8	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.9 **Gross domestic capital formation**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	18.4	20.0	19.1	19.1	18.4	18.6	19.8	21.7	24.3	24.9	30.5	35.9	37.2	39.9
Azerbaijan	23.8	29.0	34.2	33.4	26.5	20.7	20.7	34.6	53.2	58.0	41.5	29.9	21.5	20.2
Georgia	...	19.6	17.8	27.2	26.5	26.6	30.3	28.5	31.3	31.9	33.5	30.9	32.1	27.0
Kazakhstan	23.3	16.1	15.6	15.8	17.8	18.1	26.9	27.3	25.7	26.3	31.0	33.9	35.5	28.0
Kyrgyz Republic	18.3	25.2	21.7	15.4	18.0	20.0	18.0	17.6	11.8	14.5	16.4	24.2	26.6	24.8
Pakistan	18.5	19.0	17.9	17.7	15.6	17.2	17.0	16.6	16.8	16.6	19.1	22.1	22.5	22.0
Tajikistan	28.7	22.3	19.7	15.4	17.3	9.4	9.7	9.4	10.0	12.2	11.6	16.0	24.6	...
Turkmenistan	33.6	50.0	48.6	54.9	44.8	39.2	37.3	...	...	...	...	...	...	...
Uzbekistan	24.2	23.0	18.9	20.9	17.1	19.6	21.1	21.2	20.8	23.9	23.0	...	...	...
East Asia														
China, People's Rep. of	41.9	40.4	37.9	37.1	36.7	35.1	36.3	37.9	41.2	43.3	44.0	44.5	43.1	44.4
Hong Kong, China	34.1	31.6	34.0	28.9	24.8	27.5	25.3	22.8	21.9	21.8	20.6	21.7	20.9	20.4
Korea, Rep. of	37.7	38.9	36.0	25.0	29.1	30.6	29.2	29.2	29.9	29.9	29.7	29.6	29.4	31.4
Mongolia	31.7	29.9	28.1	35.2	37.0	36.2	36.1	39.6	35.5	34.5	37.0	35.1	40.2	38.6
Taipei,China	25.2	23.1	24.1	25.0	23.6	23.3	18.4	18.0	18.4	22.7	21.4	21.5	21.5	21.2
South Asia														
Bangladesh	19.1	20.0	20.7	21.6	22.2	23.0	23.1	23.1	23.4	24.0	24.5	24.7	24.5	24.2
Bhutan	46.7	43.0	33.0	35.7	39.7	47.3	59.2	59.2	56.8	62.0	51.2	46.9	38.9	...
India	26.2	24.0	25.3	23.3	25.9	24.3	22.8	25.2	27.6	32.1	35.5	36.9	39.1	...
Maldives	31.3	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	25.2	27.2	25.3	24.8	20.5	24.3	22.3	20.2	21.4	24.5	26.5	26.9	28.1	31.8
Sri Lanka	25.6	25.9	25.8	25.4	25.6	25.4	22.2	22.0	21.6	24.7	26.1	27.4	27.3	27.1
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	13.1	14.4	21.3	15.1	13.5	11.4	10.4	12.9	...
Cambodia	14.3	14.5	14.8	11.8	16.7	16.9	18.5	18.1	20.1	16.2	18.5	20.6	20.8	16.6
Indonesia	31.9	30.7	31.8	16.8	11.4	22.2	22.0	21.4	25.6	24.1	25.1	25.4	24.9	27.8
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	43.6	41.5	43.0	26.7	22.4	26.9	24.4	24.8	22.8	23.0	20.0	20.5	21.7	19.1
Myanmar	14.2	12.3	12.5	12.4	13.4	12.4	11.6	10.1	11.0	12.2	13.2	13.8	...	...
Philippines	22.5	24.0	24.8	20.3	18.8	21.2	19.0	17.7	16.8	16.7	14.6	14.5	15.4	15.2
Singapore	34.5	35.4	38.7	31.1	32.2	33.3	26.5	23.7	16.0	21.8	20.2	20.1	20.7	30.9
Thailand	42.1	41.8	33.7	20.4	20.5	22.8	24.1	23.8	25.0	26.8	31.4	28.4	26.6	28.8
Viet Nam	27.1	28.1	28.3	29.0	27.6	29.6	31.2	33.2	35.4	35.5	35.6	36.8	43.1	41.1
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	22.7	16.7	18.3	28.2	22.8	17.3	16.1	19.7	22.0	19.2	19.4	16.2	17.1	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	21.9	22.7	21.1	17.9	16.1	21.9	23.0	25.0	21.4	21.4	17.5	15.7	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	...	...	...	...	...	25.6	30.3	38.0	29.3	20.6	20.7	20.7	28.1	...
Tonga	20.1	22.6	19.5	19.0	20.2	19.4	18.0	19.7	18.4	19.4	19.8	17.6	16.1	17.6
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	23.2	20.2	18.8	17.7	20.3	22.2	20.0	21.1	19.4	21.2	21.5	23.9	25.8	...
Developed Member Countries														
Australia	24.3	22.8	23.0	23.9	24.8	25.1	22.1	22.9	25.0	26.1	26.4	27.0	27.5	28.7
Japan	28.4	28.9	28.4	26.3	24.8	25.4	24.8	23.1	22.8	23.0	23.6	23.8	24.1	23.5
New Zealand	23.3	22.8	21.9	20.3	22.3	21.6	22.3	22.2	23.5	24.8	24.8	23.7	24.1	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.10 **Exports of goods and services**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	30.6	41.9	31.5	25.2	22.9	17.3	...
Armenia	23.9	23.2	20.3	19.0	20.8	23.4	25.5	29.4	32.2	29.7	28.8	23.4	19.2	14.8
Azerbaijan	32.5	24.9	29.0	22.7	28.0	40.2	41.5	42.8	42.0	48.8	62.9	66.5	68.1	63.4
Georgia	...	13.3	15.6	16.5	19.1	23.0	24.5	29.2	31.8	31.6	33.7	32.9	31.2	28.7
Kazakhstan	39.0	35.3	34.9	30.3	42.5	56.6	46.5	47.0	48.4	52.5	53.5	51.2	49.1	57.6
Kyrgyz Republic	29.5	30.7	38.3	36.5	42.2	41.8	36.7	39.6	38.7	42.6	38.3	41.7	52.9	56.5
Pakistan	16.7	16.9	16.1	16.5	15.4	13.4	14.7	15.2	16.7	15.7	15.7	15.2	14.2	12.8
Tajikistan	112.0	73.1	81.8	49.7	67.9	92.4	66.0	62.9	63.9	58.8	54.3	58.2	51.0	...
Turkmenistan	142.5	105.8	51.3	32.6	36.6	53.8	40.7	69.0	62.8	66.4	76.0	68.7	70.4	...
Uzbekistan	31.6	34.2	29.8	25.0	21.7	26.5	30.8	31.6	36.9	40.6	39.7	...	...	...
East Asia														
China, People's Rep. of	20.2	20.1	21.8	20.3	20.4	23.3	22.6	25.1	29.5	34.0	37.4	39.9	39.7	36.5
Hong Kong, China	143.2	136.9	127.7	124.5	128.3	143.3	138.7	149.5	171.0	190.2	199.7	205.5	208.0	212.5
Korea, Rep. of	28.8	27.9	32.4	46.2	39.1	38.6	35.7	33.1	35.4	40.9	39.3	39.7	41.9	52.9
Mongolia	-1.0	-7.9	6.0	-13.5	-13.9	-16.7	-18.9	-21.4	57.7	68.1	64.2	64.4	64.2	57.2
Taipei,China	47.2	46.6	47.5	47.2	47.3	53.8	50.3	52.9	57.0	63.1	64.2	69.7	73.5	74.2
South Asia														
Bangladesh	10.9	11.1	12.0	13.3	13.2	14.0	15.4	14.3	14.2	15.5	16.6	19.0	19.8	20.3
Bhutan	...	...	...	...	...	28.4	28.1	24.6	25.8	31.1	38.7	52.4	53.9	...
India	11.0	10.5	10.8	11.2	11.7	13.2	12.8	14.5	15.2	18.1	19.9	22.2	21.2	22.7
Maldives	92.7	91.7	91.2	92.4	90.5	89.5	86.8	86.5	87.5	91.9	..	...	...	...
Nepal	24.2	22.3	26.3	22.8	22.8	23.3	22.6	17.7	15.7	16.7	14.8	13.4	13.0	12.1
Sri Lanka	35.9	35.0	36.6	35.3	34.6	38.2	38.4	34.9	34.7	35.3	32.3	30.1	29.1	24.9
Southeast Asia														
Brunei Darussalam [a]	59.7	59.9	57.2	50.5	55.8	67.4	69.5	67.1	69.3	68.8	70.2	71.8	67.7	...
Cambodia	31.2	25.4	33.7	31.8	37.2	49.9	52.7	55.4	58.5	63.6	64.1	68.8	65.3	52.7
Indonesia	26.3	25.8	27.9	53.0	35.5	41.0	38.2	32.7	30.5	32.2	34.1	31.0	29.4	29.8
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	94.1	91.6	93.3	115.7	121.3	119.8	110.4	108.3	106.9	115.4	117.5	116.5	110.5	103.6
Myanmar	0.8	0.7	0.6	0.4	0.3	0.5	0.5	0.4	0.2	0.2	0.2	0.2	...	...
Philippines	36.4	40.5	49.0	52.1	51.5	55.4	49.2	50.2	49.6	50.9	47.6	47.3	42.5	36.9
Singapore	187.0	181.6	175.2	172.7	183.9	195.6	191.6	192.3	212.5	224.4	236.4	243.4	230.2	234.3
Thailand	41.8	39.3	48.0	58.9	58.3	66.8	65.9	64.2	65.7	70.7	73.6	73.7	73.2	76.4
Viet Nam	32.8	40.9	43.1	44.8	50.0	55.0	54.6	56.8	59.3	65.7	69.4	73.6	76.9	78.2
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	59.3	62.8	61.0	60.8	61.0	65.2	60.7	61.5	59.9	53.9	56.1	48.5	51.7	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	59.3	52.6	46.8	50.5	43.6	66.2	65.3	59.8	65.9	67.9	74.5	82.8	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	...	...	...	...	...	0.4	1.2	11.4	12.1	11.9	11.5	12.1	11.0	...
Tonga	8.7	7.8	6.4	5.6	4.7	8.2	11.1	17.9	19.3	20.3	19.9	16.2	13.9	14.1
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	45.8	47.1	52.1	43.6	39.9	43.6	41.7	45.1	44.8	46.3	45.3	44.1	42.3	...
Developed Member Countries														
Australia	18.1	19.2	19.4	19.9	18.8	19.9	22.7	21.2	19.4	17.5	18.7	20.3	20.6	20.7
Japan	9.2	9.8	10.9	10.9	10.3	11.0	10.6	11.4	12.0	13.3	14.3	16.1	17.6	17.4
New Zealand	29.0	28.1	28.1	29.4	30.6	35.5	35.1	32.5	29.1	28.9	27.8	29.1	29.0	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources; ADB staff estimates using CEIC data, IFS-BOP, and Official Country Data website (data.un.org/browse.aspx?c=SNA).

Table 2.11 **Imports of goods and services**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	61.6	90.9	80.7	71.3	64.0	56.6	...
Armenia	62.2	56.0	58.3	52.8	49.8	50.5	46.1	46.6	50.0	45.3	43.2	39.3	39.2	39.6
Azerbaijan	53.4	55.9	53.0	54.5	41.9	38.4	37.3	50.0	65.5	72.7	52.9	38.8	28.5	24.8
Georgia	..	32.4	42.1	37.1	38.1	39.7	38.9	42.4	46.4	48.2	51.6	57.0	58.0	57.7
Kazakhstan	43.5	36.0	37.4	34.9	40.1	49.1	48.1	47.0	43.0	43.9	44.7	40.5	42.8	37.3
Kyrgyz Republic	42.4	56.6	46.2	58.0	57.0	47.6	37.0	43.3	45.3	51.3	56.8	79.0	84.1	93.6
Pakistan	19.4	21.4	20.8	17.5	17.0	14.7	15.7	15.3	16.1	14.6	19.6	23.2	21.3	23.8
Tajikistan	121.2	63.4	85.4	57.5	66.4	100.2	77.3	76.0	73.7	69.6	72.8	83.0	86.3	...
Turkmenistan	145.0	107.0	82.4	70.6	54.9	47.4	34.5	53.4	55.5	57.1	65.5	59.4	60.7	...
Uzbekistan	28.7	34.5	30.1	26.0	21.6	26.7	31.9	31.0	30.8	33.3	30.0	...	...	...
East Asia														
China, People's Rep. of	18.6	18.0	17.3	16.0	17.6	20.9	20.5	22.8	27.6	31.4	...	...	...	...
Hong Kong, China	147.6	138.4	131.0	124.0	123.1	138.8	134.2	141.2	161.8	181.3	186.3	194.1	197.1	201.6
Korea, Rep. of	29.9	31.3	33.0	33.3	32.4	35.7	33.5	31.7	33.1	36.7	36.6	38.3	40.4	54.1
Mongolia	...	...	...	...	...	...	...	...	74.9	79.1	67.9	58.0	62.8	71.5
Taipei,China	45.6	43.3	45.4	46.2	44.8	51.6	45.1	45.8	49.7	59.7	60.0	64.0	68.0	69.4
South Asia														
Bangladesh	17.3	18.7	18.0	18.3	18.7	19.2	21.5	19.0	20.0	20.8	23.0	25.2	26.7	28.8
Bhutan	...	...	...	...	...	52.5	46.4	44.1	43.5	57.0	62.2	60.7	55.6	...
India	12.2	11.7	12.1	12.8	13.6	14.2	13.6	15.5	15.9	19.9	22.7	25.2	24.7	28.0
Maldives	77.2	73.1	78.5	75.8	79.9	71.6	70.0	65.6	65.5	80.8	...	...	...	...
Nepal	34.6	35.8	37.7	33.9	29.7	32.4	33.2	28.5	28.5	29.5	29.5	31.3	31.3	32.7
Sri Lanka	45.5	43.7	43.6	41.1	42.1	48.4	44.5	41.4	40.7	44.2	41.3	41.1	39.5	38.3
Southeast Asia														
Brunei Darussalam [a]	55.8	60.6	58.5	57.4	48.4	35.8	39.2	41.6	36.0	31.8	27.3	25.2	27.8	...
Cambodia	47.4	44.0	45.7	44.8	50.1	61.7	61.4	64.3	66.6	70.9	72.7	76.0	72.9	75.7
Indonesia	27.6	26.4	28.1	43.2	27.4	30.5	30.1	26.4	23.1	27.5	29.9	25.6	25.4	28.6
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	98.0	90.2	92.4	93.7	96.3	100.6	93.0	91.1	87.3	95.0	94.6	93.9	90.2	80.5
Myanmar	1.7	1.5	1.3	1.0	0.7	0.6	0.5	0.3	0.2	0.1	0.1	0.1	...	...
Philippines	44.2	49.3	59.3	58.8	51.3	53.5	52.3	50.7	55.6	54.6	51.7	48.0	42.3	38.7
Singapore	171.4	166.5	162.4	152.0	167.4	182.0	176.5	175.5	185.0	199.1	207.9	213.2	198.5	215.3
Thailand	48.6	45.5	46.6	43.0	45.7	58.1	59.4	57.5	58.9	65.8	74.7	70.2	65.3	73.7
Viet Nam	41.9	51.8	51.2	52.2	52.8	57.5	56.9	62.0	67.7	73.3	73.5	78.2	92.7	94.7
The Pacific														
Cook Islands	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	58.8	58.8	58.4	58.3	61.4	70.3	68.7	63.9	68.2	70.5	74.0	69.3	68.2	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	..	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	41.1	44.1	45.4	45.8	46.4	49.2	52.3	56.9	51.5	58.3	56.1	62.4	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	...	...	...	...	...	72.8	71.1	106.5	102.5	95.2	79.1	78.9	93.6	...
Tonga	43.4	47.5	39.0	41.7	35.1	37.1	51.6	63.1	62.0	58.2	64.6	60.2	61.5	70.8
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	54.8	54.5	50.4	54.1	57.5	53.4	54.7	60.9	58.8	58.7	60.3	57.7	54.7	...
Developed Member Countries														
Australia	20.1	19.6	19.1	20.7	21.0	21.9	22.4	21.1	21.5	20.1	21.2	21.8	21.8	22.5
Japan	7.8	9.3	9.8	9.0	8.7	9.5	9.9	10.1	10.4	11.4	12.9	14.9	15.9	17.3
New Zealand	28.2	27.5	27.7	29.1	31.4	33.8	32.7	30.6	28.8	29.7	30.1	30.5	29.8	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.12 **Gross domestic saving**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	-19.4	35.8	-31.8	-14.8	-8.3	-8.7	...
Armenia	-17.5	-11.7	-14.7	-11.2	-8.3	-8.9	-4.8	0.9	6.5	7.4	14.0	17.7	18.7	17.9
Azerbaijan	2.9	0.3	19.1	4.8	8.6	20.4	24.9	24.7	27.6	31.3	47.5	54.4	56.9	56.2
Georgia	...	-13.0	-12.2	4.8	8.2	0.9	10.9	12.4	17.9	12.7	15.7	5.9	7.4	0.8
Kazakhstan	15.3	19.8	17.1	15.9	16.0	26.0	28.7	33.8	34.3	34.9	38.9	44.1	43.8	46.6
Kyrgyz Republic	5.5	-0.6	13.8	-6.1	3.2	14.3	17.7	13.8	5.3	5.8	-2.1	-13.1	4.6	-10.8
Pakistan	15.8	14.5	13.2	16.7	14.0	16.0	15.9	16.5	17.3	17.6	15.2	14.2	15.4	11.0
Tajikistan	28.7	32.0	29.3	23.3	19.4	0.6	1.8	6.4	9.3	14.2	4.3	6.0	6.9	...
Turkmenistan	31.0	43.7	18.3	7.3	12.3	50.2	36.9	43.2	31.1	25.6	38.6	33.1	...	...
Uzbekistan	27.1	22.7	18.7	19.9	17.3	19.4	20.0	21.8	26.9	31.2	32.7	...	...	...
East Asia														
China, People's Rep. of	39.6	38.3	39.0	38.9	38.0	38.0	39.0	40.4	43.0	45.6	46.6	47.8	49.9	50.4
Hong Kong, China	29.6	30.1	30.7	29.4	30.1	31.9	29.8	31.1	31.2	30.7	33.0	33.1	31.8	31.2
Korea, Rep. of	36.5	35.7	35.8	37.9	35.8	33.3	31.3	30.7	32.2	34.1	32.3	31.0	30.9	30.3
Mongolia	23.4	18.9	25.8	14.3	14.6	10.4	5.7	3.4	12.2	19.5	32.0	39.8	37.2	35.7
Taipei,China	26.8	26.4	26.1	26.0	26.2	25.5	23.6	25.0	25.7	26.0	25.6	27.1	29.0	26.0
South Asia														
Bangladesh	13.1	14.9	15.9	17.4	17.7	17.9	18.0	18.2	18.6	19.5	20.0	20.3	20.4	20.3
Bhutan	39.8	35.6	23.5	22.9	22.5	23.3	40.9	39.7	39.1	36.1	27.8	38.6	37.2	...
India	24.4	22.7	23.8	22.3	24.8	23.7	23.5	26.3	29.8	31.7	34.2	35.7	37.7	...
Maldives	46.4	49.2	45.9	46.7	44.2	44.2	44.9	46.3	49.3	49.2	32.9	...	...	...
Nepal	13.8	12.9	13.0	12.8	12.6	14.1	11.7	9.5	8.6	11.7	11.6	9.0	9.9	11.2
Sri Lanka	14.6	16.8	18.8	19.6	18.0	15.2	16.1	15.5	15.6	15.9	17.2	17.0	17.6	14.1
Southeast Asia														
Brunei Darussalam [a]	36.6	36.1	35.5	29.9	36.9	49.4	44.3	47.2	48.6	51.4	59.1	62.1	59.1	...
Cambodia	2.5	-1.0	6.4	2.3	7.6	8.1	11.6	8.5	9.1	8.5	9.9	13.8	16.1	30.3
Indonesia	30.6	30.1	31.5	26.5	19.5	31.8	31.5	25.1	23.7	24.9	27.5	28.7	28.1	30.6
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	39.7	42.9	43.9	48.7	47.4	46.1	41.8	42.0	42.5	43.4	42.8	43.1	42.0	42.2
Myanmar	13.4	11.5	11.8	11.8	13.0	12.3	11.5	10.2	11.0	12.3	13.3	13.8	...	...
Philippines	14.5	14.6	14.2	12.4	14.3	17.3	17.1	19.1	19.7	21.2	21.0	20.1	20.8	19.2
Singapore	50.1	50.6	51.5	51.8	48.7	46.9	41.6	40.6	43.6	47.1	48.8	50.3	52.4	50.0
Thailand	36.9	36.0	35.3	34.8	32.5	32.5	31.4	31.7	32.0	31.7	30.9	32.4	34.1	33.2
Viet Nam	18.2	17.2	20.1	21.5	24.6	27.1	28.8	28.7	27.4	28.5	30.3	30.6	29.2	26.6
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	23.1	20.7	20.9	30.7	22.4	12.2	8.1	17.3	13.6	2.5	1.5	-4.5	0.6	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	40.2	31.2	22.4	22.6	13.2	38.8	36.0	27.9	35.7	31.0	35.9	36.1	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste [b]	...	...	...	3.9	13.0	-46.8	-39.7	-57.1	-61.1	-62.8	-46.8	-46.1	-54.5	...
Tonga	-14.6	-17.2	-13.1	-17.2	-10.2	-9.4	-22.6	-25.5	-24.3	-18.4	-24.9	-26.4	-31.4	-38.9
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	17.0	11.8	20.3	22.4	19.2	19.3	17.9	9.4	12.7	16.4	20.2	23.9	24.9	...
Developed Member Countries														
Australia	22.3	22.5	23.4	23.2	22.6	23.1	22.4	23.1	23.0	23.6	23.9	25.5	26.3	27.0
Japan	29.0	28.8	28.6	27.6	26.2	26.4	24.3	23.6	23.8	24.0	24.6	24.2	23.9	...
New Zealand	24.1	23.4	22.3	20.6	21.5	23.3	24.7	24.1	23.8	24.0	22.8	22.0	22.9	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.13 **Growth rates of real GDP**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	4.6	12.6	10.3	10.3	16.4	0.0
Armenia	6.9	5.9	3.3	7.3	3.3	5.9	9.6	15.1	14.0	10.5	13.9	13.2	13.8	6.8
Azerbaijan	-12.0	1.3	5.8	10.0	7.4	11.1	9.9	10.6	11.2	10.2	26.4	34.5	25.1	10.8
Georgia	2.6	11.3	10.5	3.1	2.9	1.8	4.8	5.5	11.1	5.9	9.6	9.4	12.3	2.1
Kazakhstan	-9.2	0.5	1.7	-1.9	2.7	9.8	13.5	9.8	9.3	9.6	9.7	10.7	8.9	3.3
Kyrgyz Republic	-5.4	7.1	9.9	2.1	3.7	5.4	5.3	-0.0	7.0	7.0	-0.2	3.1	8.5	7.6
Pakistan	5.1	6.6	1.7	3.5	4.2	3.9	2.0	3.1	4.7	7.5	9.0	5.8	6.8	4.1
Tajikistan	-6.0	-22.5	1.7	5.3	3.7	8.3	9.6	10.8	11.1	10.3	6.7	6.6	7.7	7.9
Turkmenistan	-7.2	6.7	-11.4	7.1	16.5	5.5	4.3	-0.6	3.3	5.0	9.6	9.0	8.5	...
Uzbekistan	0.9	1.7	5.2	4.3	4.3	4.0	4.5	4.2	4.4	7.7	7.1	7.4	9.6	9.0
East Asia														
China, People's Rep. of	10.9	10.0	9.3	7.8	7.6	8.4	8.3	9.1	10.0	10.1	10.4	11.6	13.0	9.0
Hong Kong, China	2.3	4.2	5.1	-6.0	2.6	8.0	0.5	1.8	3.0	8.5	7.1	7.0	6.4	2.4
Korea, Rep. of	9.2	7.0	4.7	-6.9	9.5	8.5	4.0	7.2	2.8	4.6	4.0	5.2	5.1	2.2
Mongolia	...	2.4	4.0	3.5	3.2	1.2	0.9	3.8	6.1	10.6	7.3	8.6	10.2	8.9
Taipei,China	6.5	6.3	6.6	4.5	5.7	5.8	-2.2	4.6	3.5	6.2	4.2	4.8	5.7	0.1
South Asia														
Bangladesh	4.9	4.6	5.4	5.2	4.9	6.0	5.3	4.4	5.3	6.3	6.0	6.6	6.4	6.2
Bhutan	7.3	5.8	4.2	5.8	7.7	7.2	6.8	10.9	7.2	6.8	6.5	6.3	21.4	...
India	7.3	8.0	4.3	6.7	6.4	4.4	5.8	3.8	8.5	7.5	9.5	9.7	9.0	6.7
Maldives	7.4	9.1	10.4	9.8	7.2	4.8	3.5	6.5	8.5	9.5	-4.6	18.0	7.2	5.8
Nepal	3.4	5.2	5.1	3.2	4.3	6.0	5.4	0.1	3.9	4.7	3.5	3.4	3.3	5.3
Sri Lanka	5.5	3.8	6.4	4.8	4.3	6.0	-1.4	4.0	5.9	5.4	6.2	7.7	6.8	6.0
Southeast Asia														
Brunei Darussalam [a]	4.5	2.9	-1.5	-0.6	3.1	2.8	2.7	3.9	2.9	0.5	0.4	4.4	0.6	0.4
Cambodia	6.5	5.3	5.7	5.0	12.6	8.4	7.7	7.0	8.5	10.3	13.3	10.8	10.2	6.7
Indonesia	8.2	7.8	4.7	-13.1	0.8	4.9	3.8	4.3	4.8	5.0	5.7	5.5	6.3	6.1
Lao PDR	7.1	6.9	6.9	4.0	7.3	6.3	4.6	6.9	6.2	7.0	6.8	8.7	7.8	7.2
Malaysia	9.8	10.0	7.3	-7.4	6.1	8.9	0.5	5.4	5.8	6.8	5.3	5.8	6.2	4.6
Myanmar	6.9	6.4	5.7	5.8	10.9	13.7	11.3	12.0	13.8	13.6	13.6	...	...	...
Philippines	4.7	5.9	5.2	-0.6	3.4	4.4	1.8	4.4	4.9	6.4	5.0	5.3	7.1	3.8
Singapore	8.2	7.8	8.3	-1.4	7.2	10.1	-2.3	4.0	3.5	9.3	7.3	8.4	7.8	1.1
Thailand	9.2	5.9	-1.4	-10.5	4.4	4.8	2.2	5.3	7.1	6.3	4.6	5.2	4.9	2.6
Viet Nam	9.5	9.3	8.2	5.8	4.8	6.8	6.9	7.1	7.3	7.8	8.4	8.2	8.5	6.2
The Pacific														
Cook Islands	...	0.3	-2.3	-0.8	2.7	13.9	4.9	2.6	8.2	4.3	0.0	0.7	1.3	-0.1
Fiji Islands	...	4.8	-2.2	1.3	8.8	-1.7	2.0	3.2	1.1	5.2	0.6	3.4	-6.6	0.2
Kiribati	-0.3	4.8	5.6	10.6	-1.0	5.7	-3.8	7.1	3.3	-0.7	0.0	3.2	-0.5	3.4
Marshall Islands	-0.3	-12.3	-5.3	3.6	-2.9	5.0	3.2	4.7	3.2	5.9	1.7	0.8	2.3	1.2
Micronesia, Fed. States of	2.9	-3.1	-10.6	5.5	2.1	4.7	0.1	0.9	2.9	-3.3	-0.6	-2.3	-3.2	-1.0
Nauru	...	...	...	...	...	...	...	...	...	...	-14.5	6.3	-27.3	1.0
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	3.4	6.6	-6.3	4.7	10.1	-9.8	-0.0	2.0	4.4	0.6	3.9	2.3	4.1	7.2
Samoa	6.6	7.3	0.8	2.4	2.2	3.3	8.2	3.2	4.8	4.8	5.4	1.0	6.4	-3.4
Solomon Islands	10.0	1.6	-1.7	3.2	-1.6	-14.2	-8.0	-2.8	6.5	8.0	5.0	6.1	10.7	6.7
Timor-Leste [b]	9.5	10.8	4.1	...	-35.5	13.7	16.5	2.4	0.1	4.2	6.2	-5.8	7.8	2.6
Tonga	4.5	0.0	-3.2	3.5	2.3	5.4	7.2	1.4	3.4	2.6	-3.0	3.0	0.2	0.7
Tuvalu	-5.0	-7.1	5.6	19.7	-0.5	13.4	5.9	1.2	...	...	...	...	...	...
Vanuatu	-0.0	2.5	8.6	4.3	-3.2	2.7	-2.6	-7.4	3.2	5.5	6.5	7.4	6.8	...
Developed Member Countries														
Australia	4.3	4.1	3.9	4.5	5.2	4.0	1.9	3.8	3.2	4.0	2.8	3.0	3.3	3.7
Japan	2.0	2.7	1.6	-2.0	-0.1	2.9	0.2	0.3	1.4	2.7	1.9	2.0	2.4	-0.6
New Zealand	4.2	3.5	1.7	0.5	5.3	2.4	3.6	4.9	4.3	3.8	3.0	1.8	3.1	-1.0

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2003 include the value added of activities of the United Nations, while estimates beginning 2003 exclude its value added.

Sources: ADB staff estimates using World Development Indicators Online (World Bank 2009), country sources, CEIC data, US Bureau of Economic Analysis, and UNECE Statistical Division Database.

National Accounts

Table 2.14 **Growth rates of real GDP per capita**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	6.1	3.5	7.6	3.4	6.2	9.8	15.1	14.1	10.4	13.7	13.1	13.6	6.6
Azerbaijan	-13.0	0.2	4.8	8.9	6.5	10.2	9.1	9.7	10.3	9.2	25.2	33.0	23.6	9.6
Georgia	5.5	14.2	13.3	4.3	3.7	2.6	5.6	6.2	11.8	6.5	9.4	7.4	12.5	2.4
Kazakhstan	-6.3	2.0	3.4	-0.2	3.7	10.2	13.7	9.7	9.0	8.9	8.7	9.5	7.7	2.1
Kyrgyz Republic	-6.4	5.5	8.3	0.6	2.2	4.3	4.5	-0.8	6.0	5.9	-1.1	2.1	7.8	6.5
Pakistan	2.5	4.1	0.7	1.1	1.9	1.6	0.1	1.0	2.7	5.4	6.9	3.9	4.9	2.3
Tajikistan	-7.0	23.4	0.2	3.2	1.6	6.1	7.4	8.6	8.9	8.0	4.5	4.5	5.5	5.5
Turkmenistan	9.9	4.1	-13.8	4.0	12.5	1.7	0.2	-5.4	-2.3	1.2	8.1	7.6	7.1	...
Uzbekistan	-1.0	-0.1	3.6	2.8	2.8	2.5	3.0	2.7	2.9	6.1	5.6	5.9	8.0	7.4
East Asia														
China, People's Rep. of	9.7	8.9	8.2	6.8	6.7	7.6	7.5	8.4	9.3	9.5	9.8	11.0	12.5	8.4
Hong Kong, China	0.3	-0.3	4.2	-6.8	1.6	7.0	-0.2	1.4	3.2	7.6	6.6	6.3	5.3	1.6
Korea, Rep. of	8.1	6.0	3.7	-7.5	8.7	7.6	3.2	6.6	2.3	4.2	3.7	4.8	4.8	1.9
Mongolia	...	0.6	2.4	2.4	1.9	-0.5	-0.3	2.2	5.3	9.3	6.0	7.3	8.1	7.2
Taipei,China	5.6	5.4	5.8	3.6	4.9	4.9	-2.9	4.1	3.0	5.8	3.8	4.4	5.3	-0.2
South Asia														
Bangladesh	3.2	2.9	3.8	3.6	3.4	4.5	3.8	3.1	3.8	4.9	4.6	5.2	5.0	4.9
Bhutan	5.9	4.5	2.9	4.5	6.4	5.8	5.4	9.5	5.8	5.4	5.1	4.4	19.2	...
India	5.2	5.8	2.3	4.6	4.4	2.6	3.9	2.2	6.8	5.8	7.9	8.0	7.5	5.2
Maldives	5.3	6.8	6.0	7.5	5.2	3.2	1.2	4.8	6.8	7.8	-6.0	15.9	5.1	4.2
Nepal	2.4	2.8	2.6	0.8	1.9	3.5	2.8	-2.1	1.7	2.4	1.2	1.1	1.1	3.0
Sri Lanka	4.4	2.5	5.2	3.4	2.7	4.5	-2.8	2.5	4.6	4.3	5.1	6.5	6.1	5.0
Southeast Asia														
Brunei Darussalam [a]	0.4	-0.2	-0.4	-3.1	0.6	0.3	0.3	0.4	1.3	-2.3	-2.4	0.9	-1.2	-1.6
Cambodia	1.3	-0.0	0.2	0.7	10.6	6.5	5.7	4.5	6.7	10.7	11.8	9.3	8.8	5.3
Indonesia	6.5	6.6	3.5	-14.1	-0.4	3.9	2.4	2.9	3.4	3.7	4.3	4.2	5.0	4.7
Lao PDR	7.4	4.9	4.6	1.9	5.1	4.1	2.4	4.6	3.9	4.7	4.9	6.3	5.6	4.8
Malaysia	6.8	7.5	4.4	-9.7	3.5	6.2	-1.7	3.2	3.6	4.6	3.1	3.8	4.1	2.5
Myanmar	5.0	4.5	3.8	1.9	8.7	11.5	9.1	9.8	11.6	11.3	11.3	...	...	...
Philippines	2.3	3.4	2.8	-2.9	1.0	1.8	-0.3	2.3	2.8	4.2	2.9	3.3	5.0	1.8
Singapore	8.2	3.5	4.8	-4.7	6.3	8.2	-4.9	3.1	5.0	7.9	4.8	5.0	3.4	-4.1
Thailand	8.0	4.8	-2.3	-11.4	3.4	4.0	1.5	4.5	6.3	5.4	3.7	4.5	4.1	1.4
Viet Nam	7.8	7.6	6.5	4.2	3.2	5.4	5.5	5.7	5.8	6.3	7.0	6.9	7.1	4.9
The Pacific														
Cook Islands	20.5	-3.3	7.3	4.4	8.3	4.3	3.8	0.9	8.2	-5.4	0.5	-2.2	0.2	-0.6
Fiji Islands	...	3.9	3.8	0.4	7.8	-2.3	1.6	3.0	0.5	4.6	0.2	2.9	-7.1	-0.3
Kiribati	-1.7	2.9	3.7	8.6	-2.8	4.3	-5.4	5.3	1.6	-2.4	-2.3	1.4	-2.4	1.4
Marshall Islands	-1.7	-13.6	6.4	-5.0	-4.3	5.1	3.5	5.1	2.1	4.8	0.6	0.3	1.1	0.1
Micronesia, Fed. States of	2.7	-3.3	-10.8	5.2	-2.3	4.4	-0.1	0.7	2.7	-3.4	0.7	-2.4	-3.2	-1.0
Nauru	...	...	...	...	...	...	...	...	...	...	-15.4	22.9	-27.8	0.4
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	-5.3	4.5	-8.1	2.7	9.1	-24.2	2.9	-1.3	2.5	-2.0	1.1	-0.6	0.8	4.5
Samoa	5.6	6.3	-0.1	1.5	1.3	2.4	7.3	2.9	4.5	4.5	5.1	0.7	6.0	-3.9
Solomon Islands	6.0	-2.0	-5.3	-0.5	5.1	-16.5	-10.5	-5.4	3.6	5.1	2.1	3.2	7.7	3.9
Timor-Leste [b]	...	...	...	...	19.7	4.3	15.3	-9.0	-1.9	-1.1	2.9	-8.7	4.4	0.6
Tonga	4.2	-0.3	-3.6	3.0	1.9	4.9	6.8	0.9	2.9	2.1	-3.4	2.5	0.2	0.3
Tuvalu	-5.5	-7.6	5.1	19.1	-1.0	12.8	5.4	0.7	...	...	...	...	...	...
Vanuatu	-2.5	-0.1	5.8	1.7	-5.6	0.0	-5.1	-9.8	0.9	2.8	3.8	4.7	4.1	...
Developed Member Countries														
Australia	3.1	2.7	2.7	3.4	4.0	2.8	0.5	2.5	1.9	2.8	1.5	1.5	1.7	1.9
Japan	1.7	2.5	1.3	-2.3	-0.3	2.7	-0.1	0.0	1.2	2.7	1.9	2.1	2.4	-0.5
New Zealand	2.7	1.9	0.3	-0.4	4.8	1.8	3.0	3.1	2.3	2.2	1.8	0.6	2.0	-1.4

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2003 include the value added of activities of the United Nations, while estimates beginning 2003 exclude its value added.

Sources: ADB staff estimates using World Development Indicators Online (World Bank 2009), country sources, CEIC data, US Bureau of Economic Analysis, and UNECE Statistical Division Database.

Table 2.15 **Growth rates of agriculture real value added**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	7.1	-2.1	2.7	-0.2	24.8	-18.4
Armenia	...	2.0	-4.5	12.8	1.4	-1.0	12.2	3.8	4.2	14.6	11.2	0.5	10.2	1.3
Azerbaijan	-7.8	2.8	-7.5	6.6	7.1	12.1	11.1	6.4	5.6	5.0	7.5	0.9	4.0	6.1
Georgia	...	...	3.9	-6.6	6.9	-12.0	8.2	-1.4	10.3	-7.9	12.0	-11.7	3.3	-2.1
Kazakhstan	-24.4	-5.0	-0.9	-19.3	21.4	-3.2	17.1	3.2	2.2	-0.1	7.1	6.0	8.9	-5.5
Kyrgyz Republic	-2.0	15.2	12.3	2.9	8.2	2.6	7.3	3.1	3.2	4.1	-4.2	1.7	1.6	0.7
Pakistan	6.6	11.7	0.1	4.5	2.0	6.1	-2.2	0.1	4.1	2.4	6.5	6.3	4.1	1.1
Tajikistan	...	...	...	...	...	...	8.0	14.2	10.4	15.3	2.8	5.8	6.4	...
Turkmenistan	54.0	16.7	41.1	34.5	14.8	2.6	6.9	11.5	0.6	17.4	7.4	6.6	10.9	...
Uzbekistan	2.0	-5.7	5.8	4.1	5.5	3.2	4.1	6.0	6.8	10.1	5.6	6.2	6.1	6.0
East Asia														
China, People's Rep. of	5.0	5.1	3.5	3.5	2.8	2.4	2.8	2.9	2.5	6.3	5.2	5.0	3.7	5.5
Hong Kong, China	...	...	...	...	...	...	4.1	-1.1	-6.3	2.7	-1.0	-5.0	-6.4	-16.5
Korea, Rep. of	5.3	2.3	4.6	-6.4	5.9	1.2	1.6	-2.2	-5.4	9.1	1.3	1.5	4.0	5.5
Mongolia	...	3.4	4.3	6.6	4.4	-15.9	-18.3	-12.4	4.9	15.8	10.7	7.5	15.8	5.0
Taipei,China	2.7	-0.3	-1.9	-6.3	2.7	1.2	-1.9	4.7	-0.1	-4.1	-8.1	6.1	-1.9	-1.4
South Asia														
Bangladesh	-0.3	3.1	6.0	3.2	4.8	7.4	3.1	–	3.1	4.1	2.2	4.9	4.6	3.2
Bhutan	1.5	2.0	3.9	2.3	1.5	4.6	5.0	2.7	2.2	1.8	0.4	1.9	0.4	...
India	-0.7	9.9	-2.6	6.3	2.7	-0.2	6.3	7.2	10.0	0.0	5.8	4.0	4.9	1.6
Maldives	1.0	2.2	1.3	6.4	3.3	-0.2	5.0	17.0	1.6	2.5	12.4	-0.6	-16.1	-1.6
Nepal	-0.9	3.8	4.4	0.9	2.8	4.9	5.5	3.1	3.3	4.8	3.5	1.8	1.0	4.7
Sri Lanka	3.4	-4.1	3.1	2.4	6.0	2.3	-3.8	2.0	1.5	1.3	2.9	7.2	2.8	9.5
Southeast Asia														
Brunei Darussalam [a]	2.9	1.4	11.3	3.7	11.2	6.6	5.8	5.2	11.3	12.0	1.3	-9.9	-4.5	...
Cambodia	3.5	1.2	5.5	5.1	3.7	-1.2	4.5	-3.5	10.5	-0.9	15.7	5.5	5.0	5.7
Indonesia	4.4	3.1	1.0	-1.3	2.2	1.9	4.1	2.6	3.8	2.8	2.7	3.4	3.4	4.8
Lao PDR	3.1	2.8	7.0	3.1	8.2	4.2	-0.6	1.9	2.5	3.4	0.7	2.5	8.6	2.0
Malaysia	2.5	4.5	0.7	-2.8	0.5	6.1	-0.2	2.9	6.0	4.7	2.6	5.2	1.4	4.0
Myanmar	4.8	5.0	3.7	4.5	11.5	11.0	8.7	6.0	11.7	11.0	12.1	..	..	..
Philippines	0.9	3.8	3.1	-6.4	6.5	3.4	3.7	4.0	3.8	5.2	2.0	3.8	4.8	3.2
Singapore	-3.8	3.2	0.7	-7.1	-1.8	-5.8	-2.0	-6.3	1.9	12.7	-1.2	15.5	-3.0	-4.0
Thailand	4.0	4.4	-0.7	-1.5	2.3	7.2	3.2	0.7	12.7	-2.4	-1.8	4.6	1.8	5.1
Viet Nam	4.8	4.4	4.3	3.5	5.2	4.6	3.0	4.2	3.6	4.4	4.0	3.7	3.8	4.1
The Pacific														
Cook Islands	...	12.7	4.2	33.5	9.2	0.1	-2.9	9.5	28.3	-2.6	-3.5	-4.6	8.4	-3.8
Fiji Islands	...	4.5	-10.4	-7.8	13.7	-1.3	-5.5	4.9	-4.0	4.4	0.8	-0.5	-5.7	...
Kiribati	9.1	-14.1	-4.7	9.0	1.9	-6.1	-1.7	1.5	9.4	2.8	-7.4	6.9	1.0	4.9
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	-0.7	7.5	-8.4	2.1	13.8	2.1	-4.7	-0.6	7.7	-0.2	5.6	1.0	-1.2	5.0
Samoa	12.7	3.2	-6.5	3.4	-3.1	-0.1	-3.7	-6.0	-6.4	-5.0	5.4	-4.1	6.9	-9.0
Solomon Islands	11.8	-2.8	1.0	0.2	-7.2	-17.1	-3.5	4.8	19.1	11.1	5.2	5.3	12.5	6.8
Timor-Leste	-4.3	11.6	7.0	...	-3.6	-14.3	8.7	6.0	-0.4	6.0	6.3	0.3	-5.6	...
Tonga	-1.0	-3.2	-1.9	0.7	-1.8	5.5	1.2	1.1	7.1	-0.8	-3.9	-0.9	0.9	3.9
Tuvalu	0.6	6.1	0.0	-1.7	-1.1	-2.0	-2.7	-9.4	...	...	...	...	...	...
Vanuatu	2.9	4.5	9.6	8.6	-12.2	7.4	-3.1	-3.3	6.5	7.2	-4.4	2.3	2.3	...
Developed Member Countries														
Australia	16.9	23.2	7.5	0.5	10.2	5.2	4.1	3.2	-23.5	28.2	4.1	2.9	17.7	8.3
Japan	-6.0	2.4	-1.2	2.0	1.0	2.1	-2.4	6.0	-5.9	-7.1	3.6	-2.0	4.9	...
New Zealand	7.3	7.6	0.7	-4.3	4.6	2.8	2.0	0.3	9.0	3.7	5.0	0.9	1.8	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.16 **Growth rates of industry real value added**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	-2.9	35.9	19.2	19.2	7.5	4.6
Armenia	...	5.6	1.9	0.8	6.0	10.8	5.2	21.3	24.7	7.4	14.8	16.6	12.1	5.4
Azerbaijan	-13.3	7.4	17.8	17.7	2.6	5.7	8.3	15.2	14.1	11.9	43.4	49.8	32.9	9.9
Georgia	...	...	8.6	3.6	-1.7	3.4	-0.5	14.5	16.5	12.1	12.0	13.5	14.5	-4.5
Kazakhstan	-15.9	-4.5	4.8	12.3	3.6	15.3	15.4	11.8	9.2	11.2	10.7	13.4	8.0	2.1
Kyrgyz Republic	-12.3	2.4	19.3	-1.8	-3.8	8.8	4.5	-9.0	12.7	3.0	-9.8	-6.9	10.3	10.7
Pakistan	4.1	4.7	-0.3	6.1	5.0	1.3	4.1	2.7	4.2	16.3	12.1	4.1	8.8	1.7
Tajikistan	...	...	...	...	...	...	15.6	8.9	12.3	-1.5	7.7	4.7	2.7	...
Turkmenistan	22.8	16.1	-38.6	-0.5	17.1	1.0	6.7	-6.2	9.7	2.7	8.7	10.4	7.9	...
Uzbekistan	-5.2	1.4	2.7	2.3	2.1	1.8	2.9	3.4	3.2	5.0	8.9	7.5	8.3	...
East Asia														
China, People's Rep. of	13.9	12.1	10.5	8.9	8.1	9.4	8.4	9.8	12.7	11.1	11.7	13.0	14.7	9.3
Hong Kong, China	...	...	...	...	...	...	-3.6	-3.2	-4.6	-2.7	-1.7	-2.5	-0.5	-1.2
Korea, Rep. of	9.8	7.2	4.5	-8.2	12.2	11.7	3.3	7.4	6.0	7.9	4.8	6.6	6.0	2.2
Mongolia	...	-3.4	-2.6	3.7	1.6	0.8	15.0	4.3	5.9	18.3	5.2	6.9	7.0	0.8
Taipei,China	4.7	4.0	5.4	2.6	5.4	5.8	-7.5	7.3	4.0	8.9	6.3	6.8	9.3	-1.2
South Asia														
Bangladesh	9.9	6.9	5.8	8.3	4.9	6.2	7.5	6.5	7.3	7.6	8.3	9.7	8.4	6.8
Bhutan	13.5	5.2	-1.0	4.2	15.4	7.4	10.2	17.7	7.7	4.1	2.9	8.0	51.4	...
India	11.6	6.7	3.7	4.1	4.6	6.4	2.7	7.1	7.4	10.3	10.2	11.0	8.1	3.9
Maldives	4.7	3.3	20.2	17.1	12.1	1.2	8.0	9.9	8.2	12.8	3.0	15.5	9.7	8.3
Nepal	4.3	9.4	6.4	2.2	5.8	8.6	4.1	0.9	3.1	1.4	3.0	4.5	3.9	1.9
Sri Lanka	8.3	5.9	8.3	6.1	5.5	9.0	-2.0	3.5	5.7	3.4	8.3	8.5	8.9	5.0
Southeast Asia														
Brunei Darussalam [a]	5.4	4.7	-6.1	-0.3	3.6	3.0	0.8	4.5	3.5	-0.5	-1.8	2.9	-5.6	...
Cambodia	18.9	4.4	16.8	6.2	21.2	31.2	11.4	16.8	12.0	16.6	12.7	18.3	8.4	4.1
Indonesia	10.4	10.7	5.2	-14.0	2.0	5.9	2.7	4.3	3.8	3.9	4.7	4.5	4.7	3.7
Lao PDR	13.3	17.2	8.1	9.2	8.0	9.3	-1.5	10.8	19.4	3.7	10.6	14.2	4.4	10.2
Malaysia	14.9	14.4	7.5	-10.6	8.8	13.6	-2.6	4.2	7.5	7.3	3.6	4.5	3.1	1.0
Myanmar	12.7	10.7	8.9	6.1	13.8	21.3	21.8	35.0	20.8	21.4	19.9	...	...	...
Philippines	6.7	6.4	6.1	-2.1	0.9	4.9	-2.5	3.9	4.0	5.2	3.8	4.5	6.8	5.0
Singapore	9.5	6.6	6.7	0.6	7.7	12.0	-9.0	4.0	1.2	10.5	8.1	10.6	7.2	-1.0
Thailand	10.9	6.9	-1.8	-13.0	9.6	5.3	1.7	7.1	9.6	7.9	5.4	5.7	5.7	3.4
Viet Nam	13.6	14.5	12.6	8.3	7.7	10.1	10.4	9.5	10.5	10.2	10.7	10.4	10.2	6.1
The Pacific														
Cook Islands	...	-2.0	1.2	16.3	6.6	18.2	13.3	-0.3	16.7	10.6	-12.3	1.5	7.5	0.9
Fiji Islands	...	7.4	3.0	1.2	8.1	-5.5	7.2	2.2	1.1	9.9	-6.6	2.5	-6.9	...
Kiribati	1.1	-0.5	4.4	51.8	10.3	6.3	-11.9	-4.7	1.7	-9.5	-11.5	17.3	5.5	4.0
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	-10.0	12.9	-15.1	11.2	8.5	-8.3	-0.1	2.3	8.3	0.8	4.1	1.5	5.5	7.8
Samoa	1.8	4.7	-1.9	-9.2	2.2	13.5	15.4	6.1	7.8	5.9	4.9	-2.0	13.7	-10.3
Solomon Islands	31.6	12.2	-14.5	12.6	23.9	-29.7	-36.2	-4.5	-0.4	4.0	6.7	7.0	11.5	3.5
Timor-Leste	16.6	7.2	4.1	...	-33.3	22.9	2.7	-10.6	-15.1	0.7	10.6	-18.1	28.7	...
Tonga	20.4	5.3	-17.2	6.3	10.8	-0.4	1.3	6.3	2.8	10.7	-7.5	-3.6	-3.0	1.2
Tuvalu	-13.0	-15.4	24.4	15.3	0.8	13.3	10.3	6.5	...	...	...	...	...	...
Vanuatu	-2.2	-5.7	-11.1	4.3	4.7	7.8	-4.7	-5.8	3.6	5.4	7.1	7.0	10.4	...
Developed Member Countries														
Australia	4.2	3.5	1.7	4.5	2.7	3.6	0.2	3.0	4.8	0.9	2.0	2.2	4.2	3.4
Japan	0.9	3.3	1.4	-4.5	-0.6	2.7	-4.2	-1.8	2.4	4.9	3.3	2.5	2.1	...
New Zealand	2.8	3.5	0.1	-3.7	5.6	0.8	1.0	9.2	3.7	3.8	-0.5	-1.6	2.9	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.17 **Growth rates of services real value added**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	4.0	19.6	10.4	16.0	14.4	13.4
Armenia	...	4.8	5.0	4.5	5.3	3.8	9.8	16.1	9.1	13.3	14.7	15.5	13.3	9.0
Azerbaijan	-13.1	-4.8	6.9	5.5	9.7	9.6	7.1	5.9	8.9	9.2	9.4	17.1	11.6	8.2
Georgia	...	...	9.2	10.0	2.3	9.5	5.1	6.1	9.9	7.5	10.4	14.6	12.1	4.6
Kazakhstan	0.3	3.6	0.4	-4.9	-0.4	8.4	12.3	9.8	11.0	10.8	10.4	10.9	13.2	4.6
Kyrgyz Republic	-4.6	-0.8	0.5	3.9	3.3	5.8	3.8	4.2	7.4	11.7	8.4	9.4	12.4	11.4
Pakistan	4.8	5.0	3.6	1.6	5.0	4.8	3.1	4.8	5.2	5.8	8.5	6.5	7.0	6.6
Tajikistan	...	...	...	...	...	...	3.9	10.1	10.0	18.3	7.7	8.3	12.0	...
Turkmenistan	-16.0	-2.0	59.1	6.6	27.7	18.0	-0.1	14.2	-1.3	0.9	12.1	8.8	7.8	...
Uzbekistan	-0.9	3.8	5.4	5.4	5.0	5.4	5.1	3.3	3.2	7.4	7.1	8.6	13.4	...
East Asia														
China, People's Rep. of	9.8	9.4	10.7	8.4	9.3	9.7	10.3	10.4	9.5	10.1	10.5	12.1	13.8	9.5
Hong Kong, China	...	...	...	...	...	...	1.8	2.6	4.2	9.7	7.3	7.2	7.2	2.4
Korea, Rep. of	8.1	6.2	5.1	-3.9	6.6	6.1	4.7	7.7	1.7	2.4	3.5	4.4	5.1	2.5
Mongolia	...	5.1	7.5	1.1	3.1	15.3	6.1	11.0	6.7	4.1	7.1	10.1	9.7	15.6
Taipei,China	7.8	8.0	7.5	5.9	6.1	5.8	0.6	3.4	3.3	4.9	3.7	4.1	4.4	1.0
South Asia														
Bangladesh	4.9	4.0	4.5	5.0	5.2	5.5	5.5	5.4	5.4	5.7	6.4	6.4	6.9	6.5
Bhutan	6.9	8.9	13.1	11.2	6.4	7.4	4.6	7.1	9.3	11.2	15.1	8.2	6.4	...
India	10.1	7.6	8.8	8.3	9.5	5.7	7.2	7.5	8.5	9.1	10.6	11.2	10.9	9.7
Maldives	14.8	11.0	10.0	8.9	6.8	6.0	2.4	4.7	9.6	9.7	-8.2	21.3	9.1	5.8
Nepal	5.9	5.7	4.7	6.5	5.1	5.9	4.5	-1.8	3.7	6.8	3.3	5.6	4.5	7.0
Sri Lanka	5.2	5.9	6.1	4.7	3.1	6.1	-0.3	4.8	8.9	6.1	4.5	7.6	9.2	7.3
Southeast Asia														
Brunei Darussalam [a]	2.9	-0.5	7.4	-1.2	1.9	2.5	6.1	2.8	1.6	2.0	4.1	7.4	10.4	...
Cambodia	8.3	9.2	2.9	5.0	14.6	8.9	8.7	10.0	5.9	13.2	13.1	10.1	10.1	9.0
Indonesia	7.6	6.8	5.6	-16.5	-1.0	5.2	5.0	5.0	6.4	7.1	7.9	7.4	8.8	8.9
Lao PDR	10.2	8.5	7.5	5.5	6.7	6.9	14.7	11.3	3.8	12.0	9.9	9.7	9.1	9.7
Malaysia	9.6	8.9	11.1	-1.1	4.4	6.0	4.1	5.8	4.2	6.4	7.3	7.6	10.0	7.5
Myanmar	7.3	6.5	6.7	7.0	9.2	13.4	12.9	14.8	14.6	14.4	13.1	...	...	...
Philippines	5.0	6.4	5.4	3.5	4.0	4.4	4.3	5.1	6.1	7.7	7.0	6.5	8.1	3.3
Singapore	7.5	8.7	9.5	-1.7	6.5	8.2	2.0	3.9	4.3	8.1	6.8	7.4	7.7	4.5
Thailand	8.9	5.3	-1.1	-10.0	0.4	3.7	2.4	4.6	3.5	6.8	5.2	4.9	4.7	1.2
Viet Nam	9.8	8.8	7.1	5.1	2.3	5.3	6.1	6.5	6.5	7.3	8.5	8.3	8.9	7.2
The Pacific														
Cook Islands	...	-1.3	-4.0	-5.7	1.2	15.4	5.0	1.7	3.7	4.8	2.3	1.5	-0.7	0.4
Fiji Islands	...	3.4	-2.3	4.3	3.3	0.9	3.0	2.5	1.0	3.5	5.0	6.0	-6.8	...
Kiribati	-6.5	15.4	7.2	10.1	2.8	2.0	0.5	7.5	6.7	0.5	6.5	3.9	-3.7	0.9
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	-1.0	0.0	4.1	3.1	8.4	-26.9	7.5	5.1	-1.5	-0.7	3.6	5.6	7.6	9.2
Samoa	6.4	10.8	5.7	7.8	4.2	0.1	8.7	4.4	6.1	6.4	5.6	3.5	2.9	1.3
Solomon Islands	3.2	4.0	-1.0	4.2	-2.5	-5.7	-4.6	-9.5	-5.9	4.6	4.3	6.5	8.7	7.1
Timor-Leste [b]	13.3	12.7	2.8	...	-48.1	30.1	24.6	6.1	6.5	4.5	4.9	-5.9	11.7	...
Tonga	3.5	0.1	1.4	4.5	2.3	6.9	13.0	0.1	1.7	2.3	-2.6	7.7	1.1	-0.6
Tuvalu	-4.8	-3.8	3.2	26.4	0.0	19.1	6.4	3.4	...	...	...	...	...	...
Vanuatu	-0.4	3.3	11.2	3.2	-1.7	0.9	-2.1	-8.6	2.3	5.0	9.4	8.7	7.4	...
Developed Member Countries														
Australia	5.7	3.8	4.6	4.1	5.8	4.4	3.5	3.8	3.6	3.9	3.3	3.3	4.0	4.0
Japan	3.2	3.0	1.8	-0.5	0.6	1.9	2.1	1.7	1.2	2.1	1.3	1.9	2.4	...
New Zealand	4.6	3.4	2.7	2.5	5.3	3.3	5.1	3.8	3.6	4.6	4.0	3.1	3.9	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Estimates before 2003 include the value added of activities of the United Nations, while estimates beginning 2003 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.18 **Growth rates of real private consumption expenditure**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	..	...	...	...	...	..	...	...
Armenia	...	3.8	7.3	5.3	1.4	8.3	7.6	8.6	7.2	9.2	8.8	8.3	12.2	6.4
Azerbaijan	-2.9	9.4	11.7	13.3	11.6	10.0	9.4	8.0	9.7	11.2	13.2	14.5	16.9	17.2
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	-20.6	-5.2	3.2	-0.7	0.5	1.7	8.1	2.7	11.8	13.9	10.7	12.6	10.8	3.8
Kyrgyz Republic	-16.7	6.0	-8.9	17.8	0.3	-5.0	2.2	4.7	24.0	7.5	8.3	19.2	2.7	14.7
Pakistan	7.1	7.1	4.2	1.6	7.4	0.4	0.5	1.4	0.4	10.1	12.9	1.0	4.7	-1.3
Tajikistan	...	...	...	...	...	...	8.6	13.5	16.1	13.1	20.6	14.0	17.1	...
Turkmenistan	11.0	-13.3	23.1	2.6	9.8	-13.3	12.5	2.5	15.2	5.8	-0.1	15.7	7.6	...
Uzbekistan	...	...	...	...	...	...	...	...	..	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	1.7	3.7	5.5	-5.5	1.2	5.1	1.8	-0.9	-1.3	7.0	3.0	5.9	8.5	1.5
Korea, Rep. of	9.9	6.7	3.3	-13.4	11.5	8.4	5.7	8.9	-0.4	0.3	4.8	4.7	5.1	0.9
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	5.6	6.7	7.1	6.2	5.5	4.6	0.7	2.6	1.5	4.5	3.0	1.8	2.3	-0.3
South Asia														
Bangladesh	3.5	-0.1	4.7	1.1	1.3	4.1	4.7	4.9	3.5	3.2	3.9	4.3	5.9	5.5
Bhutan	...	...	...	...	...	...	6.0	7.3	10.7	2.3	1.3	1.3	22.1	...
India	6.1	7.8	3.0	6.5	6.1	3.4	6.0	2.9	5.9	5.2	7.1	6.3	8.5	2.9
Maldives	....	4.0	7.3	3.8	3.2	3.2	0.4	2.3	4.3	5.4	...	...	...	...
Nepal	...	...	...	...	...	...	...	3.5	3.2	1.0	4.7	5.4	3.2	3.3
Sri Lanka	4.0	2.9	4.7	9.5	0.8	4.0	1.5	9.1	8.3	3.3	1.7	6.5	3.9	7.6
Southeast Asia														
Brunei Darussalam [a]	-4.8	11.4	12.9	-9.8	-2.8	7.0	4.2	0.7	15.8	12.3	-0.6	3.7	2.0	...
Cambodia	8.6	8.8	-1.1	10.1	6.7	4.9	2.4	8.4	8.1	12.5	12.3	6.8	6.2	...
Indonesia	12.6	9.7	7.8	-6.2	4.6	1.6	3.5	3.8	3.9	5.0	4.0	3.2	5.0	5.3
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	11.7	6.9	4.3	-10.2	2.9	13.0	3.0	3.9	8.1	9.8	9.1	6.8	10.4	8.5
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	3.8	4.6	5.0	3.4	2.6	3.5	3.6	4.1	5.3	5.9	4.8	5.5	5.8	4.7
Singapore	3.2	6.1	5.6	-3.3	9.1	14.9	4.7	4.9	0.9	5.1	3.8	4.0	5.2	2.4
Thailand	7.8	5.8	-1.4	-11.5	4.3	5.2	4.1	5.4	6.5	6.2	4.6	3.0	1.6	2.5
Viet Nam	...	9.1	5.9	4.5	2.6	3.1	4.5	7.6	8.0	7.1	7.3	8.3	10.8	9.2
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	-5.1	32.8	28.9	12.4	31.3	-45.7	-13.4	18.8	-8.0	7.7	9.8	6.3	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	5.1	3.6	2.5	4.6	5.0	4.4	3.6	3.0	3.4	5.4	4.4	2.6	4.1	3.7
Japan	1.9	2.5	0.7	-0.9	1.0	0.7	1.6	1.1	0.4	1.6	1.3	1.5	0.7	0.5
New Zealand	3.9	4.4	2.4	3.1	3.3	1.3	2.8	4.9	6.6	5.1	4.6	2.8	3.2	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.19 **Growth rates of real government consumption expenditure**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	-2.7	-2.3	-2.1	1.7	2.9	3.1	5.1	11.1	8.8	19.1	14.0	14.6	17.0
Azerbaijan	-2.4	-0.5	1.8	-0.3	-1.3	2.3	5.3	14.5	22.1	4.4	3.4	4.7	3.9	4.9
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	-5.4	-14.7	-10.2	-14.8	7.6	15.0	19.2	-7.5	8.9	10.6	10.8	7.3	14.0	5.5
Kyrgyz Republic	-13.4	7.3	-4.5	4.2	4.1	5.9	-1.3	-0.2	1.2	4.6	-2.7	1.5	1.8	1.3
Pakistan	5.5	6.8	-8.4	6.8	-6.9	7.5	5.6	15.0	7.2	1.4	1.7	48.3	-9.6	39.0
Tajikistan	...	...	...	...	...	...	10.8	0.1	2.4	2.2	0.4	2.5	1.4	...
Turkmenistan	11.5	10.0	66.1	38.2	-12.3	14.6	-5.5	14.1	27.7	6.6	2.6	13.4	8.1	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	3.0	3.7	2.2	0.5	3.1	2.0	6.0	2.4	1.8	0.7	-3.2	0.3	3.0	1.7
Korea, Rep. of	5.0	8.0	2.6	2.3	2.9	1.6	5.0	4.9	4.4	3.8	4.3	6.6	5.4	4.2
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	3.8	7.2	6.0	3.6	-4.3	0.7	0.5	2.1	0.6	-0.5	1.1	-0.4	0.9	1.1
South Asia														
Bangladesh	2.3	-0.8	3.3	13.2	0.6	0.9	4.5	19.1	13.2	10.7	7.8	6.0	6.4	3.6
Bhutan	...	...	...	...	...	...	8.1	8.7	7.6	7.4	13.0	5.0	1.0	...
India	7.8	4.6	11.2	12.2	13.1	0.9	2.3	0.4	2.6	3.6	6.2	5.5	7.4	20.2
Maldives	...	8.8	23.7	9.8	13.1	14.1	4.4	7.1	8.5	14.7	...	...	...	...
Nepal	...	...	...	...	...	...	...	7.8	10.5	8.8	1.2	0.8	7.0	3.6
Sri Lanka	8.9	8.5	7.2	5.2	3.9	5.3	-1.7	-1.8	4.8	9.3	12.0	9.6	7.4	9.8
Southeast Asia														
Brunei Darussalam [a]	2.3	1.6	1.6	-3.9	2.0	7.7	9.3	-2.0	-2.6	4.1	-1.0	12.8	15.8	...
Cambodia	-23.2	25.2	2.0	-7.4	16.8	12.4	8.8	53.6	3.8	5.0	3.9	1.7	19.5	...
Indonesia	1.3	2.7	0.1	-15.4	0.7	-0.9	7.6	13.0	10.0	4.0	6.6	9.6	3.9	10.4
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	6.1	0.7	5.7	-8.9	17.1	1.6	15.7	11.9	8.6	7.6	6.5	5.0	6.5	10.9
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	5.6	4.1	4.6	-1.9	6.7	6.1	-5.3	-3.8	2.6	1.4	2.3	10.4	6.6	3.2
Singapore	11.7	19.6	7.4	8.3	6.6	18.3	5.9	5.5	1.0	0.4	6.7	6.6	2.2	8.1
Thailand	5.2	12.1	2.8	3.9	3.1	2.3	2.5	0.7	2.5	5.7	11.3	2.4	9.2	0.4
Viet Nam	...	7.4	4.0	3.2	-5.7	5.0	6.6	5.4	7.2	7.8	8.2	8.5	8.9	7.5
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	-5.4	18.5	-5.3	-3.6	7.0	-3.9	7.1	11.2	-14.0	19.5	1.1	10.7	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	3.5	4.2	1.9	3.8	4.5	3.3	2.1	2.8	3.2	3.9	3.8	2.5	3.0	3.4
Japan	3.9	2.9	0.8	1.8	4.2	4.3	3.0	2.4	2.3	1.9	1.6	0.4	2.0	0.9
New Zealand	4.9	1.4	8.1	-0.5	5.7	-2.6	4.1	1.3	4.9	4.3	4.7	4.0	4.3	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.20 **Growth rates of real gross domestic capital formation**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	7.8	4.9	5.2	-4.4	5.2	16.3	22.5	30.7	17.5	26.9	32.2	18.3	5.9
Azerbaijan	55.2	111.4	39.0	23.0	-2.0	2.6	20.6	84.0	61.5	21.4	16.6	14.8	17.8	34.3
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	-42.4	-29.6	5.6	-2.8	9.7	10.7	40.5	11.0	6.4	15.1	35.0	31.7	23.4	-12.1
Kyrgyz Republic	96.3	11.4	0.7	-31.5	23.3	22.1	-5.6	-6.4	-26.1	23.6	13.7	53.3	14.6	-2.2
Pakistan	3.8	5.8	-3.8	3.0	-9.0	4.9	4.3	-0.3	6.4	-5.2	12.9	18.4	12.9	3.9
Tajikistan	...	...	...	...	...	...	39.2	5.7	23.1	-3.2	2.6	9.4	43.9	...
Turkmenistan	-29.0	58.9	-13.8	20.9	-5.0	-7.6	-0.7	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	14.7	-2.2	14.0	-16.0	-15.6	18.8	-4.2	-0.7	2.1	1.8	-0.5	8.4	8.0	-1.4
Korea, Rep. of	10.1	10.5	-5.3	-30.6	24.1	10.7	-0.3	7.5	4.5	2.7	2.4	4.4	3.0	1.2
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	5.8	3.3	14.1	8.6	-0.2	3.9	22.2	3.2	4.0	24.7	-1.7	1.8	2.5	-10.6
South Asia														
Bangladesh	9.1	10.6	11.1	12.1	9.9	7.3	5.8	8.2	7.9	9.2	10.7	8.7	8.1	1.8
Bhutan	...	...	...	...	...	...	30.1	13.8	-0.9	16.4	-13.5	-23.7	10.7	...
India	7.6	-0.5	12.1	0.1	20.8	-3.5	-2.9	16.8	17.6	21.8	19.5	13.2	14.7	...
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	...	...	...	...	...	...	...	-14.0	6.5	17.4	9.5	4.4	1.5	21.8
Sri Lanka	-0.3	6.1	5.2	10.6	0.6	8.7	-13.2	5.3	13.1	14.1	9.4	13.3	8.2	4.7
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	6.7	45.7	-20.8	2.8	0.5	1.4	26.5	...
Cambodia	39.4	2.7	16.4	-20.4	48.3	8.6	21.3	3.8	21.7	-7.9	29.9	24.8	13.7	...
Indonesia	13.1	4.9	6.3	-39.0	-23.2	12.9	10.3	-1.8	10.8	6.9	12.4	1.3	2.0	12.6
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	20.3	5.8	11.2	-43.0	-3.9	29.2	-9.3	7.9	-1.5	6.9	-2.5	11.3	5.5	-2.4
Myanmar	28.5	13.0	10.5	19.2	13.8	11.3	2.8	10.1	24.8	25.9	29.8	...	...	...
Philippines	3.5	12.5	11.7	-16.3	-2.0	5.5	-7.3	-4.3	3.0	7.2	-8.8	5.1	12.4	1.7
Singapore	14.5	9.6	19.5	-24.1	10.4	24.1	-22.4	-4.9	-30.7	49.8	0.6	12.4	12.3	42.8
Thailand	14.3	5.2	-21.9	-50.9	8.5	11.3	2.7	6.0	13.5	12.8	12.8	-2.9	0.4	6.7
Viet Nam	...	14.2	9.4	12.6	1.2	10.1	10.8	12.7	11.9	10.5	11.2	11.8	26.8	6.3
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	12.8	56.6	-18.7	-8.3	5.9	29.3	7.0	17.5	-11.4	0.6	-9.8	-1.9	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	12.9	0.1	8.3	9.5	7.6	6.3	9.5	8.2	14.7	10.7	6.0	7.1	5.6	10.2
Japan	3.0	5.0	-0.0	-7.8	-4.7	4.9	-1.6	-6.0	0.5	2.8	2.7	1.1	2.2	-5.0
New Zealand	9.8	3.2	-0.5	-3.6	15.9	-1.1	6.7	7.1	13.2	10.1	2.6	-3.8	7.3	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.asox?d=SNA).

Table 2.21 **Growth rates of real exports of goods and services**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	7.2	-6.5	-1.6	13.7	19.0	27.0	35.8	29.1	-1.7	15.9	-7.4	-3.5	-12.5
Azerbaijan	-4.2	1.1	45.0	13.9	50.0	15.4	34.1	-6.3	19.6	38.6	20.2	46.6	-4.9	24.7
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	5.0	2.0	1.2	-11.9	3.0	27.9	-1.8	15.1	7.5	11.2	1.1	6.5	8.3	1.8
Kyrgyz Republic	-17.4	6.7	21.1	-8.7	-10.4	10.5	-3.2	8.1	5.3	12.8	-11.0	8.9	25.8	17.9
Pakistan	-3.1	2.0	-6.5	-5.7	-2.9	16.0	12.2	10.0	28.4	-1.5	9.6	9.9	2.3	-5.4
Tajikistan	...	...	...	...	...	...	20.8	7.6	29.5	22.6	2.9	31.2	15.1	...
Turkmenistan	8.9	-20.8	-57.0	-32.0	30.9	55.0	-20.9	68.6	-4.6	9.2	25.5	-1.4	11.1	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	10.0	5.6	4.9	-4.5	4.5	16.3	-1.7	9.0	12.8	15.4	10.6	9.4	8.3	2.7
Korea, Rep. of	24.4	12.2	21.6	12.7	14.6	19.1	-3.4	12.1	14.5	19.7	7.8	11.4	12.6	5.7
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	12.6	6.8	9.2	2.8	11.7	18.9	-7.8	10.6	10.4	14.4	7.6	10.3	8.8	-0.2
South Asia														
Bangladesh	30.7	8.1	16.5	12.3	2.3	14.4	14.9	-2.3	6.9	12.5	15.6	25.8	13.0	7.0
Bhutan	...	...	...	...	...	...	8.6	-1.2	14.3	26.6	33.3	41.2	20.9	...
India	31.4	6.3	-2.3	13.9	18.0	18.2	4.3	21.1	9.6	27.2	17.6	21.1	2.1	12.8
Maldives	...	14.2	9.8	7.2	6.4	7.6	0.2	6.2	16.2	11.9	...	...	...	...
Nepal	...	...	...	...	...	...	...	-23.2	-4.7	12.3	-3.0	-1.3	0.5	-3.4
Sri Lanka	7.7	3.9	11.6	0.1	5.8	17.1	-8.0	3.4	3.4	7.7	6.6	3.8	7.3	0.4
Southeast Asia														
Brunei Darussalam [a]	16.8	-3.4	-5.1	-10.0	14.0	11.9	1.3	5.8	2.3	-0.7	-1.3	3.9	-9.8	...
Cambodia	35.1	-19.4	39.6	-3.5	37.7	39.4	16.5	13.0	11.1	28.1	16.4	19.2	10.1	...
Indonesia	7.7	7.6	7.8	11.2	-31.8	26.5	0.6	-1.2	5.9	13.5	16.6	9.4	8.5	9.5
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	19.0	9.2	5.5	0.5	13.2	16.1	-6.8	5.4	5.1	16.1	8.3	6.6	4.5	1.3
Myanmar	-22.0	10.2	24.1	-0.9	6.8	79.3	...	20.6	-25.0	12.3	3.6	...	...	...
Philippines	12.0	15.4	17.2	-21.0	3.6	17.0	-3.4	4.0	4.9	15.0	4.8	13.4	5.4	-1.9
Singapore	14.0	9.6	10.1	-3.9	8.0	15.2	-4.0	7.2	14.0	19.4	12.3	11.7	8.7	1.3
Thailand	15.4	-5.5	7.2	8.2	9.0	17.5	-4.2	12.0	7.1	9.6	4.2	9.1	7.1	5.5
Viet Nam	...	...	...	...	...	...	...	-9.9	-16.6	...	...	...	...	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	3.3	-16.0	-17.9	4.2	-7.7	43.7	10.4	-1.3	14.3	2.9	6.8	0.4	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	5.1	10.0	11.0	4.2	2.2	8.5	7.6	-1.0	-0.4	2.1	3.1	2.2	3.8	4.5
Japan	4.3	5.9	11.1	-2.7	1.9	12.7	-6.9	7.5	9.2	13.9	7.0	9.7	8.4	1.7
New Zealand	2.3	4.7	3.9	2.9	7.4	6.3	3.0	7.8	0.9	4.6	-0.0	3.1	2.9	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

National Accounts

Table 2.22 Growth rates of real imports of goods and services
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	-0.6	11.6	-4.9	-1.9	7.2	6.4	18.9	26.5	-2.9	14.3	3.8	13.0	5.3
Azerbaijan	17.8	37.9	18.1	15.4	-0.4	17.3	48.0	16.4	57.6	33.9	19.8	25.1	8.4	25.4
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	-19.9	-17.1	7.5	-7.2	0.6	28.0	-1.5	0.5	-7.6	14.9	12.5	12.2	25.8	-11.5
Kyrgyz Republic	-18.4	6.9	-20.2	1.5	-4.9	0.4	-13.8	13.1	16.0	16.3	6.5	45.0	11.0	19.1
Pakistan	4.0	13.6	-3.8	-5.6	-5.4	-2.3	2.2	3.0	11.2	-8.6	40.5	18.7	3.5	3.6
Tajikistan	...	...	...	...	...	...	-14.5	11.1	23.7	25.9	16.5	39.6	36.5	...
Turkmenistan	-6.4	-21.2	-31.8	-8.2	-9.4	-8.8	-24.1	53.9	7.4	8.0	25.6	-1.1	10.8	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	12.4	4.4	7.0	-5.9	0.5	16.5	-1.5	7.4	11.4	13.8	8.0	9.1	9.1	2.0
Korea, Rep. of	23.0	14.3	3.5	-21.8	27.8	20.1	-4.9	14.4	11.1	11.7	7.6	11.3	11.7	3.7
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	9.9	6.0	13.6	6.7	4.5	15.0	-13.0	7.1	8.1	18.9	3.8	5.6	3.8	-4.3
South Asia														
Bangladesh	48.4	14.1	-1.7	4.5	2.3	10.2	11.2	-11.2	7.4	10.6	19.1	18.2	18.0	-2.1
Bhutan	...	...	...	...	...	...	-2.7	7.1	7.6	37.5	17.0	1.7	7.6	...
India	28.1	-2.4	13.2	20.8	7.0	4.5	2.8	12.3	13.8	22.2	41.1	24.5	6.9	17.9
Maldives	...	10.6	20.5	2.3	16.3	-5.1	1.4	0.6	14.6	25.2	...	...	...	...
Nepal	...	...	...	...	...	...	...	-15.1	0.1	8.5	6.9	6.5	1.1	7.5
Sri Lanka	0.8	2.5	10.4	12.4	-2.6	14.8	-10.7	10.9	11.2	9.0	2.7	6.9	3.7	4.5
Southeast Asia														
Brunei Darussalam [a]	15.9	21.2	-16.7	-13.4	-3.6	-6.2	3.2	13.3	-8.1	3.8	2.8	4.3	13.0	...
Cambodia	33.1	-4.5	7.7	-0.4	28.3	30.6	9.6	15.3	12.9	19.8	17.3	16.0	12.1	...
Indonesia	20.9	6.9	14.7	-5.3	-40.7	25.9	4.2	-4.2	1.6	26.7	17.8	8.6	9.0	10.0
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	23.7	4.9	5.8	-18.8	10.6	24.4	-8.2	6.2	4.5	19.6	8.9	8.1	6.0	1.9
Myanmar	19.8	-7.4	3.4	16.6	-0.8	-8.0	...	-17.5	-15.8	-16.5	2.3	...	...	...
Philippines	16.0	16.7	13.5	14.7	-2.8	4.3	3.5	5.6	10.8	5.8	2.4	1.8	-4.1	2.4
Singapore	14.5	10.5	11.5	-8.7	9.0	19.7	-5.6	5.9	9.6	22.7	11.2	11.9	8.3	6.1
Thailand	20.0	-0.6	-11.3	-21.6	10.5	27.1	-5.5	13.7	8.4	13.4	9.0	3.3	3.4	7.5
Viet Nam	...	...	...	...	...	...	...	-13.6	-18.5	...	...	...	...	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	14.6	11.4	5.2	4.1	15.1	0.6	8.3	17.5	6.0	13.7	4.7	3.6	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	16.6	4.0	9.8	9.9	5.0	12.4	-1.0	1.5	13.1	13.0	12.1	7.2	9.2	12.7
Japan	13.3	13.4	0.5	-6.8	3.6	9.2	0.6	0.9	3.9	8.1	5.8	4.2	1.5	1.1
New Zealand	6.8	6.4	2.5	2.1	11.3	-0.7	4.0	7.2	12.7	12.5	4.2	-1.6	9.6	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources. ADB staff estimates using CEIC data, and Official Country Data website (data.un.org/browse.aspx?d=SNA).

Table 2.23 **Growth rates of agriculture production index**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia													
Afghanistan	4.5	7.5	9.0	5.5	-0.9	-17.5	-4.3	18.9	3.7	-3.6	14.0	-9.8	9.1
Armenia	-6.5	3.0	-11.7	11.0	–	-5.0	6.3	–	8.8	15.3	15.6	6.8	7.0
Azerbaijan	-5.7	4.8	-8.0	5.0	7.1	11.1	9.0	3.7	4.4	1.7	12.5	-0.7	1.5
Georgia	6.5	-3.5	6.4	-10.3	4.8	-17.3	6.6	-6.2	14.3	-6.7	12.4	-36.7	17.4
Kazakhstan	-21.2	-2.2	–	-19.8	37.0	-10.0	20.0	0.9	-0.9	-2.8	8.6	8.8	9.7
Kyrgyz Republic	-6.9	11.9	9.3	7.3	8.0	4.2	6.1	-7.6	4.1	2.0	-1.9	1.0	-2.0
Pakistan	10.0	1.1	2.2	3.3	5.3	2.0	-2.0	1.0	3.0	7.8	3.6	1.7	4.3
Tajikistan	-10.7	-14.7		-3.2	-1.1	10.1	14.3	12.5	5.6	9.0	0.7	0.7	3.4
Turkmenistan	1.0	-40.0	18.3	4.2	21.6	6.7	17.7	-6.2	5.7	11.6	0.8	-6.3	5.9
Uzbekistan	1.0	-8.7	2.1	4.2	-2.0	2.0	1.0	4.0	1.9	8.4	6.9	4.8	0.8
East Asia													
China, People's Rep. of	8.1	6.3	5.9	4.4	3.2	3.1	2.0	4.9	1.9	6.4	3.4	2.5	1.6
Hong Kong, China	–	–	-8.2	-17.8	10.8	2.4	2.4	–	-4.7	-9.8	13.5	-9.5	-21.1
Korea, Rep. of	1.2	7.0	3.3	-2.1	5.4	2.0	–	-7.0	-3.2	4.4	–	–	1.1
Mongolia	6.3	9.5	-2.2	11.1	8.0	-0.9	-22.4	-6.0	-14.1	16.4	-5.1	5.4	–
Taipei,China	3.7	0.2	-1.3	-5.5	1.2	2.2	-1.2	4.1	0.1	-4.2	-5.7	0.7	-2.6
South Asia													
Bangladesh	4.1	5.3	2.5	2.4	14.3	6.3	-2.0	3.0	2.9	-1.9	11.5	1.7	-1.7
Bhutan	5.5	2.1	2.0		12.0	-17.9	3.3	-1.1	12.8	10.4	29.9	3.3	-1.9
India	2.4	4.8	1.1	2.2	5.3	1.0	3.1	-6.9	10.6	-1.0	4.9	4.6	7.1
Maldives	–	2.2	6.5	2.0	1.0	2.0	-8.7	1.1	10.8	9.7	-31.0	39.7	-54.1
Nepal	7.5	1.2	3.4	1.1	5.5	4.2	3.0	2.9	3.8	3.6	0.9	2.6	-0.8
Sri Lanka	3.1	-8.9	3.3	1.1	3.1	2.0	-3.0	2.0	3.0	-3.9	8.1	1.9	-0.9
Southeast Asia													
Brunei Darussalam [a]	3.8	-11.1	25.0	16.7	22.9	15.1	14.1	-5.3	–	15.9	-15.3	21.0	10.2
Cambodia	25.8	1.2	2.4	1.2	11.5	2.1	4.0	-4.9	18.4	-4.3	28.8	7.7	6.5
Indonesia	8.8	1.0	-4.0	–	1.0	3.1	2.0	5.9	6.5	6.1	3.3	4.8	3.8
Lao PDR	-8.5	–	12.3	2.7	17.3	19.3	1.0	7.5	-3.5	5.5	2.6	4.2	6.5
Malaysia	2.4	3.5	2.2	-4.4	10.3	3.1	5.1	1.9	6.6	5.3	5.9	4.8	-0.8
Myanmar	3.8	2.5	1.2	1.2	7.1	8.8	9.1	3.7	8.0	6.6	3.1	10.5	6.8
Philippines	2.4	8.0	2.1	-8.3	9.1	3.1	4.0	3.9	1.9	7.3	1.7	3.4	4.1
Singapore	-5.9	-25.4	28.8	-2.4	–	-63.9	21.7	30.1	18.9	16.8	-24.2	23.0	47.2
Thailand	2.2	2.2	2.2	-3.2	3.3	5.3	4.0	1.0	4.8	0.9	-0.9	3.6	6.1
Viet Nam	5.8	5.5	6.5	3.7	10.6	6.4	4.0	7.7	1.8	5.3	1.7	3.3	1.6
The Pacific													
Cook Islands	–	4.8	12.5	13.1	-8.9	–	-7.8	16.0	24.1	-15.0		–	23.5
Fiji Islands	2.9	-1.9	-4.7	-15.8	20.0	–	-7.8	5.3	-7.1	4.3	3.1	2.0	-8.9
Kiribati	-1.2	16.9	–	5.2	1.0	-5.8	1.0	2.0	–	24.0	–	-0.8	2.4
Marshall Islands	58.2	-15.4	-7.2	-28.7	-21.6	-74.9	-13.7	254.5	132.7	-38.3	–	2.7	31.7
Micronesia, Fed. States of	...	–	–	–	–	-1.0	–	1.0	–	–	–	–	3.0
Nauru	–	–	1.0	–	–	–	–	–	–	–	–	-1.0	9.1
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	–	5.9	1.1	3.3	4.3	3.1	2.0	4.0	1.0	1.9	2.8	-0.9	1.9
Samoa	9.6	7.7	4.1	-1.0	-4.0	3.1	2.0	2.0	–	–	1.9	–	–
Solomon Islands	9.2	3.2	4.1	2.9	-5.7	2.0	-3.0	1.0	2.0	8.9	6.4	-0.9	0.9
Timor-Leste	–	-4.5	1.0	-9.4	-2.1	7.4	2.0	7.8	-0.9	5.5	3.4	-1.7	-8.5
Tonga	-12.0	2.1	1.0	-4.1	6.4	-1.0	–	4.0	–			1.0	–
Tuvalu	–	4.7	4.5	2.2	3.2	–	4.1	2.0	3.8	2.8		–	2.7
Vanuatu	3.1	–	17.8	3.4	-16.3	-5.8	2.1	-10.1	5.6	14.9	-0.9	–	1.9
Developed Member Countries													
Australia	9.8	11.9	-23.0	6.9	6.5	-1.0	4.1	-22.5	19.0	-7.4	10.3	-22.9	-1.4
Japan	-1.9	-1.9		-4.8	1.0	–	-2.0	1.0	-5.1	3.2	1.0	-3.1	3.2
New Zealand	1.1	2.2	5.4	1.0	-5.1	7.4	3.0	1.9	4.7	4.5	-1.7	2.6	1.7

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, FAOSTAT Database Online (FAO 2009).

Production

Table 2.24 **Growth rates of manufacturing production index**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	-16.3	-3.6	0.2	-4.1	2.1	17.3	15.1	8.0	8.0	9.2	7.6	8.1	6.7	...
Kyrgyz Republic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	1.5	3.2	-2.1	7.6	3.6	...	1.0	13.7	7.2	18.9	18.2	9.1	-9.1	9.0
Tajikistan	-16.3	-27.3	-10.7	5.6	12.8	12.0	16.3	22.5	9.9	15.1	10.5	6.1	9.3	-3.7
Turkmenistan	-4.9	25.9	6.9	-0.7	18.7	13.4	13.3	...	...	...	...	...	...	...
Uzbekistan	-0.1	2.4	4.7	3.4	7.1	7.1	8.6	9.8	7.3	10.2	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	0.9	-3.7	-0.8	-8.7	-6.4	-0.5	-4.4	-9.8	-9.2	2.9	2.5	2.2	-1.5	-6.5
Korea, Rep. of	12.0	8.4	4.6	-6.5	25.3	17.2	0.1	8.1	5.6	10.7	6.4	8.7	7.1	3.0
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	5.3	2.7	7.2	3.2	7.8	7.8	-9.0	8.9	9.6	10.0	3.7	4.5	8.3	-1.6
South Asia														
Bangladesh	5.8	6.7	2.9	9.5	4.1	4.9	6.5	4.8	6.3	7.1	8.5	10.8	10.1	6.9
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	14.1	7.3	6.7	4.4	7.1	5.3	2.9	6.0	7.4	9.2	9.1	12.5	9.0	2.3
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	9.3	9.8	14.4	23.8	...	8.5	3.5	-6.6	2.4	2.0	...	2.0	2.5	...
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	66.0	48.8	2.0	...	...	...	...	...	...	...
Indonesia	11.0	6.6	13.2	-34.2	1.8	3.6	...	3.3	5.5	3.3	1.3	-1.6	5.6	3.1
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	14.2	12.2	12.4	-10.3	12.9	24.9	-6.5	5.2	10.9	12.8	5.1	8.9	2.2	0.6
Myanmar	7.7	5.8	2.2	5.5	...	...	...	...	...	...	...	...	...	...
Philippines	15.0	9.7	5.3	0.9	5.0	16.0	7.3	8.9	6.1	11.7	17.5	3.1	6.3	10.1
Singapore	10.3	3.3	4.5	-0.3	13.9	15.3	-11.6	8.4	3.0	13.9	9.5	11.9	5.9	-4.1
Thailand	6.2	9.3	0.7	-9.3	12.3	6.9	2.7	9.1	14.0	11.7	9.1	7.4	8.2	5.3
Viet Nam	...	...	...	...	...	...	...	...	...	...	...	...	...	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	5.4	8.3	6.3	7.8	5.6	13.3	-0.2	-2.1	12.4	-16.4	1.8	2.1	-1.4
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Samoa [b]	19.3	8.5	...	-3.7	6.1	2.8	6.8	2.8	-4.2	4.3	–	-1.0	-3.9	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	2.1	1.7	2.2	1.1	2.0	0.9	2.2	2.1	3.7	0.9	-1.2	-0.5	1.9	3.3
Japan	3.3	2.2	3.7	-6.9	0.2	5.7	-6.8	-1.2	3.1	4.8	1.4	4.5	2.8	-3.4
New Zealand	3.2	2.1	-0.4	-3.8	3.2	4.5	0.5	5.8	4.4	4.0	-2.0	-1.6	0.7	-2.0

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Refers to volume indexes of industrial production.

Source: Country sources.

Money, Finance, and Prices

Inflation picked up throughout the region in 2008 and food prices were partly to blame. **Bank credit** as a ratio to GDP in many economies in the region is still far from the ratios that are typical in the developed market economies of Western Europe and North America. Differences in **yields on short-term treasury bills** mainly reflect differences in expected inflation. Since 2000, **exchange rates** of most economies in the Asia and Pacific region, including the People's Republic of China (PRC) and India, have been appreciating against the US Dollar but the other three most populous countries have seen their currencies continue to fall.

Introduction

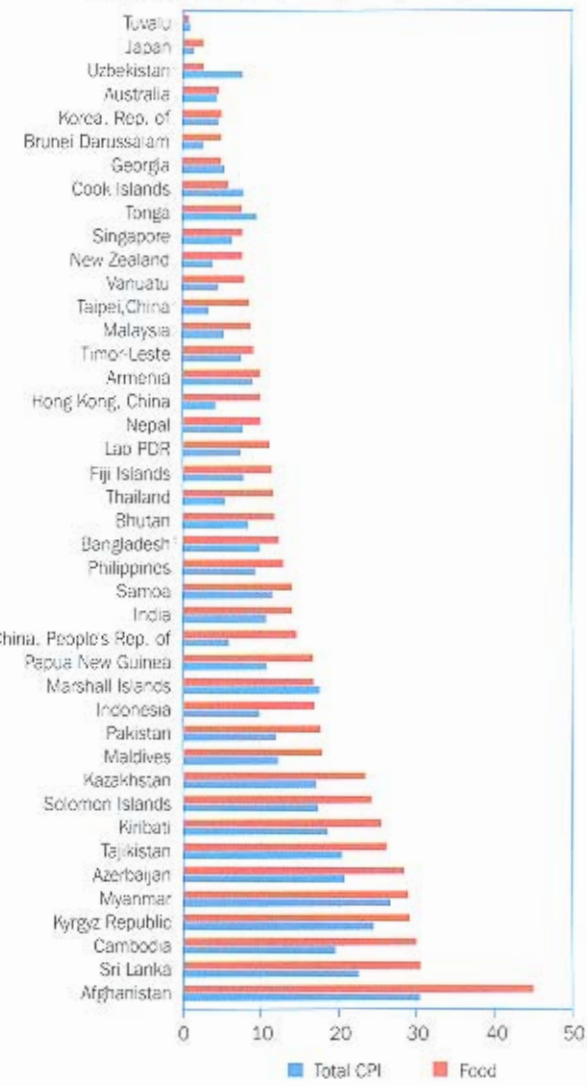
The tables in this **money, finance, and prices** theme highlight some significant developments in money supply, finance, and inflation since the mid-1990s. This theme also looks at changes in exchange rates and at the development of stock markets, which are growing in importance as a source of business finance. Data from the 2005 round of the International Comparison Program are used to cast light on price levels in the region.

Key Trends

Inflation is rising throughout the region, with food prices as one of the causes. Table 3.1 shows that in 2008, inflation as measured by consumer price indexes (CPIs), rose throughout the region. Georgia, Myanmar, and Timor-Leste were the only three countries to report small declines in inflation rates. Some of the increases were substantial and CPIs, rose by 10 percentage points or more in Afghanistan, Cambodia, Kyrgyz Republic, Mongolia, and Viet Nam—and in two Pacific economies—Kiribati and Marshall Islands.

Rising world prices for food, energy, and raw materials, particularly in the first part of 2008, lay behind the rise in inflation. Figure 3.1 shows that in almost all economies, food prices rose faster than the overall CPI—the red bars are generally longer than the blue ones. Food prices rose more slowly than the overall CPI in just six economies—Georgia, Uzbekistan, and four Pacific economies: Cook Islands, Marshall Islands, Tonga, and Tuvalu. Food is the largest item of expenditure for the poor and rising food prices threaten to exacerbate poverty in developing Asia by reducing the real incomes of the already poor, while pushing many others below the poverty line. This may reverse the gains in poverty reduction recorded over the past decade.

Figure 3.1 **Annual Growth in Total Consumer Price Indexes and in the Food Component, 2008 (percent)**

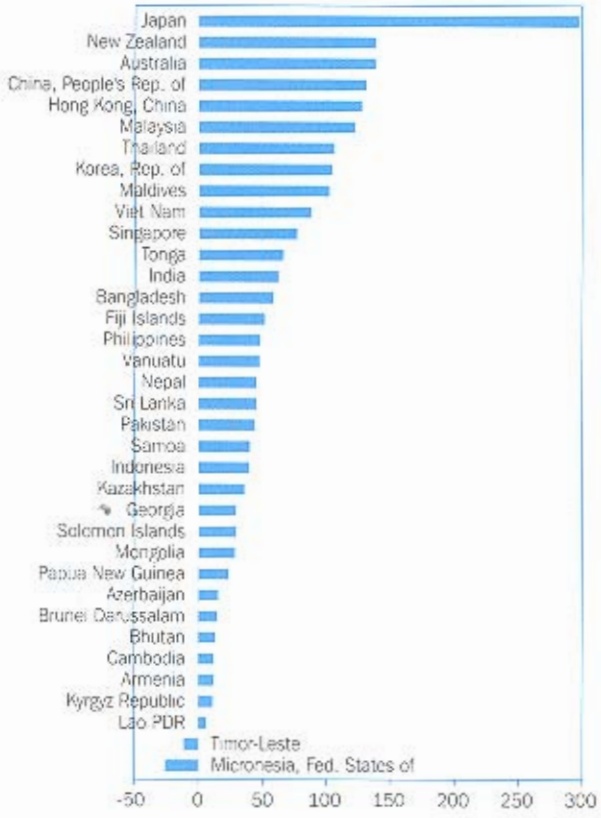


Sources: Tables 3.1 and 3.2.

Bank credit is one source of funding for investment. In developed market economies, banks are the main source of credit for small and medium-sized enterprises to help them expand. In developing countries, small enterprises may not have sufficient collateral to take out bank loans and they are forced to use more expensive sources of credit such as village moneylenders and trade credit. Table 3.11 shows that over the last decade or so, bank credit as a ratio to GDP has been increasing in the poorest and least developed economies but many are still far from the ratios of 100% or more that are typical in the developed market economies of Western Europe and North America.

Figure 3.2 shows that just six developing member countries have bank credit ratios of over 100%— People's Republic of China; Hong Kong, China; Republic of Korea; Malaysia; Maldives; and Thailand.

Figure 3.2 **Domestic Credit Provided by Banking Sector, Average of Latest Three Years (percent of GDP)**

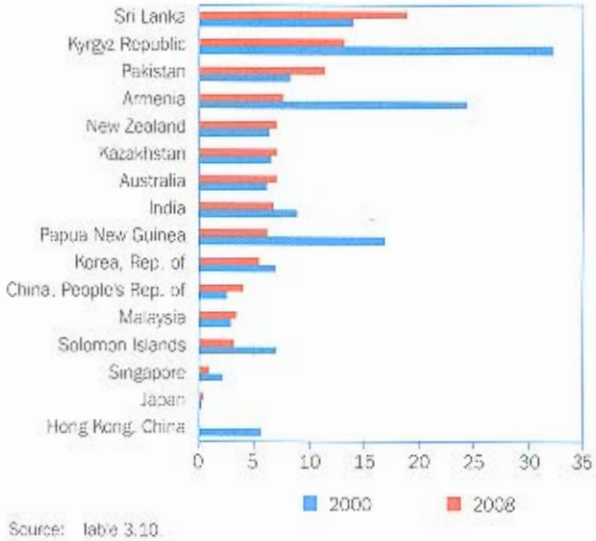


Source: Derived from Table 3.11.

Short-term interest rates are largely determined by inflation. Interest rates are determined by several factors including monetary and fiscal policy, risk factors, and intermediation costs. However, in most economies, inflation is the main determinant of interest rates, and the yields shown in Figure 3.3 mainly reflect differences in expected rates of inflation. Among the developing member countries, sharp reductions in interest rates (more than 50%) in 2008 compared with interest rates in 2000 in Armenia, Kyrgyz Republic, Papua New Guinea, and Solomon Islands will also reflect more optimism about the prospects for better price stability. The high yields shown for Pakistan and Sri Lanka may reflect security concerns about civil conflict in those countries. Interest rates in Japan have been kept exceptionally low in response to a mostly deflationary economic environment. Reductions in yields were as common as increases in the 2000 and 2008 comparison.

These are short-term interest rates, and the long-term interest rates that are relevant to investment decisions will usually be higher.

Figure 3.3 **Yield on Short-Term Treasury Bills, 2000 and 2008 (percent)**

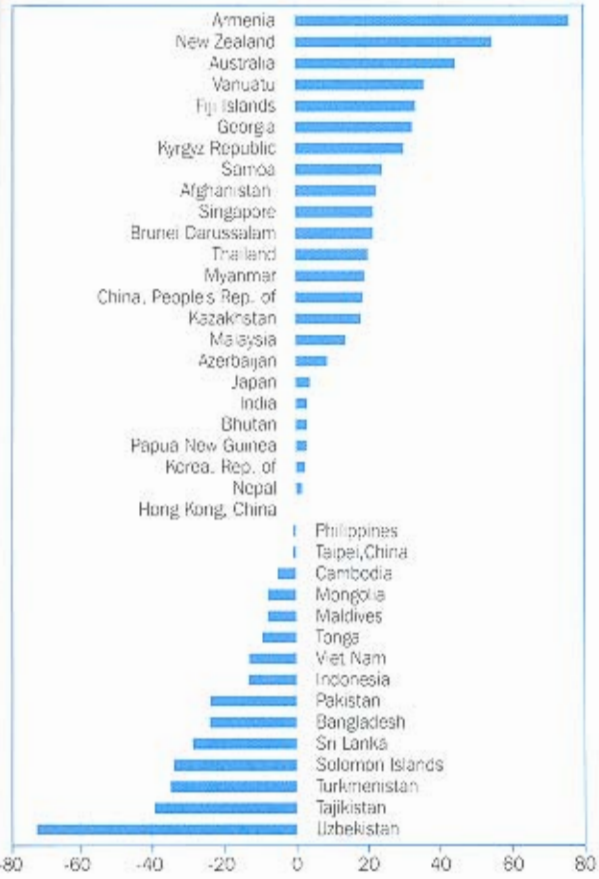


Source: Table 3.10.

Exchange rates of most economies in the Asia and Pacific region have appreciated against the United States (US) Dollar. Figure 3.4 shows the total percentage change in various currencies in the Asia and Pacific region from 2000 to 2008. The total percentage change is computed using the number of units of US Dollars that can be purchased with one local currency unit, so that bars to the right in Figure 3.4 indicate that the local currency is appreciating against the Dollar; in 2008, one Piastre, Rial, Yuan, etc. bought more US Dollars than in 2000. Bars to the left indicate that country's currency is depreciating against the US Dollar.

In about three-fifths of the 39 economies in Figure 3.4, currencies have appreciated against the US Dollar with gains of over 20% in 12 economies. The value of the Yuan in 2008 was about 18% higher against the US Dollar than it was in 2005, when the People's Bank of China changed its exchange rate policy. Hong Kong, China on the other hand has maintained a relatively stable US Dollar exchange rate for its currency as can be seen from Figure 3.4.

Figure 3.4 **Total Percentage Change in Currencies in the Asia and Pacific Region, 2000–2008**



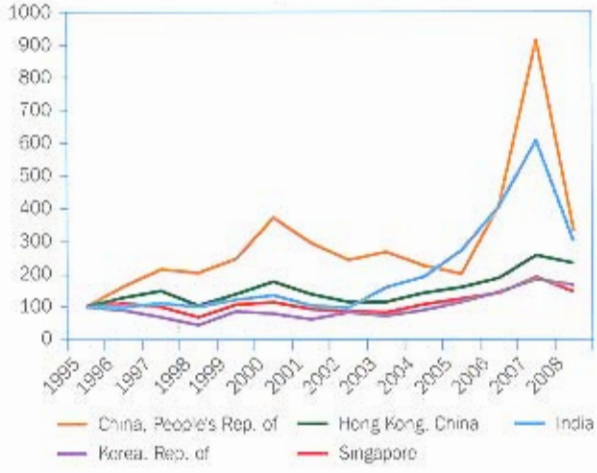
Source: Derived from Table 3.16.

The remaining economies whose currencies have depreciated against the US Dollar include Bangladesh, Indonesia, Pakistan, Sri Lanka, and Viet Nam. Depreciation against the US Dollar will boost their exports to the United States but at the same time increase the prices of imported energy products and raw materials.

Stock exchanges in Asia have seen substantial growth but fell sharply in 2008. In the developed economies, stock exchanges are an important source of funding for enterprises and a means for households to enjoy the benefits of economic growth. In the last two decades, new stock exchanges have been established in several Asian countries and existing stock exchanges have seen substantial growth. Figure 3.5 shows the growth of price indexes in five regional stock markets since 1995.

Since 1995, prices in the stock markets in Hong Kong, China; Republic of Korea; and Singapore show similar movements and no great volatility from year to year. But stock markets in India and, especially, the PRC have moved much more sharply ending in a speculative boom in 2007 followed by a dramatic collapse of prices in 2008.

Figure 3.5 **Stock Market Price Indexes, 1995–2008 (1995=100)**



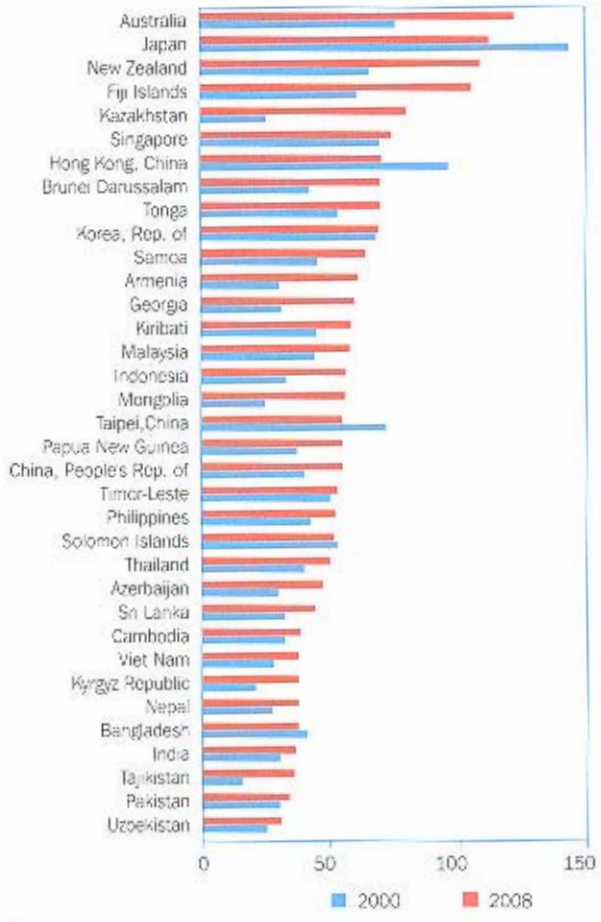
Source: Derived from Table 3.13.

Price levels are higher in richer economies and lower in poor economies. PPPs are currency converters that have been corrected for differences among countries in their price levels. Exchange rates are also currency converters but they have not been corrected for price level differences. As a result, ratios of PPPs to exchange rates measure the differences in price levels between countries. These are shown in Figure 3.6.

The ratios are shown with the average price level for the US equal to 100. Economies with ratios above 100 have price levels above that of the US, while indexes under 100 indicate that prices in that economy are lower. Price level indexes are shown for both 2000 and 2008 with US as the basis of the comparison each time. For example, in 2000, the price level in Japan was about 44% higher than that in the US. However, by 2008, the difference in price levels had been drastically reduced due to a fall in the price level in Japan and an increase in that of the US, so that the price level in Japan was then only about 13% higher than that in the US.

In general, price levels are higher in the richer economies—Australia and Japan for example—and lower in poor economies such as Pakistan and Uzbekistan. Fiji is an exception—a relatively low-income economy with a relatively high price level.

Figure 3.6 **Price Level Indexes, 2000 and 2008 (United States = 100)**



Source: Table 3.18.

Data Issues and Comparability

The coverage and content of consumer price indexes are not standardized. In some countries, the consumer price index covers only urban prices, or prices in the capital city. In addition, the "market basket" may be based on expenditures of a particular socioeconomic group and not the population as a whole. Wholesale price indexes are not always based on wholesale prices but on prices at the factory or farm gate.

The stock market price indexes are usually the most widely tracked indexes on the stock exchange.

Yields on treasury bills are the interest rates implied by the prices at which they are traded on financial markets, not the interest rates at which the bills were issued.

Table 3.1 **Growth rates of consumer price index** [a]
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan [a]	...	...	...	...	...	...	...	...	...	13.3	5.9	7.2	8.6	30.6
Armenia	176.0	18.7	14.0	8.7	0.6	-0.8	3.1	1.1	4.7	7.0	0.6	2.9	4.4	9.0
Azerbaijan	...	19.9	3.7	-0.8	-8.5	1.9	1.5	2.9	2.2	6.7	9.5	8.2	16.9	20.9
Georgia	...	13.8	7.3	10.7	10.9	4.6	3.4	5.4	7.0	7.5	8.2	8.8	11.0	5.5
Kazakhstan	176.2	39.3	17.4	7.1	8.3	13.2	8.4	5.9	6.4	6.9	7.6	8.6	10.8	17.0
Kyrgyz Republic	43.5	32.0	23.4	10.4	36.0	18.7	6.9	2.1	3.1	4.1	4.3	5.6	10.2	24.5
Pakistan	13.0	10.8	11.8	7.8	5.7	3.6	4.4	3.5	3.1	4.6	9.2	7.9	7.8	12.0
Tajikistan	...	420.4	85.4	43.9	27.5	32.9	38.6	12.3	16.4	7.1	7.1	10.0	13.1	20.5
Turkmenistan	...	...	83.7	16.8	24.2	8.3	11.6	8.8	5.6	5.9	10.7	10.5	9.0	12.0
Uzbekistan	...	54.0	58.8	17.9	29.1	24.9	27.4	27.6	10.3	3.7	7.8	6.8	6.8	7.8
East Asia														
China, People's Rep. of	17.1	8.3	2.8	-0.8	-1.4	0.4	0.7	-0.8	1.2	3.9	1.8	1.5	4.8	5.9
Hong Kong, China	9.0	6.3	5.9	2.8	-4.0	-3.8	-1.6	-3.1	-2.5	-0.4	1.0	2.0	2.0	4.3
Korea, Rep. of	4.4	5.0	4.4	7.5	0.8	2.3	4.1	2.8	3.5	3.6	2.8	2.2	2.5	4.7
Mongolia	56.8	46.9	36.6	9.4	7.5	11.6	6.2	0.9	5.2	8.3	12.8	4.8	9.6	28.0
Taipei,China	3.7	3.1	0.9	1.7	0.2	1.3	-0.0	-0.2	-0.3	1.6	2.3	0.6	1.8	3.5
South Asia														
Bangladesh	8.9	7.0	3.7	9.0	7.0	2.8	1.9	2.8	4.4	5.8	6.5	7.2	7.2	9.9
Bhutan	9.5	8.8	6.5	10.6	6.8	4.0	3.4	2.5	2.6	4.2	5.3	5.0	5.2	8.4
India	10.2	9.0	7.2	13.2	4.7	4.0	3.8	4.3	3.8	3.8	4.2	6.2	6.3	10.7
Maldives	5.5	6.2	7.5	1.4	3.0	-1.2	0.7	0.9	2.9	6.4	1.6	3.5	7.4	12.3
Nepal [c]	7.7	8.1	8.1	8.3	11.4	3.4	2.4	2.9	4.8	4.0	4.5	8.0	6.4	7.7
Sri Lanka [b]	7.7	15.9	9.6	9.4	4.7	6.2	14.2	9.6	5.8	9.0	11.0	10.0	15.8	22.6
Southeast Asia														
Brunei Darussalam [d]	6.0	2.0	1.7	-0.4	0.1	1.2	0.6	-2.3	0.3	0.9	1.1	0.2	0.3	2.7
Cambodia [e]	7.8	7.1	8.0	14.8	4.0	-0.8	0.2	3.3	1.1	3.9	5.8	4.7	5.9	19.7
Indonesia [e]	9.5	7.9	6.2	58.5	20.3	9.3	12.5	10.0	6.8	6.1	10.5	13.1	6.4	9.8
Lao PDR	19.6	15.8	19.5	90.1	128.4	23.1	7.8	10.7	15.5	10.5	7.2	6.8	4.5	7.5
Malaysia	4.0	3.4	2.8	5.2	2.8	1.5	1.4	1.8	1.2	1.4	3.1	3.6	2.0	5.4
Myanmar	...	...	...	25.3	21.3	-0.2	21.2	57.0	36.6	4.5	9.4	20.0	35.0	26.8
Philippines	6.7	7.5	5.6	9.3	5.9	4.0	6.8	3.0	3.5	6.0	7.6	6.2	2.8	9.3
Singapore	1.8	1.4	2.0	-0.3	0.0	1.3	1.0	-0.4	0.5	1.7	0.4	1.0	2.1	6.5
Thailand	5.7	5.9	5.6	8.1	0.2	1.7	1.6	0.6	1.8	2.8	4.5	4.7	2.2	5.4
Viet Nam	...	5.7	3.2	7.8	4.3	-1.6	-0.5	4.0	3.2	7.8	8.3	7.4	8.3	25.6
The Pacific														
Cook Islands	0.9	-0.6	-0.4	0.7	1.3	3.2	8.7	3.4	2.0	0.9	2.5	3.4	2.5	7.8
Fiji Islands	2.2	3.0	3.4	5.7	2.0	1.1	4.3	0.7	4.2	2.8	...	2.5	4.8	7.8
Kiribati [a]	4.1	...	2.6	4.3	0.6	0.9	7.0	1.6	2.6	-1.9	-0.5	-0.2	3.7	18.6
Marshall Islands [b]	8.3	9.6	4.8	2.2	1.7	1.6	1.7	1.3	-2.8	2.2	4.4	4.3	3.1	17.5
Micronesia, Fed. States of	...	...	...	...	...	2.2	0.5	-0.1	0.1	2.3	4.3	4.6	3.2	...
Nauru	1.8	4.1	6.1	3.9	6.7	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	1.6	1.9	5.0	3.9	4.5	3.2	12.0
Papua New Guinea	17.3	11.6	4.0	13.6	14.9	15.6	9.3	11.8	14.7	2.4	1.5	2.4	0.9	10.8
Samoa	-2.9	5.4	6.8	...	0.3	0.9	4.7	8.1	0.1	16.3	1.9	3.8	5.5	11.5
Solomon Islands [b]	9.6	11.7	8.1	12.3	8.0	7.1	7.7	9.3	10.0	7.1	7.2	11.2	7.7	17.3
Timor-Leste	...	...	...	...	...	...	...	...	...	...	1.8	4.0	8.7	7.6
Tonga	0.4	3.0	2.2	3.3	4.5	6.2	6.7	10.7	6.8	11.8	9.9	7.3	5.1	9.6
Tuvalu [f]	5.6	–	1.6	0.6	4.0	1.3	1.3	8.0	3.3	2.8	3.2	0.9	0.6	0.9
Vanuatu [a]	1.8	1.1	2.8	3.2	3.1	2.1	3.5	2.1	1.1	3.2	1.2	2.1	4.0	4.7
Developed Member Countries														
Australia	4.6	2.6	0.3	0.9	1.5	4.5	4.4	3.0	2.8	2.3	2.7	3.5	2.3	4.4
Japan	-0.1	0.1	1.9	0.6	-0.3	-0.8	-0.7	-0.9	-0.3	0.0	-0.3	0.3	0.0	1.4
New Zealand	3.8	2.3	1.2	1.3	-0.1	2.6	2.6	2.7	1.8	2.3	3.0	3.4	2.4	4.0

a Unless otherwise indicated, data refer to the whole country.
b Data refer to capital city.
c Data refer to urban areas only.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
e For 1990–1996, data refer to CPI for 27 cities with April 1988–March 1989 as base period. For 1997–2002, data refer to CPI for 43 cities with 1996 as base period. For 2003 onward, data refer to CPI for 45 cities with 2002 as base period.
f Data prior to 1999 cover Funafuti only.

Source: Country sources.

Prices

Table 3.2 Growth rates of food consumer price index [a]
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan [b]	...	...	...	...	...	...	...	...	...	11.9	3.9	4.8	12.2	44.9
Armenia	190.5	14.9	8.4	6.8	3.9	-2.2	4.2	1.2	6.1	9.9	0.7	3.0	6.0	10.0
Azerbaijan	...	17.6	-0.5	-1.3	-11.0	2.3	2.7	3.7	3.2	10.0	10.9	12.0	16.2	28.5
Georgia	...	8.1	7.9	9.9	6.5	7.5	3.7	8.1	9.4	13.6	8.3	9.3	12.0	5.1
Kazakhstan	183.8	34.8	6.4	4.4	7.4	16.0	11.5	6.8	7.0	7.7	8.1	8.7	12.2	23.4
Kyrgyz Republic	40.1	41.2	24.9	10.5	41.0	18.5	5.7	0.2	2.8	3.2	5.3	7.6	12.6	29.1
Pakistan	16.5	10.1	11.9	7.7	5.9	2.2	3.8	2.5	2.8	6.0	12.5	6.9	10.3	17.7
Tajikistan	...	722.4	77.5	53.4	23.2	30.7	46.4	12.1	14.5	5.5	5.9	9.2	15.0	26.1
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	57.4	55.2	12.6	25.6	18.9	27.9	28.0	5.4	-1.2	6.7	3.9	3.3	2.7
East Asia														
China, People's Rep. of	22.9	7.6	-0.1	-3.2	-4.2	-2.6	0.0	-0.6	3.4	9.9	2.9	2.3	12.3	14.6
Hong Kong, China	7.1	3.9	3.7	1.9	-1.9	-2.2	-0.8	2.1	-1.5	1.0	1.8	1.7	4.3	10.1
Korea, Rep. of	3.4	3.9	3.9	8.7	2.8	0.9	3.5	4.9	4.7	8.1	3.1	0.5	2.5	5.0
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	4.3	3.8	-0.7	4.4	-0.7	0.4	-0.9	-0.2	-0.1	4.2	7.3	-0.6	2.9	8.6
South Asia														
Bangladesh	9.3	7.0	3.3	10.8	9.3	2.6	1.4	1.6	3.5	6.9	7.9	7.7	8.2	12.3
Bhutan	...	...	...	...	...	...	2.2	2.0	1.5	2.7	5.0	5.2	8.8	11.8
India	11.7	8.6	5.8	14.9	1.6	1.8	2.2	2.6	3.4	2.8	3.3	7.6	9.3	14.1
Maldives	...	...	3.5	11.3	-1.9	-10.5	10.2	5.9	-5.7	10.9	0.2	4.7	16.0	17.8
Nepal [c]	7.4	8.9	8.2	7.8	16.2	0.4	-2.3	3.7	4.4	3.3	4.0	7.8	7.2	10.1
Sri Lanka [b]	6.9	19.2	10.9	10.9	4.0	4.5	15.2	10.6	2.6	9.1	11.4	8.9	20.3	30.5
Southeast Asia														
Brunei Darussalam [d]	2.6	3.0	3.7	0.3	-0.2	0.0	0.5	0.3	-0.8	1.6	0.5	0.3	2.2	5.0
Cambodia [b]	...	7.6	6.7	14.1	7.6	-3.4	-2.5	1.8	1.5	6.4	8.4	6.5	12.6	29.9
Indonesia [e]	13.2	9.5	7.2	81.3	24.8	2.7	7.3	10.8	0.8	5.9	10.0	14.8	11.4	16.9
Lao PDR	...	...	25.4	92.7	118.9	...	6.7	9.6	15.2	10.4	7.7	9.4	8.1	11.2
Malaysia	4.8	5.8	4.1	8.9	4.6	1.9	0.7	0.7	1.3	2.2	3.6	3.4	3.0	8.8
Myanmar	...	...	...	26.3	20.6	-2.6	19.5	68.3	36.3	1.1	9.3	20.6	35.3	29.0
Philippines	8.0	9.6	3.3	8.0	4.6	1.6	4.7	2.3	2.2	6.2	6.4	5.5	3.3	12.9
Singapore	2.2	2.1	2.0	0.2	0.3	0.5	0.5	0.0	0.6	2.0	1.4	1.5	3.0	7.7
Thailand	8.0	8.8	7.0	9.5	-0.8	-1.2	0.7	0.3	3.7	4.4	4.9	4.6	4.1	11.6
Viet Nam	...	...	...	...	...	-3.9	-1.3	7.6	2.6	11.6	11.3	8.7	11.2	...
The Pacific														
Cook Islands	-0.3	0.7	-0.1	1.4	0.4	3.4	9.3	6.9	2.6	0.9	1.1	2.4	0.2	5.9
Fiji Islands	0.7	2.3	4.7	7.7	1.8	-3.2	4.1	0.5	6.2	3.8	...	1.8	9.7	11.5
Kiribati	...	...	3.1	8.2	1.5	0.5	8.2	0.0	5.3	-1.5	0.9	-3.4	5.8	25.4
Marshall Islands [b]	3.0	13.1	5.3	2.2	0.9	-0.2	0.3	2.4	-0.2	3.4	0.3	2.9	1.3	16.8
Micronesia, Fed. States of	...	...	...	...	...	0.9	-0.3	0.3	-0.5	4.5	3.9	1.7	1.6	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	2.4	-1.3	0.8	7.1	-1.5	-1.2	5.3	...
Papua New Guinea	18.0	13.8	6.4	13.4	17.0	13.6	9.6	17.1	13.3	0.2	3.8	5.3	0.6	16.6
Samoa	-6.9	6.7	7.3	...	-1.0	-0.1	5.1	11.6	-1.9	27.0	0.3	4.0	7.7	14.1
Solomon Islands [b]	7.6	13.1	11.1	12.8	11.4	6.6	9.4	10.6	4.1	9.2	5.6	9.8	6.0	24.1
Timor-Leste	...	...	...	...	...	...	...	...	...	...	0.4	3.7	12.6	9.2
Tonga	...	7.3	3.1	6.3	5.3	0.4	8.6	18.8	9.6	8.9	6.0	2.0	5.0	7.7
Tuvalu [f]	5.6	1.0	-0.2	0.2	3.9	1.1	5.3	3.9	7.4	2.8	5.5	1.3	0.9	0.8
Vanuatu [b]	3.8	-1.6	1.0	3.2	2.1	2.0	2.0	1.0	–	3.9	0.5	3.5	3.8	8.0
Developed Member Countries														
Australia	3.9	2.8	2.6	2.7	3.4	2.4	6.6	3.6	3.7	2.3	2.4	7.7	2.4	4.6
Japan	-1.3	-0.1	1.8	1.5	-0.6	-1.9	-0.6	-0.8	-0.2	0.9	-0.9	0.5	0.3	2.6
New Zealand	1.3	1.4	2.2	3.2	1.0	1.3	6.0	3.1	0.1	0.8	1.4	2.9	3.9	7.8

a Coverage of food varies by country. Unless otherwise indicated, data refer to the whole country.
b Data refer to capital city.
c Data refer to urban areas only.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
e For 1990–1996, data refer to CPI for 27 cities with April 1988–March 1989 as base period. For 1997–2002, data refer to CPI for 43 cities with 1996 as base period. For 2003 onward, data refer to CPI for 45 cities with 2002 as base period.
f Data prior to 1999 cover Funafuti only.

Sources: Country sources, CEIC data, for Bhutan and Maldives: economy sources.

Table 3.3 **Growth rates of wholesale/producer price index**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	275.4	22.4	19.0	13.4	2.3	0.8	-0.4	2.5	8.9	21.7	7.7	0.9	0.6	2.2
Azerbaijan	...	...	...	...	...	...	1.8	-2.3	16.1	12.9	18.9	17.7	8.0	11.6
Georgia	...	...	...	2.2	15.6	5.7	3.7	6.1	2.5	4.3	7.4	11.0	11.8	9.8
Kazakhstan	139.8	23.8	15.5	0.8	18.8	38.0	0.3	0.3	9.3	16.7	23.7	18.4	12.4	36.8
Kyrgyz Republic	21.8	23.0	26.3	8.0	53.7	32.0	9.1	5.3	5.6	8.8	3.1	15.9	11.8	25.4
Pakistan	16.0	11.1	13.0	6.6	6.3	1.8	6.2	2.1	5.6	7.9	6.7	10.2	6.9	16.4
Tajikistan	...	...	...	...	...	39.2	25.2	9.1	15.4	16.5	10.4	42.7	21.2	20.3
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	54.5	41.1	38.2	60.9	42.2	48.0	29.9	29.6	25.6	24.0	10.9	7.7
East Asia														
China, People's Rep. of	14.9	2.9	-0.3	-4.1	-2.4	2.8	-1.3	-2.2	2.3	6.1	4.9	3.0	3.1	6.9
Hong Kong, China	2.8	-0.1	-0.3	-1.8	-1.6	0.2	-1.6	-2.7	-0.3	2.2	0.8	2.3	3.0	5.5
Korea, Rep. of	4.7	3.2	3.8	12.2	-2.1	2.0	-0.5	0.3	2.2	6.0	2.2	0.9	1.4	8.6
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	7.4	-1.0	-0.5	0.6	-4.6	1.8	-1.3	0.0	2.5	7.0	0.6	5.6	6.5	5.1
South Asia														
Bangladesh [a]	4.6	5.4	0.6	5.1	6.8	-0.4	-1.5	0.2	5.3	3.7	3.4	8.9	...	...
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	8.0	4.7	4.4	5.9	3.3	7.2	3.6	3.4	5.5	6.5	4.4	5.4	4.7	8.4
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	...	...	...	...	...	...	...	4.9	3.8	4.1	7.3	8.9	9.0	9.1
Sri Lanka	8.8	20.5	6.9	6.1	-0.3	1.7	11.7	10.7	3.1	12.5	11.5	11.7	24.4	24.9
Southeast Asia														
Brunei Darussalam [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	11.4	7.6	9.2	101.8	10.5	12.5	13.0	4.4	3.4	7.4	15.3	13.6	13.8	25.8
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	4.7	2.8	2.5	11.2	-3.9	3.6	0.2	-0.7	4.7	6.2	5.9	5.1	6.7	8.2
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	...	...	...	...	5.4	5.8	7.8	5.0	5.0	8.4	11.4	8.4	3.1	11.9
Singapore	0.1	0.1	-1.2	-3.0	2.1	10.1	-1.6	-1.5	2.0	5.2	9.6	5.0	0.3	7.5
Thailand	...	1.8	5.1	12.1	4.7	3.8	2.5	1.7	4.0	6.7	9.2	7.0	3.3	12.4
Viet Nam	...	...	...	...	...	...	2.1	1.8	2.6	7.3	4.4	4.2	6.8	21.8
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	3.6	0.9	1.2	0.7	0.7	7.1	3.1	0.2	0.5	4.0	6.0	7.9	2.3	8.3
Japan	-0.8	-1.7	-0.7	-2.0	-1.4	0.1	-2.3	-2.1	-0.8	1.3	1.6	2.2	1.8	4.6
New Zealand	1.3	0.5	0.7	0.8	0.9	5.2	4.9	1.3	0.2	1.9	3.4	4.6	2.6	8.6

a For agricultural and industrial products.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Country sources.

Prices

Table 3.4 **Growth rates of GDP deflator**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	3.8	6.8	8.4	8.3	6.8	4.2
Armenia	...	19.6	17.7	10.7	0.1	-1.4	4.1	0.7	4.6	6.3	3.2	4.6	4.1	8.5
Azerbaijan	545.8	26.5	9.2	-0.9	2.2	12.5	2.5	3.2	6.0	8.4	16.1	11.3	21.0	20.9
Georgia	...	...	6.5	6.9	9.7	4.7	5.4	5.9	3.4	8.4	7.9	8.5	9.7	9.9
Kazakhstan	161.0	38.9	16.1	5.6	13.3	17.4	10.1	5.8	11.7	16.1	17.9	21.5	15.5	20.0
Kyrgyz Republic	42.0	35.3	19.3	9.1	37.6	27.2	7.3	2.0	4.0	5.1	7.1	9.4	14.9	21.2
Pakistan	13.9	8.4	13.4	7.5	5.9	2.7	7.9	2.6	4.4	7.8	7.0	10.5	7.9	13.4
Tajikistan	314.8	470.3	65.2	87.8	26.5	22.7	31.0	18.8	27.0	17.5	9.5	21.5	27.3	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	362.5	87.8	83.8	51.4	56.9	59.1	58.1	57.6	37.9	15.1	16.5	27.2	24.0	19.9
East Asia														
China, People's Rep. of	13.7	6.4	1.5	-0.9	-1.3	2.0	2.1	0.6	2.6	6.9	3.8	3.6	7.4	7.2
Hong Kong, China	4.1	5.8	5.7	0.8	-4.5	-3.6	-1.9	-3.5	-6.2	-3.5	-0.1	-0.3	2.9	1.4
Korea, Rep. of	7.4	5.1	4.6	5.8	-0.1	0.7	3.9	3.2	3.6	3.0	0.7	-0.1	2.1	2.7
Mongolia	59.6	14.8	23.8	-5.2	9.7	8.9	8.4	6.9	9.8	17.2	20.4	23.1	12.3	22.4
Taipei,China	2.1	3.1	1.7	2.6	-1.3	-1.6	0.5	-0.3	-1.3	-0.9	-0.6	-0.7	0.3	-2.3
South Asia														
Bangladesh	7.3	4.2	3.1	5.3	4.7	1.9	1.6	3.2	4.5	4.2	5.1	5.2	6.8	8.8
Bhutan	7.7	9.5	14.0	8.8	8.1	...	6.4	4.1	3.7	3.0	5.9	4.3	4.9	...
India	9.1	7.5	6.5	8.0	3.8	3.5	3.0	3.8	3.6	5.6	4.2	5.0	4.9	6.2
Maldives	...	3.7	1.2	-2.8	1.2	1.5	0.8	1.0	-1.1	0.6	-0.5	1.8	...	...
Nepal	6.0	8.2	6.9	4.2	9.4	4.2	2.7	3.9	3.1	4.0	5.8	7.0	7.4	7.8
Sri Lanka	8.4	12.2	8.5	8.3	4.4	6.7	13.0	8.2	5.1	8.8	10.4	11.3	14.0	16.4
Southeast Asia														
Brunei Darussalam [a]	2.9	4.5	8.6	-11.7	11.6	29.0	-5.6	0.4	6.1	15.9	18.8	10.0	0.9	6.5
Cambodia	11.7	3.4	4.3	10.2	1.7	-3.1	2.7	0.7	1.8	4.8	6.1	4.6	6.5	19.1
Indonesia	9.9	8.7	12.6	75.3	14.2	9.6	16.7	3.7	5.5	8.6	14.3	14.1	11.5	18.1
Lao PDR	20.6	12.9	19.3	85.3	127.1	25.1	9.9	11.4	13.3	10.4	7.8	14.4	4.3	6.6
Malaysia	3.6	3.7	3.5	8.5	0.0	4.9	-1.6	3.1	3.3	6.0	4.6	3.9	4.9	10.3
Myanmar	19.6	23.0	33.7	35.9	22.6	2.5	24.8	41.5	20.5	3.6	19.2	...	...	...
Philippines	7.6	7.7	6.2	10.5	8.0	6.4	6.4	4.5	3.8	6.1	6.5	5.1	2.8	7.8
Singapore	2.3	1.3	0.7	-1.7	-5.3	3.7	-1.8	-0.7	-0.8	4.4	1.2	1.4	5.6	1.1
Thailand	5.6	4.0	4.1	9.2	-4.0	1.3	2.1	0.8	1.3	3.1	4.5	5.1	3.2	4.5
Viet Nam	17.0	8.7	6.6	8.8	5.7	3.4	1.9	4.0	6.7	8.2	8.2	7.3	8.2	21.7
The Pacific														
Cook Islands	...	-3.5	-2.1	8.6	5.5	2.2	10.2	4.5	3.1	0.7	1.1	5.5	2.0	3.0
Fiji Islands	...	3.7	2.3	7.7	7.1	-2.8	3.0	2.4	5.0	2.4	5.1	6.3	2.8	...
Kiribati	1.4	6.5	1.8	3.7	3.5	-0.4	8.9	3.3	1.2	-2.3	2.2	-0.5	7.6	1.6
Marshall Islands	11.6	5.2	2.5	5.5	-0.1	-1.8	-0.5	3.5	0.7	-0.2	3.6	4.4	0.5	4.6
Micronesia, Fed. States of	2.8	2.8	2.7	1.6	1.9	2.0	1.3	-0.2	-0.2	1.8	4.1	4.4	2.8	...
Nauru	...	...	...	...	...	...	...	...	...	...	3.6	2.0	0.3	3.8
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	16.0	2.9	11.3	5.3	10.9	13.2	6.8	11.9	6.9	1.1	7.9	9.4	6.4	7.5
Samoa	-6.9	4.5	11.7	2.9	2.6	6.2	1.3	3.8	2.4	6.8	4.6	4.8	7.1	2.8
Solomon Islands	4.2	14.2	9.4	0.9	11.1	6.9	7.3	9.4	10.1	6.9	7.3	11.2	7.7	17.0
Timor-Leste [b]	3.1	5.4	-10.6	...	7.2	3.0	-0.2	0.3	4.7	-0.3	1.0	4.5	12.2	...
Tonga	-3.4	6.3	-0.1	2.6	6.5	0.2	3.8	11.9	8.4	6.6	8.8	10.6	8.1	4.9
Tuvalu	5.2	14.1	2.8	-0.9	5.0	-0.0	3.7	2.8	...	...	...	...	...	...
Vanuatu	2.7	2.0	2.3	4.8	3.2	1.1	4.1	1.1	3.7	2.2	2.9	5.9	5.9	...
Developed Member Countries														
Australia	1.4	2.3	1.4	1.2	0.1	2.1	4.9	2.8	3.0	3.5	3.8	4.6	4.6	4.4
Japan	-0.5	-0.6	0.6	0.0	-1.3	-1.7	-1.2	-1.5	-1.6	-1.1	-1.2	-0.9	-0.7	-1.0
New Zealand	2.0	1.3	2.0	1.3	0.7	3.2	3.8	0.2	2.4	3.3	2.2	3.2	3.8	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Estimates before 2003 include the value added of activities of the United Nations, while estimates beginning 2003 exclude its value added.

Source: Country sources.

Table 3.5 **Growth rates of money supply (M2)**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	31.5	38.3	44.6	36.7	49.7	35.2
Armenia	64.3	35.1	29.2	36.7	14.0	38.6	4.3	34.0	10.4	22.3	27.8	32.9	42.3	2.4
Azerbaijan	24.0	18.9	33.6	-17.0	22.2	86.7	-12.1	14.5	29.6	47.8	22.3	86.8	71.4	44.0
Georgia [a]	...	42.8	44.8	-1.5	19.7	39.2	21.4	17.9	22.8	42.4	26.5	39.7	49.7	6.9
Kazakhstan [a]	109.0	16.6	28.2	-14.1	84.4	45.0	45.1	32.8	27.0	69.8	25.2	78.1	25.9	35.4
Kyrgyz Republic	78.2	21.3	25.4	17.2	33.9	12.1	11.3	34.1	33.5	32.0	9.9	51.6	33.3	12.6
Pakistan	13.8	20.1	19.9	7.9	4.3	12.1	11.7	16.8	17.5	20.5	17.2	14.7	10.7	15.3
Tajikistan	...	78.7	105.1	31.7	33.7	57.2	68.0	11.7	50.4	...	41.8	81.4	78.5	-4.7
Turkmenistan [a]	448.0	411.7	81.2	84.4	21.8	94.6	16.7	1.5	40.9	13.4	27.2	17.7	32.3	14.6
Uzbekistan	151.9	119.0	45.6	27.5	32.7	37.1	54.3	29.7	27.1	47.8	54.3	36.8	46.1	32.4
East Asia														
China, People's Rep. of	32.3	25.3	19.6	14.8	14.7	12.3	17.6	16.9	19.6	14.9	16.3	17.0	16.7	17.8
Hong Kong, China	14.6	10.9	10.1	11.6	8.8	7.8	-2.7	-0.9	8.4	9.3	5.1	15.4	20.8	2.7
Korea, Rep. of	23.3	16.7	19.7	23.7	5.1	5.2	8.1	14.0	3.0	6.3	7.0	12.5	10.8	12.0
Mongolia	32.9	25.8	32.5	-1.7	31.6	17.6	27.9	42.0	49.6	20.4	34.6	34.8	56.3	-3.4
Taipei,China	9.4	9.1	8.0	8.6	8.3	6.5	4.4	2.6	5.8	7.4	6.6	5.3	0.9	7.0
South Asia														
Bangladesh	16.0	8.2	10.8	10.4	12.8	18.6	16.6	13.1	15.6	13.8	16.7	19.3	17.1	17.6
Bhutan	36.0	9.4	58.6	16.4	31.4	16.1	7.6	28.5	-0.2	19.9	11.9	32.9	2.2	2.3
India [a]	13.6	16.2	18.0	19.4	14.6	16.8	14.1	14.7	16.7	12.1	17.0	21.5	21.2	18.4
Maldives	15.4	26.1	23.3	23.0	3.5	4.2	9.1	19.5	14.5	32.8	11.7	20.6	23.7	23.6
Nepal	16.1	14.4	11.9	21.9	20.8	21.8	15.2	4.4	9.8	12.8	8.3	15.6	14.0	25.2
Sri Lanka	19.2	10.8	13.8	31.0	13.4	12.9	13.6	13.4	15.3	19.6	19.1	17.8	16.6	8.5
Southeast Asia														
Brunei Darussalam [b]	6.7	-2.3	-4.6	-12.9	16.8	25.9	-7.1	-1.4	12.9	27.0	6.8	-3.9	4.6	0.3
Cambodia	44.3	40.4	16.6	15.7	17.3	26.9	20.4	31.1	15.3	30.0	16.1	38.2	62.9	4.8
Indonesia	27.6	29.6	23.2	62.3	11.9	15.6	13.0	4.7	8.1	8.1	16.4	14.9	18.9	14.6
Lao PDR	16.4	26.7	65.8	113.3	78.3	45.9	20.1	27.0	19.2	22.3	8.2	30.1	38.7	18.3
Malaysia	24.0	19.8	22.7	1.5	14.2	5.3	2.3	6.0	11.1	25.2	15.6	17.1	9.5	13.4
Myanmar	40.5	38.9	28.9	36.5	29.6	42.2	44.8	34.2	0.2	34.5	24.1	...	...	...
Philippines	25.2	15.8	20.5	8.0	19.3	4.8	...	9.6	4.2	10.0	9.8	22.1	10.7	15.4
Singapore	8.5	9.8	10.3	30.2	8.5	-2.0	5.9	0.3	8.1	6.2	6.2	19.4	13.4	12.0
Thailand	17.0	12.6	16.4	9.5	2.1	3.7	4.2	2.6	...	5.8	6.1	8.2	6.3	9.2
Viet Nam	22.6	22.7	26.1	25.6	39.3	56.2	25.5	17.6	24.9	29.5	29.7	33.6	46.1	20.3
The Pacific														
Cook Islands	...	-3.2	31.2	12.1	16.7	4.8	14.4	3.2	9.9	9.6	5.2	22.4	-5.8	4.0
Fiji Islands	4.7	-2.3	-8.8	-0.4	14.2	-2.1	-3.1	7.9	25.1	10.4	15.0	19.8	10.4	-6.9
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	10.7	32.0	6.9	1.8	8.9	5.4	1.9	15.5	-4.4	14.8	29.5	38.9	27.8	11.2
Samoa	21.8	5.2	13.2	7.5	15.7	16.4	6.1	10.0	14.1	8.3	15.7	13.7	11.0	5.8
Solomon Islands	9.9	15.7	6.3	4.8	4.5	0.4	-13.3	4.0	25.4	19.5	38.9	26.4	24.0	...
Timor-Leste	...	...	...	...	...	...	155.5	6.8	32.4	48.3	26.3	8.6	0.9	44.5
Tonga	17.0	2.7	14.1	2.4	15.0	8.3	26.6	7.8	13.4	18.6	12.1	14.4	14.0	8.4
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	11.6	10.1	-0.3	12.6	-9.2	5.5	5.6	-1.7	-0.8	9.8	11.6	7.0	16.1	13.2
Developed Member Countries														
Australia [a]	6.1	7.0	7.5	9.7	9.3	6.3	10.3	7.3	8.5	6.1	13.6	10.2	8.9	10.2
Japan	3.2	3.0	3.9	4.0	2.7	1.9	3.3	1.8	...	0.8	0.4	-0.4	0.8	0.8
New Zealand [a]	14.9	2.6	1.5	13.6	8.2	0.9	14.7	8.0	4.1	2.7	11.7	16.4	-2.7	7.2

a Refers to M3.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Country sources.

Money and Finance

Table 3.6 **Money supply (M2)**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	12.3	12.6	14.8	17.3	19.6	23.7	30.5
Armenia	7.7	8.2	8.7	10.1	11.1	14.7	13.4	15.6	14.4	15.0	16.3	18.3	22.0	19.4
Azerbaijan	12.2	11.3	13.1	10.0	11.1	16.6	12.9	13.0	14.3	17.7	14.7	18.4	20.8	22.3
Georgia [a]	4.8	6.6	8.1	7.3	7.7	10.1	11.1	11.7	12.5	15.5	16.6	19.5	23.7	22.6
Kazakhstan [a]	11.4	9.5	10.3	8.6	13.6	15.3	17.7	20.3	21.1	28.1	27.2	36.0	36.0	39.3
Kyrgyz Republic	17.1	14.3	13.6	14.4	13.5	11.3	11.1	14.6	17.5	20.5	21.1	28.4	30.3	26.2
Pakistan	43.6	46.0	48.2	47.2	44.8	38.6	39.2	43.3	46.5	48.4	49.3	48.2	46.9	45.6
Tajikistan	20.7	8.4	10.2	6.8	6.9	8.2	9.6	8.2	8.7	11.7	14.3	20.0	26.0	18.0
Turkmenistan [a]	18.8	8.1	10.2	15.0	12.7	19.4	16.4	13.0	14.9	14.6	14.7	14.6	16.4	9.5
Uzbekistan	17.7	21.0	17.5	15.4	13.6	12.2	12.6	10.6	10.3	12.2	14.4	15.2	16.3	17.5
East Asia														
China, People's Rep. of	99.9	108.9	115.2	123.8	133.7	135.7	144.4	153.7	162.9	158.9	161.3	163.1	156.8	158.0
Hong Kong, China	204.6	206.0	204.3	240.7	267.3	277.0	273.2	275.4	308.8	322.5	316.7	342.6	378.0	373.9
Korea, Rep. of	92.9	96.4	105.3	132.1	127.0	117.3	117.4	121.0	117.1	115.5	118.1	128.5	130.6	139.3
Mongolia	18.5	19.9	20.4	20.5	23.8	25.4	29.7	38.0	42.4	39.4	41.0	41.4	52.2	37.8
Taipei,China	176.6	175.9	175.3	177.4	184.1	188.4	200.1	196.7	203.7	207.9	214.0	218.5	206.1	225.3
South Asia														
Bangladesh	27.7	27.5	28.0	27.9	28.7	31.5	34.4	36.1	37.9	39.0	40.9	43.5	44.8	45.9
Bhutan	34.1	32.3	42.9	43.4	49.0	49.9	47.2	52.5	47.1	51.4	50.9	61.0	48.9	...
India [a]	50.3	50.5	53.8	56.0	57.6	62.5	65.7	70.0	72.8	71.5	76.1	80.3	85.1	89.4
Maldives	31.2	34.8	38.1	44.0	41.8	41.1	43.0	48.0	50.9	60.2	69.7	68.8	73.9	78.4
Nepal	34.4	34.6	34.5	39.1	41.4	45.7	48.6	48.8	50.0	51.7	51.0	53.1	54.4	60.3
Sri Lanka	34.5	32.8	32.3	36.1	37.6	37.6	38.3	38.0	39.4	41.1	41.7	41.0	39.2	34.5
Southeast Asia														
Brunei Darussalam [b]	120.9	109.9	98.0	97.2	98.7	93.6	89.7	84.8	87.7	95.6	85.7	71.7	73.9	69.3
Cambodia	7.7	9.9	10.5	10.5	10.8	13.0	14.1	17.2	18.0	20.2	19.5	23.3	32.3	26.6
Indonesia	49.0	54.2	56.7	60.4	58.8	53.8	50.1	48.5	47.5	45.0	43.4	41.4	41.6	38.0
Lao PDR	13.6	14.2	18.4	20.4	14.9	17.4	18.2	19.4	19.2	19.9	18.7	19.6	24.2	25.0
Malaysia	89.4	93.9	103.7	104.7	112.6	100.0	103.4	100.9	102.5	113.4	118.9	126.8	124.2	122.0
Myanmar	30.7	32.5	29.7	28.2	26.8	32.7	34.1	28.9	21.1	24.1	...	...	...	...
Philippines	39.6	40.3	43.4	42.7	45.6	42.4	46.2	46.4	44.4	43.3	42.6	46.9	47.1	48.2
Singapore	85.3	85.8	86.7	116.6	124.6	106.9	117.9	114.1	120.1	111.7	109.2	118.6	118.3	129.5
Thailand	79.1	80.8	91.7	102.7	104.7	102.2	102.1	98.7	119.3	115.1	111.8	109.3	107.3	109.3
Viet Nam	23.0	23.8	26.0	28.4	35.7	50.5	58.1	61.4	67.0	74.4	82.3	94.7	117.9	109.8
The Pacific														
Cook Islands	34.2	34.4	47.2	49.1	52.9	47.6	47.1	45.3	44.6	46.6	43.7	50.3	45.9	46.4
Fiji Islands	55.0	49.8	44.9	41.1	40.4	42.2	38.8	39.3	45.1	46.3	50.6	55.2	63.2	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	29.7	35.8	36.7	33.9	30.2	31.2	29.7	30.1	25.8	29.1	33.6	41.7	48.1	46.4
Samoa	33.9	31.8	32.0	32.7	36.0	38.2	37.0	38.0	40.4	39.1	41.0	44.1	42.9	45.7
Solomon Islands	30.5	30.4	30.1	30.3	28.9	31.7	27.8	27.2	29.1	30.1	37.1	39.7	41.3	...
Timor-Leste [c]	...	...	...	...	...	6.3	13.9	19.2	24.3	34.7	40.8	45.0	37.5	...
Tonga	31.5	30.4	35.9	34.7	36.6	37.5	42.7	40.6	41.1	44.6	47.3	47.6	51.0	52.3
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	111.5	117.4	105.4	108.6	98.7	100.3	104.3	109.6	101.6	103.5	105.4	99.1	101.8	...
Developed Member Countries														
Australia [a]	51.1	51.4	52.5	54.4	56.5	56.6	58.4	58.8	60.0	59.2	63.0	64.4	64.9	66.0
Japan	113.2	114.1	116.0	123.1	128.2	129.2	134.9	139.1	209.9	208.2	207.6	204.4	202.6	207.5
New Zealand [a]	34.2	33.5	32.8	36.6	37.4	35.6	38.0	39.1	38.1	36.5	38.7	42.9	39.0	...

a Refers to M3.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Source: Country sources.

Table 3.7 **Interest rate on savings deposits**
(percent per annum, period averages)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	7.58	7.95	8.12	8.17	6.77	5.90	4.98	3.77	1.40	0.94	1.71	1.95	2.10	5.30 *
Tajikistan	...	...	...	...	...	...	...	6.17	8.53	3.11	3.63	2.22	1.80	3.45
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	3.15	2.62	1.91	1.58	1.18	0.99	0.99	0.74	0.72	0.72	0.72	0.72	0.76	0.66
Hong Kong, China	4.20	3.80	4.10	5.20	3.70	4.50	2.20	0.14	0.03	0.02	0.97	2.50	2.10	0.14
Korea, Rep. of	3.00	9.57	10.89	13.38	7.12	7.08	5.46	4.71	4.15	3.75	3.57	4.36	5.01	5.67
Mongolia	27.30	23.25	19.05	11.60	8.10	7.20	5.40	5.90	6.80	7.60	7.80	8.00	8.10	7.80
Taipei,China	3.50	3.50	3.50	3.50	3.50	3.50	3.04	1.53	0.63	0.55	0.55	0.55	0.55	0.55
South Asia														
Bangladesh	5.36	7.18	7.45	7.49	7.43	5.81	5.24	4.60	4.11	4.24	4.19	5.24	5.20	5.20
Bhutan	5.00	5.00	5.00	5.00	5.00	6.00	6.00	5.50	5.00	4.50	4.50	4.50	4.50	4.75
India	4.50	4.50	4.50	4.50	4.50	4.00	4.00	4.00	3.50	3.50	3.50	3.50	3.50	3.50
Maldives	5.50	5.50	5.50	5.50	5.50	5.50	5.50	4.00	3.50	2.25	2.25	2.25	2.25	2.13
Nepal	7.00	7.50	7.00	7.50	6.88	5.25	5.00	4.38	4.25	3.50	3.38	3.50	3.50	4.25
Sri Lanka	12.00	12.00	10.80	10.50	9.20	8.40	8.40	6.00	5.00	5.00	5.00	5.00	5.00	5.00
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	1.13	1.00	0.87	1.15	...	...
Cambodia	7.25	7.09	6.56	6.61	6.40	6.13	3.00	2.41	2.19	2.13	2.08	1.83	1.90	2.05
Indonesia	15.00	14.00	18.00	23.00	16.00	8.86	9.19	8.96	5.14	4.37	4.85	4.38	3.48	3.33
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	3.70	4.10	4.23	3.87	2.76	2.72	2.28	2.12	1.86	1.58	1.41	1.48	1.44	1.40
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	8.00	8.00	9.10	11.00	7.30	7.40	7.50	4.20	4.20	4.26	3.80	3.50	2.20	2.22
Singapore	2.72	2.72	3.08	1.43	1.34	1.28	0.77	0.44	0.24	0.23	0.30	0.29	0.25	0.22
Thailand	5.00	5.00	5.00	4.50	3.00	2.50	1.75	1.50	0.75	0.75	1.88	2.50	0.75	0.75
Viet Nam	...	...	0.40	0.45	0.20	0.20	0.20	2.40	2.40	2.40	3.00	3.00	3.06	3.68
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	4.00	4.00	3.75	4.13	4.13	3.88	3.88	2.38	2.13	1.88	1.80	1.00	0.80	...
Samoa	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.75	2.75	2.75	2.75	2.75	2.75	2.80
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	0.20	0.75	0.79	0.75	0.65	0.74	0.75
Tonga	4.30	3.90	3.80	3.84	3.37	3.24	3.13	3.13	3.15	3.22	3.25	3.21	3.20	3.20
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	...	...	...	...	...	...	...	...	...	...	5.40	5.60	5.75	7.00
Japan	0.91	0.29	0.25	0.23	0.11	0.09	0.05	0.02	0.01	0.01	0.01	0.06	0.21	0.21
New Zealand	...	...	...	...	...	...	...	...	...	...	...	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Country sources, CEIC data.

Money and Finance

Table 3.8 Interest rate on time deposits of 12 months
(percent per annum, period averages)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia [a]	...	37.24	35.08	29.03	26.25	21.86	17.72	11.94	7.83	5.29	6.37	6.00	6.69	7.41
Azerbaijan	...	...	...	13.50	12.40	10.40	8.60	9.40	8.54	8.53	9.38	10.50	12.10	12.20
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan [b]	...	...	14.92	10.17	10.84	8.00	6.79	9.49	9.87	10.68	10.29	10.29	10.53	11.57
Kyrgyz Republic [c]	45.40	34.90	42.29	39.95	44.17	28.07	26.58	17.55	13.06	9.58	9.78	9.88	8.91	8.79
Pakistan	10.93	11.57	11.79	12.14	9.78	8.60	8.96	6.18	2.70	2.84	5.83	6.01	6.90	7.50[x]
Tajikistan [d]	...	...	...	...	...	...	...	15.11	17.66	19.74	20.16	20.84	17.25	18.20
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	10.98	9.07	7.02	4.99	2.89	2.25	2.25	2.00	1.98	2.05	2.25	2.36	3.29	3.80
Hong Kong, China	6.30	5.20	6.40	8.30	5.80	5.40	2.50	0.74	0.12	0.26	1.73	3.02	2.80	0.97
Korea, Rep. of	8.10	10.02	10.64	13.28	7.94	7.94	5.79	4.95	4.25	3.87	3.72	4.50	5.17	5.87
Mongolia	56.85	36.40	37.90	24.29	19.80	13.80	13.20	13.20	14.00	14.10	13.00	13.00	13.50	11.20
Taipei,China	7.00	6.40	5.96	6.31	5.04	4.98	3.76	2.17	1.47	1.43	1.77	2.10	2.40	2.61
South Asia														
Bangladesh	6.31	8.02	8.69	8.90	8.91	8.97	8.92	8.50	8.81	8.20	8.31	10.32	10.70	10.86
Bhutan [e]	9.00	10.00	10.00	10.00	10.00	9.50	9.50	9.00	6.75	6.00	6.50	6.50	6.50	6.50
India	12.50	11.80	11.00	10.30	8.00	7.10	7.10	5.75	5.00	4.98	5.32	6.32	8.30	9.20
Maldives [b]	6.00	6.00	6.25	6.25	6.50	6.50	6.50	5.50	5.25	4.50	4.50	4.50	4.50	4.50
Nepal	8.00	9.50	9.50	9.25	8.38	6.88	6.13	5.25	5.00	4.25	3.63	3.63	3.63	4.25
Sri Lanka	16.00	14.90	11.00	11.50	11.50	15.00	13.00	10.00	7.00	8.00	9.00	11.00	15.00	15.00
Southeast Asia														
Brunei Darussalam [f]	...	...	...	...	...	...	...	...	1.69	1.62	1.63	1.14	...	...
Cambodia	...	11.95	11.13	11.09	9.84	7.20	8.33	7.20	7.00	6.60	6.83	6.40	7.05	7.65
Indonesia	15.00	17.00	16.00	28.29	22.35	12.17	15.48	15.28	10.39	7.07	10.95	11.63	8.24	10.43
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	6.89	7.26	9.33	5.74	3.95	4.24	4.00	4.00	3.70	3.70	3.70	3.73	3.70	3.50
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines [g]	10.70	9.90	11.40	13.30	12.80	10.50	10.80	9.20	8.00	8.18	6.00	5.01	3.10	3.96
Singapore	4.01	3.99	4.41	2.51	2.46	2.42	1.53	1.32	0.70	0.72	0.86	0.88	0.83	0.70
Thailand	10.62	8.88	11.50	6.00	4.12	3.50	2.88	2.00	1.00	1.00	3.00	4.50	2.32	1.88
Viet Nam	12.00	9.60	9.60	11.40	7.20	6.24	6.84	7.80	7.20	7.56	8.40	8.40	8.80	13.46
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	8.13	6.13	6.88	9.00	9.25	9.38	8.63	5.88	9.00	9.00	1.30	1.80	1.30	...
Samoa	7.50	7.50	7.50	7.50	7.50	7.35	7.30	6.38	6.38	6.38	6.38	6.63	7.75	7.80
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	1.26	1.28	1.28	1.29	1.28	1.33
Tonga	5.40	5.90	6.19	6.17	6.15	5.95	5.93	5.97	5.97	6.25	6.15	6.60	7.08	7.04
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	7.10	7.10	4.90	4.50	3.90	5.90	4.35	4.35	3.55	4.75	4.55	5.40	5.90	7.60
Japan [h]	1.16	0.56	0.45	0.42	0.27	0.24	0.13	0.07	0.05	0.04	0.03	0.16	0.38	0.41
New Zealand [a]	8.00	7.44	7.70	4.16	5.30	6.49	4.60	5.58	5.22	6.28	6.82	7.23	8.36	4.81

a Figures are derived simple averages of monthly rates for time deposits of 6 months.
b For time deposits of over 12 months.
c From 1996, data refer to interest rates of commercial banks in national currency for 6–12 months.
d Figures are derived simple averages of monthly rates for time deposits of 6 months to 1 year.
e For fixed deposits of 1 year to less than 3 years.
f Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
g Refers to rates charged on interest-bearing deposits with maturities of over 1 year.
h For time deposits from 12 months to less than 2 years.

Sources: Country sources, CEIC data.

Table 3.9 Lending interest rate

(percent per annum, period averages)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	17.97	18.14	14.92
Armenia	111.86	66.36	54.23	48.48	38.85	31.57	26.89	21.14	20.83	18.63	17.98	16.53	17.52	17.05
Azerbaijan	...	...	...	...	19.48	19.66	19.71	17.37	15.46	15.72	17.03	17.86	19.13	19.76
Georgia	...	58.24	50.64	46.00	33.42	32.75	27.25	31.83	32.27	31.23	21.63	18.75	20.41	21.24
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	...	65.02	49.38	73.44	60.86	51.90	37.33	24.81	19.13	29.27	26.60	23.20	25.32	19.86
Pakistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tajikistan	...	...	75.52	50.89	26.23	25.59	21.05	14.20	16.57	20.32	23.27	24.37	22.87	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	12.06	10.08	8.64	6.39	5.85	5.85	5.85	5.31	5.31	5.58	5.58	6.12	7.47	5.31
Hong Kong, China	8.75	8.50	9.50	9.00	8.50	9.50	5.13	5.00	5.00	5.00	7.75	7.75	6.75	5.00
Korea, Rep. of	9.00	8.84	11.88	15.28	9.40	8.55	7.71	6.77	6.24	5.90	5.59	5.89	6.55	7.17
Mongolia	134.37	87.91	82.05	46.77	39.29	32.75	30.24	28.38	26.31	25.38	23.56	21.44	17.54	18.00
Taipei,China [a]	7.67	7.38	7.50	7.70	7.67	7.71	7.38	7.10	3.43	3.52	3.85	4.12	4.31	4.33
South Asia														
Bangladesh	14.00	14.00	14.00	14.00	14.13	15.50	15.83	16.00	16.00	14.75	14.00	15.33	16.00	16.38
Bhutan	16.00	16.00	16.00	16.00	16.00	16.00	15.75	15.25	15.00	15.00	14.00	14.00	14.00	...
India	15.48	15.96	13.83	13.54	12.54	12.29	12.08	11.92	11.46	10.92	10.75	11.19	13.02	13.31
Maldives	...	15.00	15.00	15.00	12.50	13.00	13.00	13.54	14.00	13.00	13.00	13.00	13.00	13.00
Nepal	...	12.88	14.54	14.00	11.33	9.46	7.67	...	...	8.50	8.13	8.00	8.00	...
Sri Lanka	18.04	18.28	14.89	15.03	14.72	16.16	19.39	13.17	10.34	9.47	10.76	12.85	17.08	18.89
Southeast Asia														
Brunei Darussalam [b]	...	...	...	6.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Cambodia	18.70	18.80	18.40	18.33	17.56	17.34	16.50	16.23	18.47	17.62	17.33	16.40	16.18	16.01
Indonesia	18.85	19.22	21.82	32.15	27.66	18.46	18.55	18.95	16.93	14.12	14.05	15.98	13.86	13.60
Lao PDR	25.67	27.00	...	29.28	32.00	32.00	26.17	29.33	30.50	29.25	26.83	30.00	28.50	...
Malaysia	8.73	9.94	10.63	12.13	8.56	7.67	7.13	6.53	6.30	6.05	5.95	6.49	6.41	6.08
Myanmar	16.50	16.50	16.50	16.50	16.13	15.25	15.00	15.00	15.00	15.00	15.00	16.08	17.00	17.00
Philippines	14.68	14.84	16.28	16.78	11.78	10.91	12.40	9.14	9.47	10.08	10.18	9.78	8.69	8.75
Singapore	6.37	6.26	6.32	7.44	5.80	5.83	5.66	5.37	5.31	5.30	5.30	5.31	5.33	5.38
Thailand	13.25	13.40	13.65	14.42	8.98	7.83	7.25	6.88	5.94	5.50	5.79	7.35	7.05	7.04
Viet Nam	...	20.10	14.42	14.40	12.70	10.55	9.42	9.06	9.48	9.72	11.03	11.18	11.18	15.78
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	11.06	11.33	11.03	9.66	8.77	8.40	8.34	8.05	7.60	7.17	6.78	7.35	9.01	7.97
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	15.00	15.00	15.00	15.00	15.17	15.33	15.33	15.28	15.00	15.38	16.38	15.62	14.03	14.38
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	13.14	13.30	10.45	17.70	18.90	17.54	16.21	13.89	13.36	13.25	11.47	10.57	9.78	9.21
Samoa	12.00	12.00	12.00	11.50	11.50	11.00	11.57	11.45	11.28	11.23	11.43	11.72	12.65	12.66
Solomon Islands	16.17	16.69	15.67	15.00	14.45	14.58	14.55	14.62	14.70	14.29	14.12	13.92	14.12	14.44
Timor-Leste	...	...	...	...	...	...	...	...	16.66	15.54	16.65	16.55	15.05	13.05
Tonga	10.47	10.92	11.15	11.25	11.37	11.34	11.34	11.40	11.34	11.59	11.38	11.97	12.16	12.46
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	10.50	10.50	10.50	10.96	10.29	9.85	8.81	7.41	5.90	7.61	7.47	8.25	8.16	5.21
Developed Member Countries														
Australia	10.70	10.50	8.89	8.15	7.99	9.27	8.66	8.16	8.41	8.85	9.06	9.41	8.20	8.91
Japan	3.51	2.66	2.45	2.32	2.16	2.07	1.97	1.86	1.82	1.77	1.68	1.66	1.88	1.91
New Zealand	12.09	12.27	11.35	11.22	8.49	10.22	9.88	9.83	9.81	10.38	11.53	12.25	12.83	13.50

a Refers to base lending rates but figures from 1995 to 2002 are prime lending rates.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Financial Statistics Online (IMF 2009); for Taipei,China: economy sources.

Money and Finance

Table 3.10 Yield on short-term treasury bills [a]

(percent per annum)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	37.810	43.953	57.536	46.992	55.096	24.403	20.591	14.750	11.912	5.271	4.050	4.865	6.089	7.688
Azerbaijan	...	...	12.225	14.100	18.305	16.733	16.510	14.119	7.998	4.622	7.515	10.038	10.639	...
Georgia	...	...	...	...	..	...	29.928	43.419	44.263	19.159	...	...	...	...
Kazakhstan	48.980	28.910	15.150	23.590	15.630	6.590	5.280	5.200	5.860	3.280	3.280	3.280	7.010	7.000
Kyrgyz Republic	34.903	40.099	35.834	43.668	47.187	32.259	19.078	10.154	7.208	4.944	4.401	4.752	4.901	13.163
Pakistan [b]	12.486	13.607	15.735	...	...	8.375	10.710	6.078	1.865	2.489	7.181	8.540	8.989	11.367
Tajikistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of [c]	...	...	...	6.855	3.658	2.601	2.521	2.152	2.618	2.793	1.858	2.536	3.512	4.030
Hong Kong, China	5.550	4.450	7.500	5.040	4.940	5.690	1.690	1.350	-0.080	0.070	3.650	3.290	1.960	0.050
Korea, Rep. of [d]	14.050	12.630	13.380	15.220	6.810	7.080	5.320	4.810	4.310	3.790	3.650	4.480	5.160	5.490
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	4.990	5.130	6.880	4.740	4.830	...	...	...	...	...	1.350	...	...	...
South Asia														
Bangladesh	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India [e]	12.660	9.670	6.830	8.570	9.030	8.980	6.880	5.730	4.630	4.890	5.510	7.980	7.230	6.820
Maldives [f]	...	...	...	...	...	...	...	...	...	...	...	5.000	5.500	6.000
Nepal	9.900	11.510	2.520	3.700	4.300	5.300	5.000	3.800	3.850	2.400	2.200	1.980	3.580	...
Sri Lanka	16.805	17.400	...	12.590	12.511	14.016	17.568	12.471	8.092	7.714	9.027	10.984	16.603	18.914
Southeast Asia														
Brunei Darussalam [g]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lao PDR [h]	20.456	...	...	23.658	30.000	29.937	22.702	21.406	24.874	20.368	18.614	18.337	18.837	...
Malaysia	5.504	6.412	6.407	6.864	3.526	2.861	2.792	2.732	2.788	2.395	2.484	3.227	3.434	3.390
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	11.761	12.338	12.893	15.004	9.996	9.913	9.734	5.494	5.872	7.320	6.132	5.294	3.377	...
Singapore	1.051	1.376	2.319	2.118	1.116	2.180	1.687	0.813	0.643	0.960	2.038	2.952	2.344	0.870
Thailand	...	...	...	...	...	...	...	1.921	1.354	1.303	2.673	4.656	3.479	3.189
Viet Nam [i]	...	...	...	...	...	5.417	5.490	5.918	5.827	5.692	6.127	4.728	4.153	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	3.150	2.979	2.600	2.003	1.999	3.633	1.507	1.659	1.061	1.561	1.938	7.450	4.484	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea [j]	17.403	14.438	9.938	21.183	22.700	16.996	12.355	10.928	18.686	8.853	3.808	4.010	4.667	6.193
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	12.500	12.750	12.875	6.000	6.000	7.050	8.228	7.522	5.847	6.000	4.533	3.409	3.169	3.201
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia [k]	7.730	7.150	5.400	5.000	5.010	6.180	4.900	4.750	4.900	5.480	5.640	5.990	6.670	6.970
Japan	0.374	0.374	0.374	0.175	0.410	0.230	0.033	0.005	0.003	0.003	0.003	0.419	0.553	0.357
New Zealand	8.824	9.085	7.531	7.098	4.584	6.392	5.562	5.522	5.213	5.849	6.524	7.047	7.548	7.007

a Refers to 3-month treasury bills unless otherwise indicated.
b Refers to weighted average yield on 6-month treasury securities.
c Refers to 3-month treasury bonds trading rate.
d Refers to 91-day certificates of deposit.
e Figures are for fiscal year ending March.
f Refers to rate on 28-day treasury bills.
g Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
h Refers to weighted average auction rate for 6-month treasury bills.
i Refers to average monthly yield on 360-day treasury bills sold at auction.
j Refers to rate on 182-day treasury bills.
k Refers to 90-day bank-accepted bills.

Sources: International Financial Statistics Online (IMF 2009); for Australia, People's Republic of China, Republic of Korea: OECD Statistics Online (OECD 2009); for India and Taipei,China: economy sources.

Table 3.11 **Domestic credit provided by banking sector**
(percent of GDP)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries															
Central and West Asia															
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	-1.6	...	...
Armenia	...	9.1	9.1	8.0	10.7	10.7	11.5	9.3	7.4	5.6	6.7	8.8	8.1	12.1	16.6
Azerbaijan	...	12.5	13.0	13.0	12.9	10.6	9.6	9.8	8.7	9.4	10.9	11.2	13.1	17.2	17.1
Georgia	...	8.1	8.1	12.9	15.6	19.5	21.5	20.0	20.5	20.2	19.1	21.7	23.9	31.6	32.9
Kazakhstan	...	9.5	7.9	8.5	8.7	10.1	12.3	11.6	13.1	14.8	21.0	24.7	32.5	41.0	33.8
Kyrgyz Republic	...	25.7	25.1	18.2	20.0	14.8	12.2	10.0	11.6	11.6	8.4	9.4	11.6	14.2	...
Pakistan	50.9	51.0	54.4	52.1	51.5	49.1	41.6	37.7	36.6	37.1	41.0	43.9	42.9	45.7	...
Tajikistan	...	...	...	...	22.1	20.8	17.9	24.3	21.1	14.0	16.5	16.4	15.4	...	...
Turkmenistan	...	1.1	-19.1	8.4	25.2	26.2	26.9	18.6	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia															
China, People's Rep. of	90.0	87.7	93.3	100.7	113.1	119.3	119.7	123.0	143.5	151.9	140.4	135.6	136.2	132.0	126.2
Hong Kong, China	152.0	142.4	152.5	163.0	146.3	137.0	136.0	138.5	142.5	146.1	146.7	142.8	134.5	125.4	124.6
Korea, Rep. of	62.9	61.7	65.3	74.4	85.9	90.4	90.8	94.8	99.3	103.1	99.1	103.9	99.9	101.8	112.6
Mongolia	...	7.6	14.4	8.2	16.8	12.9	9.3	11.2	15.1	33.4	30.9	30.2	20.9	30.1	36.0
Taipei,China	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Asia															
Bangladesh	22.4	26.7	28.7	29.9	30.3	31.8	34.2	47.8	50.4	49.7	51.9	54.9	58.1	58.2	59.5
Bhutan	-1.0	9.7	4.8	14.3	2.6	1.3	2.9	6.3	10.9	11.4	17.7	14.8	13.1	13.6	...
India	51.4	44.1	45.7	46.1	46.5	49.2	53.0	54.7	58.9	57.4	58.3	60.1	63.3	64.2	...
Maldives	33.0	34.9	30.1	29.0	32.4	32.1	34.8	40.0	41.7	36.3	42.8	72.1	81.2	102.4	122.8
Nepal	28.0	34.0	33.7	34.2	38.3	38.7	40.8	42.7	41.4	41.4	42.0	42.8	43.7	49.3	...
Sri Lanka	38.0	40.9	38.7	36.8	36.6	39.2	43.7	45.4	42.2	40.7	43.3	43.6	47.1	45.0	42.8
Southeast Asia															
Brunei Darussalam [a]	...	...	...	...	...	41.0	38.6	35.6	37.7	29.4	20.5	10.4	16.3	18.5	9.3
Cambodia	...	5.3	6.2	6.9	7.2	6.6	6.4	5.6	5.6	6.6	8.0	7.2	8.9	12.9	15.3
Indonesia	46.7	51.8	54.0	59.6	59.9	62.1	60.7	53.2	52.4	49.2	49.6	46.2	41.7	40.6	36.7
Lao PDR	5.0	9.9	7.6	15.1	15.4	9.3	9.0	13.1	10.0	8.6	8.2	7.6	6.4	6.8	...
Malaysia	72.7	173.0	193.8	221.8	216.6	197.3	179.2	189.2	184.8	180.9	149.5	136.2	119.2	113.4	...
Myanmar	32.8	32.5	33.7	31.0	28.2	26.8	32.1	33.9	28.7	22.1	27.2	28.1	...	...	...
Philippines	26.9	64.3	73.9	84.5	75.6	69.2	66.9	63.3	61.4	60.1	58.1	50.6	48.6	46.0	...
Singapore	75.3	76.4	79.3	85.2	100.8	97.9	91.1	102.2	83.7	87.4	85.1	68.3	69.0	78.0	84.1
Thailand	94.1	141.3	146.4	177.6	176.7	155.8	138.3	128.6	127.8	130.7	124.5	119.2	109.0	104.6	105.1
Viet Nam	...	20.1	20.1	21.2	22.0	28.9	35.1	39.7	44.8	51.8	61.9	71.2	75.4	96.2	95.0
The Pacific															
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	38.5	45.8	44.2	39.3	34.2	29.7	37.9	35.0	34.5	37.9	39.6	47.3	53.4	54.3	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	-33.2	-47.5	-47.8	-50.7	-43.1	-45.5	-33.1	-50.9	-45.7	-32.1	-26.4	-28.6	-32.2	-17.8
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	35.7	29.2	28.1	33.4	35.3	31.7	28.2	24.1	27.6	23.0	23.0	22.2	23.7	22.6	25.7
Samoa	0.0	10.2	10.1	9.0	9.8	16.0	20.6	22.8	24.8	26.8	26.3	30.5	37.9	38.7	42.8
Solomon Islands	34.0	28.8	33.9	34.3	32.0	31.0	37.4	42.8	41.8	36.8	27.6	24.0	28.2	35.9	...
Timor-Leste	...	...	...	...	...	...	...	...	13.6	-11.6	-31.8	-13.7	8.7	-29.9	...
Tonga	45.7	57.7	57.7	67.0	66.1	56.6	61.0	64.3	65.3	64.3	58.4	70.8	67.8	61.0	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	36.1	36.4	36.4	35.0	36.9	41.4	39.6	41.4	49.3	48.3	48.2	47.6	44.8	49.5	...
Developed Member Countries															
Australia	71.6	81.8	85.1	85.0	89.7	93.2	95.7	97.2	104.0	107.7	112.2	117.2	123.1	141.8	150.5
Japan	262.6	288.1	292.9	276.7	298.4	309.9	308.9	299.5	299.2	307.3	303.2	312.8	304.9	294.4	293.2
New Zealand	80.1	92.2	94.0	102.3	108.4	112.1	111.7	109.8	112.9	116.3	120.9	131.4	139.8	144.4	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009), International Financial Statistics Online (IMF 2009).

Money and Finance

Table 3.12 **Bank nonperforming loans**
(percent of total gross loans)

	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries								
Central and West Asia								
Afghanistan	...	...	...	...	...	...	...	...
Armenia	17.5	24.4	9.9	5.4	2.1	1.9	2.5	2.4
Azerbaijan	...	28.0	21.5	15.1	9.5	7.2	...	...
Georgia	...	11.6	7.9	7.4	6.2	3.8	2.5	2.6
Kazakhstan	...	...	...	...	4.3	3.3	2.4	2.7
Kyrgyz Republic	...	...	...	...	...	...	...	...
Pakistan	19.5	23.4	21.8	17.0	11.6	8.9	6.9	8.4
Tajikistan	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...
East Asia								
China, People's Rep. of	22.4	29.8	26.0	20.4	12.8	9.8	7.5	6.7
Hong Kong, China	7.3	6.5	5.0	3.9	2.3	1.4	1.3	0.9
Korea, Rep. of	8.9	3.4	2.4	2.6	1.9	1.2	0.8	0.7
Mongolia	...	...	...	...	...	...	...	...
Taipei,China	5.3	7.5	6.1	4.3	2.8	2.2	2.1	1.8
South Asia								
Bangladesh	34.9	31.5	28.1	22.1	17.6	13.6	13.2	14.0
Bhutan	...	...	...	...	...	...	...	...
India	12.8	11.4	10.4	8.8	7.2	5.2	3.3	2.5
Maldives	...	...	...	...	...	...	...	...
Nepal	...	...	...	...	...	...	...	...
Sri Lanka	...	15.3	15.3	13.7	9.1	9.6	...	...
Southeast Asia								
Brunei Darussalam [a]	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...
Indonesia	34.4	31.9	24.0	19.4	14.3	14.8	13.2	9.3
Lao PDR	...	...	...	...	...	...	...	...
Malaysia	15.4	17.8	15.9	13.9	11.7	9.6	8.5	6.6
Myanmar	...	...	...	...	...	...	...	...
Philippines	24.0	27.7	26.5	18.1	14.4	10.3	7.5	5.8
Singapore	3.4	8.0	7.7	6.7	5.0	3.8	2.8	1.8
Thailand	17.7	11.5	15.7	13.5	11.9	9.1	8.1	7.9
Viet Nam	...	...	...	...	...	...	...	...
The Pacific								
Cook Islands	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...
Developed Member Countries								
Australia	0.5	0.6	0.4	0.3	0.2	0.2	0.2	0.2
Japan	5.3	8.4	7.4	5.2	2.9	1.8	1.5	1.5
New Zealand	...	...	...	...	...	...	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); for Taipei,China: economy sources.

Table 3.13 **Growth rates of stock market price index**
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	-28.9	-17.9	-6.7	-27.8	-1.3	26.3	-24.4	8.7	71.5	55.4	29.3	19.8	8.4	...
Tajikistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	-14.3	65.1	30.2	-4.0	19.2	51.7	-20.6	-17.5	10.3	-15.4	-11.1	101.1	123.9	-63.8
Hong Kong, China	-5.5	27.5	16.6	-29.5	34.4	26.5	-21.6	-16.8	-1.8	25.7	11.1	17.7	37.3	-9.8
Korea, Rep. of	-4.8	-9.7	-21.5	-37.4	96.2	-8.7	-21.7	32.2	-10.2	22.6	28.5	26.3	26.7	-10.6
Mongolia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taipei,China	-11.3	8.3	40.1	-8.0	-4.0	5.7	-37.5	6.5	-1.2	16.9	1.0	12.3	24.4	-17.5
South Asia														
Bangladesh	12.8	80.8	-24.2	-43.4	-17.3	12.2	17.6	17.9	2.3	67.6	23.4	-12.8	54.8	26.0
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	-17.4	0.6	12.5	-12.1	24.1	11.2	-24.5	-6.4	66.3	17.9	43.3	48.7	49.5	-50.4
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sri Lanka	...	-16.4	9.3	-9.0	-9.9	-10.3	-8.4	56.3	41.8	35.7	46.8	15.7	14.0	-14.8
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	...	18.1	1.9	-30.2	29.8	-9.1	-17.9	11.6	13.8	56.4	35.0	32.6	53.6	-4.9
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	-6.9	15.2	-13.8	-47.0	33.7	21.4	-24.0	11.2	-0.9	20.8	6.4	5.8	37.0	-12.4
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	-10.9	-2.6	-12.9	-33.5	54.5	-6.3	-35.6	24.8	-15.7	41.8	151.7	106.0	199.9	31.7
Singapore	-5.5	10.7	-7.7	-33.1	59.8	5.0	-19.3	5.0	-4.8	28.1	16.2	15.9	33.9	-23.5
Thailand	...	...	...	-40.4	19.0	-18.7	-11.4	20.8	31.6	37.5	4.2	4.1	6.6	-10.3
Viet Nam	...	...	...	...	...	...	...	-37.5	-21.1	59.4	8.3	95.6	95.5	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	34.8	19.5	17.8	52.5	36.1	15.4	19.8
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries														
Australia	-0.7	12.1	11.7	4.8	10.5	7.9	3.2	-2.9	-4.1	16.3	21.3	19.2	20.7	-21.0
Japan	-13.7	16.3	-13.1	-15.5	17.6	11.6	-22.7	-18.0	-6.2	21.8	13.5	28.2	2.3	-28.6
New Zealand	5.4	12.3	16.3	17.3	-11.1	2.3	5.3	10.0	11.0	27.4	20.2	9.8	15.4	-21.3

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Financial Statistics Online (IMF 2009); for Taipei,China: economy sources.

Money and Finance

Table 3.14 **Stock market capitalization**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Armenia	...	...	...	...	...	...	2	10	27	18	43	60	105	...
Azerbaijan	...	...	..	3	4	...	...	...	...	...	...	...	...	...
Georgia	...	...	..	...	...	24	89	105	203	206	355	668	1389	...
Kazakhstan	...	...	1342	1831	2265	1342	1204	1341	2425	3941	10521	43688	41378	...
Kyrgyz Republic	...	...	..	...	4	4	4	7	31	34	42	93	121	...
Pakistan	9286	10639	10966	5418	6965	6581	4944	10200	16579	29002	45937	45518	70262	23491
Tajikistan	...	...	...	...	...	...	...	..	..	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	..	...	...	...	...	...	...
Uzbekistan	...	128	465	...	119	32	28	31	14	4	37	715	...	...
East Asia														
China, People's Rep. of	42055	113755	206366	231322	330703	580991	523952	463080	681204	639765	780763	2426326	6226305	2793613
Hong Kong, China	303705	449381	413323	343394	609090	823398	506073	463085	551237	665248	693486	895249	1162566	468596
Korea, Rep. of	181955	138817	46052	121157	395864	171587	220046	249639	329616	428649	718180	935188	1123633	494631
Mongolia	27	26	54	40	32	37	37	32	42	25	46	113	612	...
Taipei,China	192944	274199	338295	250940	365818	262335	303181	263048	373910	418562	486021	595641	655481	371435
South Asia														
Bangladesh	1338	4551	1537	1034	865	1186	1145	1193	1622	3317	3035	3810	6793	6671
Bhutan	...	33	36	39	38	...	...	...	...	...	...	...	...	...
India	127199	122605	128466	105188	184605	148064	110396	131011	279093	387851	553074	818879	1819101	645478
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	244	207	200	267	386	790	494	417	483	853	1344	1805	4909	...
Sri Lanka	1998	1848	2096	1705	1584	1074	1332	1681	2711	3657	5720	7769	7553	4326
Southeast Asia														
Brunei Darussalam [a]	...	...	..	..	...	...	...	...	...	..	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	66585	91016	29105	22104	64087	26834	23006	29991	54659	73251	81428	138886	211693	98761
Lao PDR	...	...	..	...	...	...	...	...	..	..	...	...	...	...
Malaysia	222729	307179	93608	98557	145445	116935	120007	123872	168376	190011	181236	235356	325663	187066
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	58930	80675	31360	35314	42149	25957	41523	39021	23565	28948	40153	68382	103224	52101
Singapore	148004	150215	106317	94469	198407	152827	117338	101900	229328	277004	316658	276329	353489	180021
Thailand	141507	99828	23538	34903	58365	29489	36349	46173	121233	116685	124864	141093	196046	102594
Viet Nam	...	...	...	...	..	..	...	...	154	248	461	9093	19542	9589
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	..	..	...	...	...
Fiji Islands	67	82	93	88	108	244	121	373	433	539	587	637	522	...
Kiribati	...	...	...	...	...	...	...	...	...	..	..	...	...	...
Marshall Islands	...	...	..	..	...	...	...	...	...	..	..	...	...	...
Micronesia, Fed. States of	...	...	..	...	...	...	...	...	...	..	..	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	1520	1423	2339	2942	3166	6632	...	...
Samoa	...	...	...	...	...	...	..	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Developed Member Countries														
Australia	245218	311981	295785	328949	427683	372794	375131	378846	585475	776403	804074	1095858	1298429	675619
Japan	3667292	3088850	2216699	2495757	4546937	3157222	2251814	2126075	3040685	3678262	4736513	4726269	4453475	3220485
New Zealand	31950	38641	30511	25028	28106	18866	17779	21745	33052	43731	43409	44940	47454	24166

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); *S&P Global Stock Markets Factbook 2009* (Standard and Poor's 2009); for Taipei,China: economy sources.

Table 3.15 **Stock market capitalization**
(percent of GDP)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries															
Central and West Asia															
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	...	...	...	...	...	...	0.1	0.4	1.0	0.5	0.9	0.9	1.1	...
Azerbaijan	...	...	...	...	0.1	0.1	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	0.8	2.8	3.1	5.1	4.0	5.5	8.6	13.7	...
Kazakhstan	...	...	...	8.1	8.3	13.4	7.3	5.4	5.4	7.9	9.1	18.4	53.9	39.5	...
Kyrgyz Republic	...	...	...	...	...	0.3	0.3	0.3	0.5	1.6	1.5	1.7	3.3	3.2	...
Pakistan	7.1	15.3	16.8	17.6	8.7	11.1	8.9	6.8	14.1	19.9	29.6	42.0	35.7	49.2	16.6
Tajikistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	0.9	3.2	...	0.7	0.2	0.2	0.3	0.1	0.0	0.3	4.2	...	...
East Asia															
China, People's Rep. of	...	5.8	13.3	21.7	22.7	30.5	48.5	39.5	31.9	41.5	33.1	34.9	91.3	194.2	64.6
Hong Kong, China	108.5	210.6	282.7	234.4	205.7	373.0	368.6	303.8	282.7	347.6	401.0	390.1	471.4	561.4	217.6
Korea, Rep. of	42.1	35.2	24.9	8.9	35.1	88.8	32.2	43.6	43.3	51.2	59.4	85.0	87.8	107.1	53.2
Mongolia	...	2.2	2.2	5.1	4.1	3.5	3.4	3.2	2.5	2.9	1.4	2.0	3.6	15.6	...
Taipei,China	60.6	70.4	94.8	112.6	90.8	122.4	81.7	103.9	88.4	122.3	126.4	136.5	162.6	170.4	94.7
South Asia															
Bangladesh	1.1	3.5	11.2	3.6	2.3	1.9	2.5	2.4	2.5	3.1	5.9	5.0	5.8	9.9	8.4
Bhutan	...	...	10.3	9.7	10.2	8.9	...	...	...	...	...	...	...	...	...
India	12.2	35.7	31.6	31.3	25.3	41.0	32.2	23.1	25.8	46.6	55.3	68.3	89.5	154.6	56.9
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	...	5.5	4.6	4.1	5.5	7.7	14.4	8.2	6.9	7.6	11.7	16.4	20.0	47.6	...
Sri Lanka	11.4	15.3	13.3	13.9	10.8	10.1	6.6	8.5	9.8	14.4	17.7	23.4	27.5	23.4	10.6
Southeast Asia															
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	7.1	32.9	40.0	13.5	23.2	45.8	16.3	14.3	15.3	23.3	28.5	28.5	38.1	48.9	19.3
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	110.4	250.7	304.6	93.5	136.6	183.8	124.7	129.3	122.8	152.8	152.3	131.4	150.5	174.4	84.5
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	13.4	79.5	97.4	38.1	54.2	55.3	34.2	58.3	50.8	29.6	33.3	40.6	58.2	71.7	31.2
Singapore	93.1	175.6	162.3	110.9	114.6	240.2	164.8	137.3	115.7	248.3	252.6	261.8	198.5	211.7	98.9
Thailand	28.0	84.3	54.9	15.6	31.2	47.7	24.0	31.5	36.4	85.0	72.3	70.8	68.3	79.9	37.5
Viet Nam	...	...	...	...	...	...	...	...	...	0.4	0.5	0.9	15.2	28.5	10.6
The Pacific															
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	3.4	3.9	4.4	5.3	5.5	14.5	7.3	20.2	18.7	19.7	19.8	20.1	15.2	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	49.3	47.4	66.1	74.9	64.3	118.9	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries															
Australia	35.7	67.9	79.4	69.3	84.0	109.1	99.7	105.2	84.8	115.5	125.5	117.3	150.4	148.4	71.1
Japan	95.7	69.9	66.6	52.1	64.7	104.1	67.6	55.0	54.3	71.9	79.9	104.0	108.3	101.7	65.6
New Zealand	20.1	51.5	58.9	47.6	46.0	48.4	35.8	33.9	35.9	40.7	44.0	39.1	41.8	36.4	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); *S&P Global Stock Markets Factbook 2009* (Standard and Poor's 2009); ADB staff estimates; for Taipei,China: economy sources.

Exchange Rates

Table 3.16 **Official exchange rate**
(local currency units per US$, period averages)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	0.83	2.50	3.00	3.00	45.11	61.63	65.69	41.46	48.76	47.85	49.49	49.93	49.96	50.25
Armenia	405.91	414.04	490.85	504.92	535.06	539.53	555.08	573.35	578.76	533.45	457.69	416.04	342.08	305.97
Azerbaijan	0.88	0.86	0.80	0.77	0.82	0.89	0.93	0.97	0.98	0.98	0.95	0.89	0.86	0.82
Georgia	...	1.26	1.30	1.39	2.02	1.98	2.07	2.20	2.15	1.92	1.81	1.78	1.67	1.49
Kazakhstan	60.95	67.30	75.44	78.30	119.52	142.13	146.74	153.28	149.58	136.04	132.88	126.09	122.55	120.30
Kyrgyz Republic	10.82	12.81	17.36	20.64	39.01	47.70	48.38	46.94	43.65	42.65	41.01	40.15	37.32	36.57
Pakistan	31.64	36.08	41.11	45.05	49.50	53.65	61.93	59.72	57.75	58.26	59.51	60.27	60.74	70.41
Tajikistan	0.12	0.30	0.56	0.78	1.24	2.08	2.37	2.76	3.06	2.97	3.12	3.30	3.44	3.43
Turkmenistan	207.70	3499.80	4534.30	5130.10	8169.40	9478.60	9827.90	10097.50	10033.50	10375.00	11015.20	10681.90	10690.00	13041.50
Uzbekistan	33.00	44.68	90.70	131.80	257.18	360.68	646.27	885.04	995.54	999.18	1072.26	1219.83	1263.72	1320.20
East Asia														
China, People's Rep. of	8.35	8.31	8.29	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.19	7.97	7.61	6.95
Hong Kong, China	7.74	7.73	7.74	7.75	7.76	7.79	7.80	7.80	7.79	7.79	7.78	7.77	7.80	7.79
Korea, Rep. of	771.27	804.45	951.29	1401.44	1188.82	1130.96	1290.99	1251.09	1191.61	1145.32	1024.12	954.79	929.26	1102.05
Mongolia	448.61	548.40	789.99	840.83	1021.87	1076.67	1097.70	1110.31	1146.54	1185.28	1205.22	1165.37	1170.96	1165.74
Taipei,China	26.48	27.46	28.66	33.44	32.27	31.23	33.80	34.58	34.42	33.42	32.17	32.53	32.84	31.52
South Asia														
Bangladesh	40.28	41.79	43.89	46.91	49.09	52.14	55.81	57.89	58.15	59.51	64.33	68.93	68.87	68.60
Bhutan	32.43	35.43	36.31	41.26	43.06	44.94	47.19	48.61	46.58	45.32	44.10	45.31	41.35	43.51
India	32.43	35.43	36.31	41.26	43.06	44.94	47.19	48.61	46.58	45.32	44.10	45.31	41.35	43.51
Maldives	11.77	11.77	11.77	11.77	11.77	11.77	12.24	12.80	12.80	12.80	12.80	12.80	12.80	12.80
Nepal	51.89	56.69	58.01	65.98	68.24	71.09	74.95	77.88	76.14	73.67	71.37	72.76	66.42	69.76
Sri Lanka	51.25	55.27	58.99	64.45	70.64	77.01	89.38	95.66	96.52	101.19	100.50	103.91	110.62	108.33
Southeast Asia														
Brunei Darussalam [a]	1.42	1.41	1.48	1.67	1.69	1.72	1.79	1.79	1.74	1.69	1.66	1.59	1.51	1.41
Cambodia	2450.83	2624.08	2946.25	3744.42	3807.83	3840.75	3916.33	3912.08	3973.33	4016.25	4092.50	4103.25	4056.17	4054.17
Indonesia	2248.61	2342.30	2909.38	10013.60	7855.15	8421.78	10260.90	9311.19	8577.13	8938.85	9704.74	9159.32	9141.00	9698.96
Lao PDR	804.69	921.02	1259.98	3298.33	7102.02	7887.64	8954.58	10056.30	10569.00	10585.40	10655.20	10159.90	9603.16	...
Malaysia	2.50	2.52	2.81	3.92	3.80	3.80	3.80	3.80	3.80	3.80	3.79	3.67	3.44	3.34
Myanmar	5.61	5.86	6.18	6.27	6.22	6.43	6.68	6.57	6.08	5.75	5.75	5.78	5.56	5.39
Philippines	25.71	26.22	29.47	40.89	39.09	44.19	50.99	51.60	54.20	56.04	55.09	51.31	46.15	44.47
Singapore	1.42	1.41	1.48	1.67	1.69	1.72	1.79	1.79	1.74	1.69	1.66	1.59	1.51	1.41
Thailand	24.92	25.34	31.36	41.36	37.81	40.11	44.43	42.96	41.48	40.22	40.22	37.88	34.52	33.31
Viet Nam	11038.30	11032.60	11683.30	13268.00	13943.20	14167.70	14725.20	15279.50	15509.60	15746.00	15858.90	15994.30	16105.10	16302.30
The Pacific														
Cook Islands	1.52	1.45	1.51	1.87	1.89	2.20	2.38	2.16	1.72	1.51	1.42	1.54	1.36	1.42
Fiji Islands	1.41	1.40	1.44	1.99	1.97	2.13	2.28	2.19	1.90	1.73	1.69	1.73	1.61	1.59
Kiribati	1.35	1.28	1.35	1.59	1.55	1.72	1.93	1.84	1.54	1.36	1.31	1.33	1.20	1.19
Marshall Islands [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	1.35	1.28	1.35	1.59	1.55	1.72	1.93	1.84	1.54	1.36	1.31	1.33	1.20	1.19
Palau [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	1.28	1.32	1.44	2.07	2.57	2.78	3.39	3.90	3.56	3.22	3.10	3.06	2.97	2.70
Samoa	2.47	2.46	2.56	2.95	3.01	3.29	3.48	3.38	2.97	2.78	2.71	2.78	2.62	2.64
Solomon Islands	3.41	3.57	3.72	4.82	4.84	5.09	5.28	6.75	7.51	7.48	7.53	7.61	7.65	7.73
Timor-Leste [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	1.27	1.23	1.26	1.49	1.60	1.76	2.12	2.20	2.15	1.97	1.94	2.03	1.97	1.94
Tuvalu	1.35	1.28	1.35	1.59	1.55	1.72	1.93	1.84	1.54	1.36	1.31	1.33	1.20	1.19
Vanuatu	112.11	111.72	115.87	127.52	129.07	137.64	145.31	139.20	122.19	111.79	109.25	110.64	102.44	101.33
Developed Member Countries														
Australia	1.35	1.28	1.35	1.59	1.55	1.72	1.93	1.84	1.54	1.36	1.31	1.33	1.20	1.19
Japan	94.06	108.78	120.99	130.91	113.91	107.77	121.53	125.39	115.93	108.19	110.22	116.30	117.75	103.36
New Zealand	1.52	1.45	1.51	1.87	1.89	2.20	2.38	2.16	1.72	1.51	1.42	1.54	1.36	1.42

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Unit of currency is the US Dollar.

Sources: International Financial Statistics Online (IMF 2009); European Bank for Reconstruction and Development (EBRD); Taipei,China: economy sources.

Table 3.17 **Purchasing power parity conversion factor**
(local currency units per US$, period averages)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries									
Central and West Asia									
Afghanistan	...	...	11.78	12.27	13.96	15.13	16.09	...	...
Armenia	165.19	167.80	168.82	172.90	178.62	178.58	181.12	183.78	187.24
Azerbaijan	0.27	0.27	0.27	0.28	0.30	0.33	0.36	0.40	0.39
Georgia	0.62	0.64	0.66	0.67	0.71	0.74	0.78	0.83	0.89
Kazakhstan	36.52	39.28	40.85	44.69	50.45	57.61	67.88	76.39	96.29
Kyrgyz Republic	10.01	10.49	10.52	10.71	10.94	11.35	12.04	13.31	13.73
Pakistan	16.21	17.08	17.20	17.59	18.43	19.10	20.46	21.51	23.84
Tajikistan	0.33	0.41	0.49	0.62	0.70	0.74	0.87	1.08	1.23
Turkmenistan	...	...	...	...	...	3950.28	...	...	...
Uzbekistan	91.44	129.64	185.32	229.94	258.66	304.12	358.22	432.68	409.03
East Asia									
China, People's Rep. of	3.33	3.32	3.28	3.30	3.43	3.45	3.46	3.63	3.80
Hong Kong, China	7.50	7.19	6.82	6.27	5.88	5.69	5.50	5.52	5.47
Korea, Rep. of	773.93	785.32	796.63	807.66	809.54	788.92	764.06	759.19	762.55
Mongolia	272.34	282.64	292.07	314.03	357.67	417.22	497.98	544.90	652.07
Taipei,China	22.42	22.00	21.57	20.85	20.09	19.34	18.61	18.19	17.38
South Asia									
Bangladesh	21.32	21.15	21.45	21.95	22.24	22.64	23.09	24.01	25.54
Bhutan	14.20	14.78	15.12	15.35	15.36	15.74	15.94	15.48	...
India	13.61	13.70	13.97	14.17	14.54	14.67	14.93	15.25	15.83
Maldives	8.79	8.64	8.55	8.33	8.29	8.13	8.20	8.51	...
Nepal	19.41	21.04	21.49	21.69	21.96	22.65	23.49	24.65	25.98
Sri Lanka	24.76	27.48	30.20	31.09	32.88	35.17	37.94	42.13	47.92
Southeast Asia									
Brunei Darussalam [a]	0.74	0.68	0.67	0.70	0.78	0.90	0.96	0.95	0.99
Cambodia	1234.87	1237.68	1225.12	1221.11	1244.26	1278.55	1296.88	1345.67	1566.82
Indonesia	2806.08	3131.79	3259.41	3366.49	3552.33	3934.26	4351.33	4724.63	5453.77
Lao PDR	2036.74	2159.95	2348.81	2661.50	2855.69	2988.38	3071.75	3096.79	3227.95
Malaysia	1.69	1.62	1.64	1.66	1.71	1.73	1.75	1.79	1.93
Myanmar	108.05	131.74	183.27	218.33	219.12	249.69	...	...	...
Philippines	18.86	19.60	20.13	20.45	21.09	21.75	22.17	22.21	23.40
Singapore	1.20	1.15	1.12	1.09	1.11	1.08	1.05	1.07	1.05
Thailand	16.01	15.95	15.81	15.68	15.72	15.93	16.22	16.31	16.66
Viet Nam	4025.54	4007.45	4093.65	4276.22	4496.79	4712.69	4900.71	5167.47	6147.17
The Pacific									
Cook Islands	...	...	...	...	...	...	...	...	...
Fiji Islands	1.30	1.32	1.34	1.41	1.40	1.43	1.48	1.55	1.68
Kiribati	0.78	0.81	0.77	0.76	0.75	0.66	0.69	0.70	0.70
Marshall Islands	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	0.79	0.78	0.77	0.75	0.74	0.75	0.76	0.76	...
Nauru	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...
Papua New Guinea	1.04	1.09	1.20	1.24	1.18	1.34	1.41	1.41	1.48
Samoa	1.51	1.51	1.51	1.53	1.59	1.63	1.68	1.69	1.70
Solomon Islands	2.70	2.72	2.88	3.00	3.08	3.20	3.37	3.48	3.98
Timor-Leste	0.50	0.49	0.48	0.49	0.48	0.47	0.48	0.52	0.56
Tonga	0.94	0.94	1.03	1.10	1.12	1.20	1.28	1.32	1.35
Tuvalu	...	...	...	...	...	...	...	...	...
Vanuatu	57.30	58.21	57.85	58.72	58.33	58.13	59.75	55.91	...
Developed Member Countries									
Australia	1.31	1.33	1.34	1.35	1.37	1.39	1.41	1.42	1.45
Japan	154.94	149.44	143.77	139.68	134.32	129.55	124.33	120.14	116.32
New Zealand	1.45	1.47	1.47	1.50	1.51	1.54	1.52	1.55	1.55

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: ADB staff estimates using World Development Indicators Online (World Bank 2009), country sources, CEIC data, International Monetary Fund, and US Bureau of Economic Analysis.

Exchange Rates

Table 3.18 **Price level indexes**
(PPPs to official exchange rates, period averages, United States = 100)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries									
Central and West Asia									
Afghanistan	...	...	28.40	25.16	29.18	30.57	32.24	...	...
Armenia	30.62	30.23	29.44	29.87	33.48	39.02	43.53	53.73	61.19
Azerbaijan	29.73	28.60	27.77	28.53	30.02	35.10	40.08	46.52	47.47
Georgia	31.26	30.66	30.14	31.23	36.83	40.71	43.59	49.62	59.77
Kazakhstan	25.69	26.77	26.65	29.88	37.09	43.35	53.84	62.34	80.04
Kyrgyz Republic	20.98	21.68	22.41	24.53	25.65	27.68	29.99	35.67	37.54
Pakistan	30.22	27.59	28.80	30.46	31.63	32.10	33.94	35.41	33.86
Tajikistan	15.72	17.49	17.80	20.13	23.64	23.88	26.33	31.42	35.92
Turkmenistan	...	...	...	...	...	35.86	...	...	...
Uzbekistan	25.35	20.06	20.94	23.10	25.89	28.36	29.37	34.24	30.98
East Asia									
China, People's Rep. of	40.26	40.13	39.67	39.86	41.42	42.07	43.45	47.66	54.68
Hong Kong, China	96.28	92.15	87.43	80.46	75.44	73.13	70.81	70.70	70.22
Korea, Rep. of	68.43	60.83	63.68	67.78	70.68	77.03	80.02	81.70	69.19
Mongolia	25.29	25.75	26.31	27.39	30.18	34.62	42.73	46.53	55.94
Taipei,China	71.81	65.10	62.39	60.59	60.11	60.13	57.22	55.38	55.14
South Asia									
Bangladesh	40.89	37.90	37.05	37.75	37.38	35.20	33.49	34.87	37.23
Bhutan	31.59	31.32	31.09	32.96	33.90	35.69	35.18	37.43	...
India	30.29	29.02	28.74	30.41	32.09	33.26	32.95	36.89	36.39
Maldives	74.72	70.59	66.77	65.10	64.79	63.54	64.06	66.51	...
Nepal	27.30	28.07	27.59	28.48	29.81	31.74	32.29	37.12	37.25
Sri Lanka	32.15	30.74	31.57	32.21	32.49	35.00	36.51	38.09	44.24
Southeast Asia									
Brunei Darussalam [a]	42.78	37.95	37.46	40.00	46.44	54.26	60.63	62.86	69.73
Cambodia	32.15	31.60	31.32	30.73	30.98	31.24	31.61	33.18	38.65
Indonesia	33.32	30.52	35.01	39.25	39.74	40.54	47.51	51.69	56.23
Lao PDR	25.82	24.12	23.36	25.18	26.98	28.05	30.23	32.25	...
Malaysia	44.34	42.62	43.19	43.69	45.02	45.79	47.58	52.03	57.80
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	42.69	38.43	39.00	37.73	37.64	39.49	43.21	48.12	52.61
Singapore	69.74	64.43	62.67	62.59	65.41	64.80	66.21	70.74	74.51
Thailand	39.91	35.91	36.80	37.81	39.09	39.61	42.81	47.25	50.01
Viet Nam	28.41	27.21	26.79	27.57	28.56	29.72	30.64	32.09	37.71
The Pacific									
Cook Islands	...	...	...	...	...	...	...	...	...
Fiji Islands	61.23	57.79	61.08	74.43	80.91	84.55	84.58	96.26	105.37
Kiribati	44.97	41.78	41.78	49.58	55.08	50.58	52.30	58.71	58.46
Marshall Islands	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	79.05	78.19	76.74	74.96	74.18	74.83	75.75	75.86	...
Nauru	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...
Papua New Guinea	37.44	32.09	30.81	34.80	36.86	43.07	46.14	47.46	54.76
Samoa	45.88	43.30	44.58	51.53	57.34	60.07	60.47	64.74	64.36
Solomon Islands	52.99	51.51	42.70	39.96	41.17	42.50	44.25	45.45	51.42
Timor-Leste	50.18	49.07	48.24	49.48	47.94	46.91	47.52	51.98	56.48
Tonga	53.21	44.20	46.88	51.07	57.04	62.01	63.09	66.98	69.73
Tuvalu	...	...	...	...	...	...	...	...	...
Vanuatu	41.63	40.06	41.56	48.05	52.18	53.21	54.00	54.58	...
Developed Member Countries									
Australia	76.15	68.91	72.61	87.68	100.65	106.02	106.03	119.22	122.01
Japan	143.78	122.96	114.66	120.48	124.15	117.54	108.91	102.02	112.54
New Zealand	65.68	61.87	67.94	87.15	100.34	108.08	98.78	113.67	108.97

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: ADB staff estimates.

Globalization

The People's Republic of China (PRC) has by far the biggest share of **merchandise exports** in the region and has replaced Japan as the top exporter. The largest part of Asia's external trade is within the region. Trade with Europe and North and Central America accounts for much smaller shares of both imports and exports. Much of intra-Asian trade now consists of **trade in parts and components**. **Migrant workers' remittances** have risen more than sixfold since the mid-1990s with most of them going to the five most populous countries and the Philippines. Net inflows of **foreign direct investment** have also increased significantly over the last decade but over 80% goes to just six countries, including the PRC and India. A number of economies experienced a fall in net inflows of foreign direct investment in 2008.

Introduction

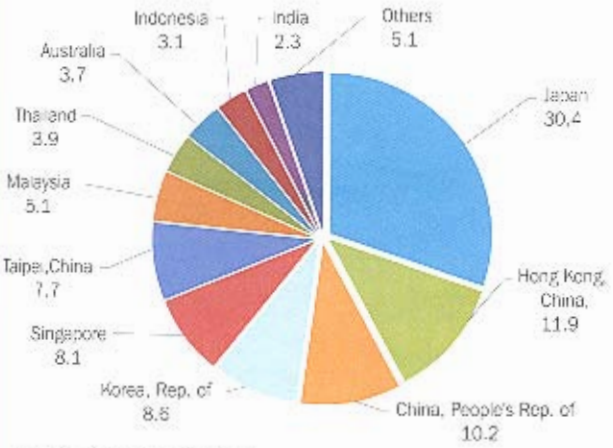
The statistics in this theme illustrate the extent of **globalization** in the Asia and Pacific region. Globalization means the growing freedom to move goods and services across borders and for migrants to work abroad while remitting a part of their incomes to their families at home. Finally, globalization means fewer restrictions on capital flows between countries.

The tables show the size and direction of merchandise trade, the current account balance, migrant workers' remittances, official and private capital flows, international reserves, and external indebtedness.

Key Trends

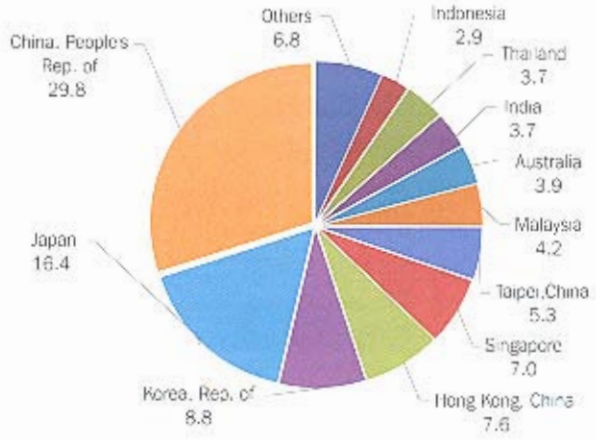
The People's Republic of China becomes the region's top exporter. Figure 4.1a and Figure 4.1b show how the shares of merchandise exports from the Asia and Pacific region have changed from 1995 to 2008. It covers the 11 largest trading economies that together account for more than 90% of total exports in the region. The most striking feature is that by 2008, the PRC had replaced Japan as the top exporter. It is interesting to note that despite its size, India is still a minor exporter—on a par with Thailand but well behind two much smaller-sized economies, Australia and Malaysia. India has however increased its share of the region's exports from 2.3% in 1995 to 3.7% in 2008.

Figure 4.1a **Percentage Distribution of Merchandise Exports, 1995**



Source: Derived from Table 4.8.

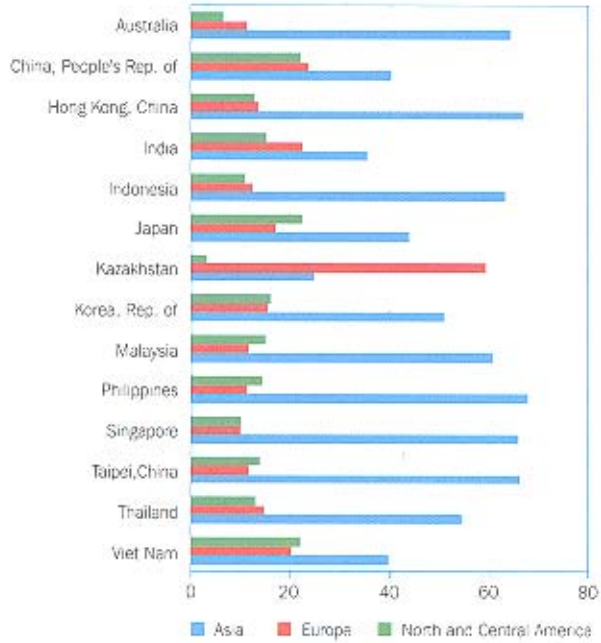
Figure 4.1b **Percentage Distribution of Merchandise Exports, 2008**



Source: Derived from Table 4.8.

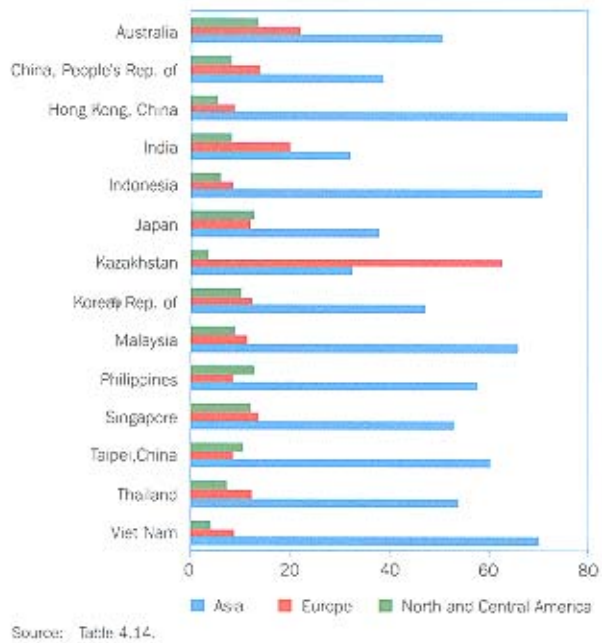
Asia's trade is mainly within Asia. The destinations of merchandise exports are shown in Figure 4.2a for 14 major exporters. Other Asian economies are by far the biggest export market for all economies except Kazakhstan, with nearly 60% of its exports (mainly petroleum products) going to Europe. The origin of merchandise imports shows a similar pattern, i.e., for most major importers, other Asian economies are the dominant source (Figure 4.2b).

Figure 4.2a **Destination of Merchandise Exports, 2008 (percent)**



Source: Table 4.13.

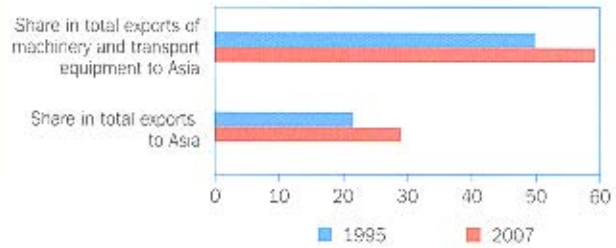
Figure 4.2b **Origin of Merchandise Imports, 2008 (percent)**



Source: Table 4.14.

Although the shares of Asia's direct trade with Europe and America are relatively low, Asia remains highly dependent on exports to the developed world. Much of the trade within Asia consists of trade in parts and components that are incorporated into finished goods destined for markets in Europe and America. As shown in Figure 4.3, the combined shares of parts and components in the exports of machinery and transport equipment and total exports to Asia of selected major exporters—PRC; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Malaysia; Philippines; Singapore; and Thailand—have increased from 1995 to 2007.

Figure 4.3 **Percentage Share of Selected Parts and Components in Total Exports of Selected Major Exporters in Asia, 1995 and 2007**



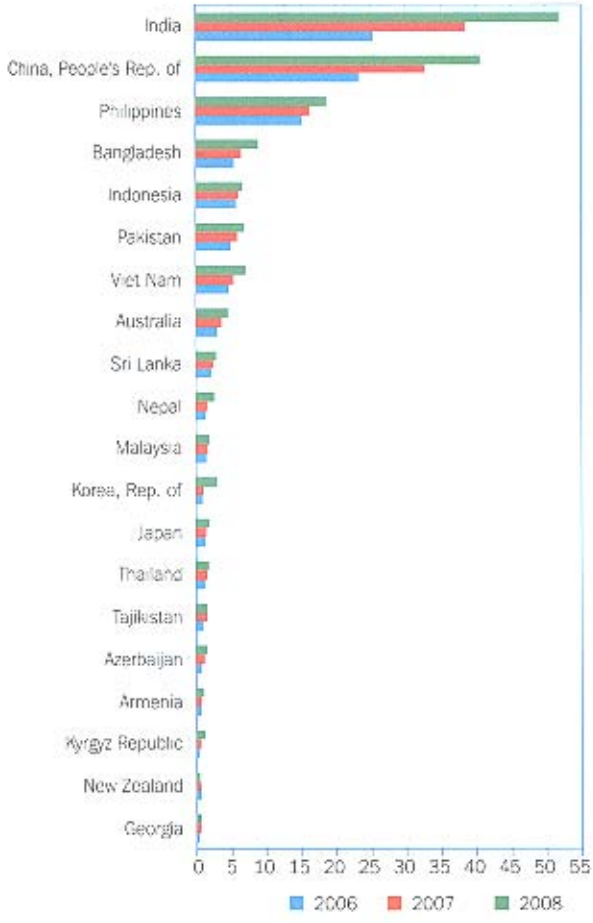
Source: Derived from United Nations Commodity Trade Database (UNSD 2009)

Migrant workers' remittances are a vital and growing source of income. Migrant workers' remittances consist of earnings of persons who work abroad for only a few months in the year, transfers of capital when people change their country of residence, and money sent back to their home countries by migrants working abroad for several years at a time. The last of these is by far the largest component and for simplicity all three kinds of transfers are referred to here as migrant workers' remittances.

Migrant workers' remittances form an important source of income for many Asian countries and Table 4.4 shows that they have grown more than sixfold since the mid-1990s. Figure 4.4 shows the dollar value of remittances for the 20 countries that currently receive over 95% of total remittances to the region. Philippines and the five most populous countries receive the bulk of these.

Migrant workers' remittances in India surged in 2008, partly because of a weakening Rupee and widening differentials between domestic and international interest rates. For the 20 economies in Figure 4.4, remittances rose sharply by 30.6% in 2007 before slowing down to 26.6% in 2008. Migrant workers' remittances are highly dependent on economic conditions in Europe, North America, and the Middle-East. The current economic recession in many of these countries suggests that remittances to the Asia and Pacific region will level off or decline in the immediate future. The World Bank has forecast a global reduction in migrant workers' remittances to all developing countries of 7.3% in 2009 compared with those in 2008.

Figure 4.4 **Migrant Workers' Remittances, 2006, 2007, and 2008 (US$ billion)**

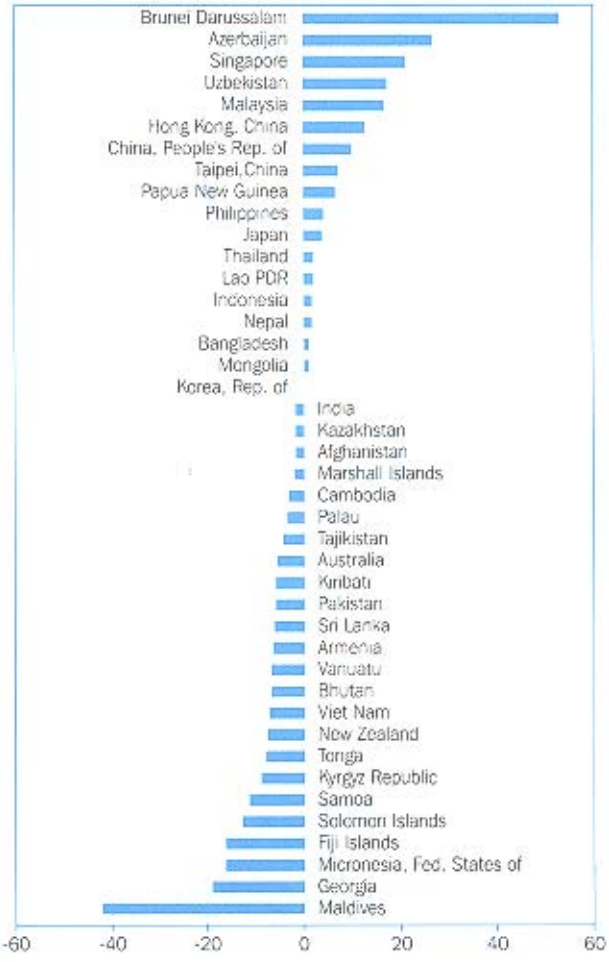


Source: Derived from Table 4.4.

Most economies have sound balance of payments. The current account balance is the difference between a country's current receipts from abroad and its current payments to foreigners. Current receipts and payments come from exports and imports of goods and services, remittances by migrant workers, interest, and dividends. A positive current account balance is used to repay foreign debt or acquire foreign assets while a negative balance is financed by liquidating foreign assets or by borrowing from abroad.

Figure 4.5 shows large positive current account balances as a percentage of GDP in Azerbaijan, Brunei Darussalam, Malaysia, Singapore, and Uzbekistan. These economies were net capital exporters—lending abroad more than they borrowed. Fiji Islands, Georgia, Maldives, and Federated States of Micronesia reported quite large deficits but the majority of countries do not face current account deficit to GDP ratios that are high enough to cause exchange rate depreciation, capital flight and, more generally, macroeconomic instability.

Figure 4.5 **Current Account Balance as a Percentage of GDP, Average of Latest Three Years**



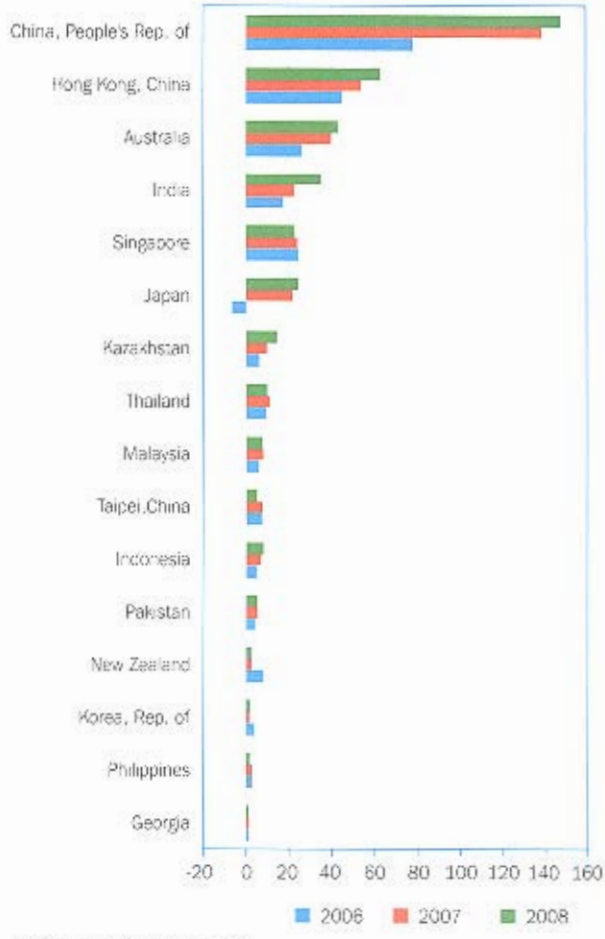
Source: Derived from Table 4.3.

Foreign direct investment is a boon for some. Foreign direct investment (FDI) is defined as a financial investment made abroad with the purpose of acquiring significant influence or outright control over a foreign enterprise. It may involve establishing a new company abroad or investing in an existing enterprise. FDI is important because besides creating jobs, it usually involves the transfer of technology and managerial skills from more developed to less developed economies.

The 16 economies in Figure 4.6 typically account for well over 95% of FDI net inflows in the region and just six economies—Australia; People's Republic of China; Hong Kong, China; India; Japan; and Singapore—accounted for over 80% of the total over the 3 years (2006–2008). FDI is profit-motivated, being undertaken to earn returns that may not be available in the home country. FDI mainly benefits countries that are growing rapidly, seen as politically stable and that are, in many cases, already rich.

Table 4.6 shows a very substantial increase in net inflows of FDI over the last decade. However, a number of economies in Figure 4.5 experienced a fall in net inflows of FDI in 2008. As a result, total FDI for the 16 economies in Figure 4.5 increased by 9.5%, compared with 51% in 2007. On the other hand, India recorded a particularly sharp rise. This country has traditionally been wary of encouraging FDI because of its potential to induce financial instability if the foreign funds are rapidly withdrawn. This policy is now changing and India was the fourth largest recipient of FDI in 2008.

Figure 4.6 **Net Inflows of Foreign Direct Investment, 2006, 2007, and 2008 (US$ billion)**



Source: Derived from Table 4.6.

Data Issues and Comparability

International trade statistics are closely monitored by the World Trade Organization and other international agencies. Common definitions are used by all countries, and the larger Asian countries use standard forms and procedures for data processing.

Most of the other international transactions in this section are taken from balance of payments statistics. Countries follow guidelines of the International Monetary Fund in compiling these statistics and meet regularly to discuss methodology, but many countries have difficulty in accurately recording nonofficial transactions such as workers' remittances and private capital flows.

Table 4.1 **Trade in goods balance**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	-27.7	-39.7	-38.9	-36.9	-37.0	-58.0	-62.7
Armenia	-31.3	-29.4	-34.1	-30.5	-25.7	-24.2	-19.8	-15.5	-15.5	-12.8	-12.0	-14.0	-17.4	-22.1
Azerbaijan	-15.4	-21.8	-14.3	-23.5	-8.9	6.1	10.8	7.7	-1.3	1.9	24.9	36.9	46.1	49.7
Georgia	...	-19.2	-22.4	-19.6	-21.4	-17.4	-17.1	-14.4	-16.0	-17.9	-18.9	-26.1	-28.5	-30.0
Kazakhstan	0.7	-1.6	-1.2	-3.6	2.0	11.9	4.4	8.1	11.9	15.7	18.1	18.1	14.4	25.3
Kyrgyz Republic	-8.2	-13.9	-0.1	-13.5	-7.0	0.3	2.0	-4.6	-6.9	-7.7	-17.0	-31.3	-34.1	-36.9
Pakistan	-4.3	-6.3	-5.3	-3.1	-3.5	-2.0	-1.9	-0.4	-0.4	-1.3	-4.1	-6.7	-6.8	-10.3
Tajikistan	...	-1.5	-6.6	-9.1	-4.0	-9.5	-10.6	-10.1	-7.7	-6.5	-14.0	-23.8	-41.9	-41.4
Turkmenistan	14.0	13.7	-10.6	-19.2	-8.6	25.3	14.3	23.0	16.0	11.4	27.1	51.8	49.3	...
Uzbekistan	2.6	-5.6	-0.7	0.8	2.5	5.5	2.4	3.8	8.4	9.9	10.2	10.4	10.3	7.9
East Asia														
China, People's Rep. of	2.5	2.3	4.9	4.6	3.3	2.9	2.6	3.0	2.7	3.1	6.0	8.2	9.3	8.3
Hong Kong, China	...	...	-9.8	-4.7	-1.9	-4.8	5.0	-3.1	-3.6	-5.6	-4.3	-7.4	-9.5	-10.7
Korea, Rep. of	-0.8	2.7	-0.6	12.1	6.4	3.2	2.7	2.6	3.4	5.2	3.9	2.9	2.7	0.6
Mongolia	2.1	3.1	10.9	-6.4	-6.2	-7.7	-9.9	-14.0	-15.7	-5.5	-4.3	-4.3	-1.3	-11.4
Taipei,China	4.8	6.1	4.6	3.7	4.9	4.3	7.0	8.4	8.6	5.2	5.5	6.6	7.9	4.6
South Asia														
Bangladesh	-6.2	-7.7	-5.1	-3.9	-4.3	-4.1	-4.4	-3.7	-4.3	-4.1	-5.7	-4.8	-5.0	-7.0
Bhutan	-9.3	-4.2	-8.8	-6.8	-14.1	-15.8	-18.0	-18.3	-14.8	-14.7	-30.1	-13.8	-3.7	...
India	-3.1	-3.8	-3.7	-3.1	-3.9	-2.7	-2.4	-2.1	-2.3	-4.8	-6.4	-6.8	-8.0	-9.8
Maldives	-37.8	-41.2	-42.8	-40.0	-44.5	-37.4	-37.8	-33.2	-37.9	-49.4	-65.9	-64.5	-69.9	-70.7
Nepal	-20.3	-21.0	-24.0	-20.3	-14.1	-14.8	-13.8	-11.8	-14.0	-14.4	-14.4	-16.9	-16.7	-20.5
Sri Lanka	-11.6	-9.6	-8.1	-6.7	-8.5	-10.8	-7.2	-8.2	-8.1	-10.9	-10.3	-12.6	-11.3	-14.4
Southeast Asia														
Brunei Darussalam [a]	8.7	4.7	12.8	...	...	...	45.7	38.1	48.3	47.3	50.7	52.5	46.2	50.5
Cambodia	-9.7	-12.2	-6.7	-11.6	-13.1	-14.7	-13.1	-13.8	-12.5	-12.7	-16.0	-14.8	-16.0	-16.6
Indonesia	3.2	2.6	4.7	19.3	14.7	15.2	13.8	12.0	10.5	7.8	6.1	8.1	7.6	4.6
Lao PDR	-15.8	-19.9	-19.2	-16.8	-17.4	-11.8	-10.9	-8.0	-5.9	-13.9	-11.5	-5.1	-3.5	-4.1
Malaysia	0.0	4.0	3.6	24.4	28.6	22.2	19.8	18.8	23.3	22.1	24.7	23.4	20.0	23.0
Myanmar	-0.8	-0.7	-0.6	-0.5	-0.2	-0.1	0.0	0.0	0.1	0.0	0.1	0.1	...	...
Philippines	12.1	-13.7	-13.5	-0.0	-7.8	-7.9	-8.8	-7.2	-7.3	-6.5	-7.9	-5.7	-5.8	-7.5
Singapore	10.0	10.1	9.2	17.6	16.8	15.1	20.2	21.2	31.6	28.0	30.1	30.7	28.2	16.9
Thailand	-8.7	-8.9	-3.1	10.9	7.6	4.5	2.2	2.2	2.6	0.9	-4.7	0.5	4.7	0.1
Viet Nam	-11.3	-11.3	-4.6	3.6	3.4	1.2	1.5	-3.0	-6.5	-5.0	-4.6	-4.6	-14.6	-14.1
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	-11.9	-8.9	-12.5	-11.6	-12.9	-11.7	-15.8	-14.2	-17.4	-22.7	-25.0	-30.7	...	...
Kiribati	-47.8	-48.1	-46.9	-39.5	-45.7	-48.2	-51.7	-59.8	-54.4	-58.0	-69.7	-56.4	-47.2	...
Marshall Islands	-28.8	-38.4	-39.2	-46.3	-50.3	-69.3	-62.9	-49.5	-51.0	-40.3	-40.6	-38.5	-38.9	-37.9
Micronesia, Fed. States of	-34.4	-40.7	-43.7	-37.8	-39.1	-41.0	-44.6	-39.5	-42.2	-53.7	-52.6	-54.4	-54.0	-58.2
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	-112.2	-96.4	-66.8	-63.9	-65.0	-75.9	-63.1	-64.9	-49.4	...
Papua New Guinea	29.1	19.7	13.5	19.1	23.9	31.4	28.5	18.5	27.4	27.7	36.8	40.1	33.6	33.3
Samoa	-41.6	-39.5	-34.8	-35.0	-42.4	-120.7	-153.3	-142.9	-37.6	-37.3	-40.3	-46.4	-39.2	-45.0
Solomon Islands	4.2	3.0	-7.5	6.0	16.6	-8.1	-12.7	4.5	1.8	9.1	-5.6	-17.4	-17.6	9.9
Timor-Leste [b]	...	...	...	-23.3	-24.8	-74.9	-69.9	-41.9	-40.6	-39.1	-35.3	-34.9	-48.5	...
Tonga	-35.0	-30.2	-28.0	-43.9	-28.7	-35.1	-36.5	-29.2	-33.2	-34.0	-41.2	-43.2	-39.8	-45.2
Tuvalu	-62.9	-69.3	-49.5	-61.5	-48.2	-73.2	-72.1	-97.0	-100.8	...	...	...	...	...
Vanuatu	-22.4	-21.3	-17.1	-16.7	-23.4	-20.4	-24.7	-29.9	-23.1	-22.4	-24.9	-27.5	-31.8	...
Developed Member Countries														
Australia	-1.2	-0.2	0.4	-1.5	-2.5	-1.3	0.5	1.4	-3.0	-2.9	-1.9	-1.3	-2.1	-0.3
Japan	2.5	1.8	2.3	3.1	2.8	2.5	1.7	2.4	2.4	2.8	2.1	1.9	2.4	0.8
New Zealand	0.8	1.0	1.4	1.4	-0.6	1.7	1.9	0.5	0.5	-0.8	-1.4	-2.5	1.6	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data.

Balance of Payments

Table 4.2 **Trade in services balance**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan [a]	...	...	...	...	...	...	...	-3.3	-9.2	-8.0	-8.1	-6.5	-4.3	-4.0
Armenia	-1.8	-3.2	-3.8	-4.1	-3.4	-2.9	-0.8	-1.7	-2.4	-2.8	2.4	-2.0	-2.3	-2.7
Azerbaijan	-5.5	-9.2	-9.7	-8.3	-5.0	-4.3	-6.6	-15.0	-22.2	-25.8	-14.9	-9.2	-6.4	-5.1
Georgia	...	...	-1.5	0.6	0.3	-0.3	2.4	1.3	1.5	1.4	1.3	2.0	1.6	0.2
Kazakhstan	-1.4	-1.2	-1.3	-1.1	-1.0	-4.4	-6.2	-8.1	-6.6	-7.2	-9.2	-7.3	-7.7	-5.0
Kyrgyz Republic	-10.5	-11.9	-7.1	-6.9	-7.2	-6.3	-2.7	-0.4	-0.1	-0.6	-1.3	-2.9	2.7	-1.9
Pakistan	-2.0	-2.7	-1.9	-1.6	-1.4	-1.3	-1.4	0.3	-0.4	-2.9	-3.7	-4.1	-3.7	-3.8
Tajikistan	...	...	...	...	...	...	...	-2.9	2.1	-4.3	-4.5	-9.2	-11.9	...
Turkmenistan	...	-14.7	-16.4	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan [b]	-2.7	-1.9	-3.7	-2.1	-1.4	-0.5	-1.2	2.2	-2.8	-2.8	-1.1	-0.1	0.1	0.8
East Asia														
China, People's Rep. of	-0.8	-0.2	-0.4	-0.3	-0.5	-0.5	-0.4	-0.5	-0.5	-0.5	-0.4	-0.3	-0.2	-0.3
Hong Kong, China	...	...	...	5.2	7.2	9.3	9.7	11.4	12.9	14.5	16.7	18.8	20.3	21.6
Korea, Rep. of	-0.6	-1.1	-0.6	0.3	-0.1	-0.5	-0.8	-1.4	-1.2	-1.1	-1.6	-2.0	-2.0	-1.8
Mongolia	-3.1	-4.8	-5.0	-7.1	-7.7	-9.0	-9.0	-7.4	-3.4	9.1	-2.7	-1.2	...	...
Taipei,China	-3.3	-2.8	-2.6	-2.7	-2.4	-2.1	-1.6	-1.0	-0.8	-1.5	-1.9	-1.0	-1.0	-0.2
South Asia														
Bangladesh	-2.2	-1.4	-1.4	1.2	-1.4	-1.8	-1.7	-1.2	-1.4	-1.5	-1.7	-1.7	-1.8	...
Bhutan [c]	-2.3	-7.7	1.2	0.4	2.3	-3.4	0.6	-4.0	-12.4	-9.1	-6.7	-2.2	0.2	...
India	-1.0	-1.1	-0.9	-0.7	-0.7	-0.6	-0.6	-0.3	-0.2	-0.4	-1.1	-1.4	...	...
Maldives	39.1	44.6	42.9	43.0	39.8	38.2	39.1	39.3	45.0	45.1	14.9	35.2	34.1	...
Nepal	-8.1	-10.9	-12.4	-7.5	-8.2	-5.3	-3.4	-1.2	-1.6	-1.0	-0.7	-1.2	-1.9	-1.1
Sri Lanka	-2.9	-3.1	-2.8	-2.7	-2.8	-4.1	-2.5	-1.8	-1.4	-1.8	-2.2	-2.7	-2.6	-2.5
Southeast Asia														
Brunei Darussalam [d]	...	...	...	...	...	...	-10.2	-7.7	-9.1	-6.8	-5.2	-4.1	...	...
Cambodia	-2.1	-1.5	-0.8	-1.4	0.1	2.8	4.5	5.3	2.4	5.4	7.6	6.8	7.1	5.3
Indonesia	-4.0	-3.8	-4.5	-8.0	-5.6	-6.3	-6.3	-5.3	-5.2	-3.4	-3.2	-2.7	-2.7	-2.5
Lao PDR	-1.4	-1.2	-0.3	3.9	5.4	8.1	8.1	8.2	4.5	5.8	5.4	4.6	4.8	...
Malaysia	-3.8	-2.4	-2.6	-2.2	-3.6	-3.0	-2.4	-1.6	-3.6	-1.7	-1.7	-1.2	0.2	...
Myanmar	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	...	...
Philippines	3.3	4.2	1.2	-4.0	-2.1	-2.5	-3.2	2.6	-2.5	-2.0	-1.4	0.1	1.6	0.9
Singapore	5.5	5.1	3.6	3.1	-0.4	-1.4	-4.8	-4.1	-3.9	-3.0	-2.2	-1.9	-1.6	...
Thailand	-2.4	-1.4	-1.1	1.0	0.9	-1.3	1.4	-1.0	-1.7	-2.5	-3.9	-4.0	-3.3	-4.7
Viet Nam	...	-0.2	-2.3	-1.9	-1.9	-1.8	-1.8	-2.1	-2.0	-1.9	0.6	-0.0	-1.3	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	9.8	10.9	14.7	10.7	8.1	6.1	7.4	13.4	11.1	8.8	11.4	8.6	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands [e]	4.5	-0.1	1.3	-0.1	5.0	28.7	20.9	20.4	27.7	22.0	18.9	19.5	...	...
Micronesia, Fed. States of [a]	-0.5	-2.7	-9.5	-12.9	-8.2	-8.4	-10.5	-11.6	-11.9	-10.5	-9.5	-9.3	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau [a]	...	...	...	...	42.8	36.7	43.2	43.1	59.2	70.2	62.5	52.2	54.5	...
Papua New Guinea	-6.6	-6.7	-10.7	-12.6	-13.0	-15.1	-12.3	-16.9	-17.1	-19.0	-17.8	...	...	...
Samoa	10.2	13.7	10.3	15.0	16.0	...	...	...	...	13.7	13.2	17.0	15.3	...
Solomon Islands	-10.7	-8.9	-9.8	0.2	-9.5	-7.1	-10.9	-14.4	-15.4	-3.8	-5.4	-9.8	...	...
Timor-Leste [a, f]	...	...	...	-7.9	-9.3	-15.8	-11.7	-162.6	-104.1	-49.5	62.1	142.0	254.4	...
Tonga	...	...	...	...	...	...	-5.9	-6.2	-10.8	-12.7	6.0	-11.4	...	...
Tuvalu [a]	11.4	-36.8	-29.5	-28.8	-25.8	50.8	-44.3	-32.6	...	...	...	...	...	...
Vanuatu	20.4	23.5	20.3	22.4	17.0	24.4	19.7	18.3	17.9	17.2	17.6	18.0	21.7	...
Developed Member Countries														
Australia	-0.3	0.1	0.0	-0.2	0.0	0.3	0.2	0.3	0.4	0.1	0.1	0.1	0.1	0.0
Japan	-1.1	-1.3	-1.3	-1.3	-1.2	-1.0	-1.1	-1.1	-0.8	-0.8	-0.5	-0.4	-0.5	-0.4
New Zealand	-0.3	-0.3	-0.9	-1.3	-0.4	-0.2	0.2	1.0	1.4	0.9	0.3	0.2	0.1	...

a Includes income.
b Includes other goods and income starting 2003.
c Prior to 2000, services, income, and transfer receipts and payments were grouped as service transfer receipts and service transfer payments.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
e Includes other goods and income.
f GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: International Financial Statistics Online (IMF 2009), country sources.

Table 4.3 **Current account balance**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	-3.2	3.0	1.7	0.3	-2.4	-1.2	-1.5
Armenia	-17.0	-18.2	-18.7	-22.1	-16.6	-14.6	-9.4	-6.2	-6.8	-0.5	-1.1	-1.8	-6.4	-11.4
Azerbaijan	-16.6	-29.3	-23.1	-30.7	-13.1	-3.2	-0.9	-12.3	-27.8	-29.8	1.3	17.7	27.3	35.6
Georgia	-12.4	-18.6	-14.6	-8.0	-9.4	-5.3	-6.6	-6.2	-9.6	-6.9	-11.1	-15.2	-19.7	-22.3
Kazakhstan	-1.3	-3.6	-3.6	5.6	-1.4	2.0	-6.3	-4.2	-0.9	0.8	-1.8	-2.5	-7.8	5.3
Kyrgyz Republic	-16.4	-24.0	-8.1	-23.5	-15.5	-6.2	-1.8	-1.9	-2.2	1.3	-1.6	-10.1	-6.0	-10.7
Pakistan	-3.7	-7.4	-6.0	-2.9	3.1	-0.3	0.5	3.7	4.8	1.9	-1.4	-3.9	-4.8	-9.4
Tajikistan	...	-7.2	-6.7	-4.2	6.2	-7.2	-5.6	-1.4	-0.3	-2.8	-0.8	-1.5	-13.3	0.9
Turkmenistan	0.7	0.1	-24.8	-34.3	-23.3	13.6	3.2	13.0	5.5	1.3	11.9	37.7	42.7	...
Uzbekistan	-0.2	-7.8	-5.4	-0.9	-1.5	2.4	-1.5	1.4	8.9	10.0	13.7	17.2	19.1	16.0
East Asia														
China, People's Rep. of	0.2	0.8	3.9	3.1	1.9	1.7	1.3	2.4	2.8	3.6	7.2	9.4	11.0	9.8
Hong Kong, China	...	...	4.4	1.5	6.3	4.1	5.9	7.6	10.4	9.5	11.4	12.1	12.3	14.2
Korea, Rep. of	-1.7	-4.1	1.6	11.7	5.5	2.3	1.6	0.9	1.9	3.9	1.8	0.6	0.6	-0.7
Mongolia	3.2	-3.1	9.8	-7.8	-5.7	-7.4	-6.1	-9.4	-6.6	3.5	3.8	11.7	4.4	-12.9
Taipei,China	2.0	3.8	2.3	1.2	2.7	2.8	6.5	8.9	10.0	6.0	4.9	7.2	8.6	6.4
South Asia														
Bangladesh	-1.8	-3.2	-2.1	-1.1	1.1	-0.9	-2.4	0.3	0.3	0.3	-1.0	1.4	1.4	0.8
Bhutan	-11.6	-11.9	-7.6	10.6	2.2	5.4	-8.8	-14.9	-21.8	-17.0	28.4	-4.2	11.7	...
India	-1.6	-1.2	-1.3	-1.0	-1.0	-0.6	0.7	1.3	2.4	-0.4	-1.2	-1.0	-1.5	-2.4
Maldives	4.6	-1.7	-6.8	-4.0	-13.4	-8.2	9.4	-5.6	-4.5	-15.8	-36.4	-33.0	-41.5	-51.7
Nepal	-5.2	-8.3	-5.6	-5.0	0.1	-2.3	-2.5	4.0	2.3	2.7	1.9	2.2	0.1	3.1
Sri Lanka	-6.1	-4.8	-2.6	-1.4	-3.5	-6.4	-1.3	1.4	-0.3	-3.1	-2.7	-5.3	-4.3	-9.3
Southeast Asia														
Brunei Darussalam [a]	51.3	43.0	55.3	...	...	...	31.7	26.2	47.7	48.6	52.8	56.3	50.7	52.6
Cambodia	-3.1	-3.0	0.6	-5.7	-5.0	-2.7	-1.1	-2.3	-3.6	-2.2	-3.6	0.4	-2.8	-7.3
Indonesia	-3.2	-3.4	-2.3	4.3	4.1	4.8	4.2	4.0	3.5	0.6	0.1	3.0	2.4	0.1
Lao PDR	-7.5	-12.5	-10.0	-2.3	-5.1	-0.3	-4.0	0.2	-2.0	-7.5	-6.7	1.2	1.9	2.7
Malaysia	-9.8	-4.4	-5.9	13.2	15.9	9.0	7.9	8.0	12.1	12.1	15.0	16.3	15.7	17.6
Myanmar	-0.2	-0.2	-0.2	-0.2	0.1	-0.1	-0.0	0.0	-0.0	-0.0	0.0	0.0	...	...
Philippines	-4.4	-4.8	-5.3	2.4	-3.8	-2.9	-2.4	-0.4	0.4	1.9	2.0	4.5	4.9	2.5
Singapore	17.1	15.0	15.5	22.2	17.4	11.6	12.5	12.6	23.2	18.1	22.7	25.4	23.5	14.8
Thailand	-7.9	-7.9	-2.1	12.8	10.2	7.6	4.4	3.7	3.4	1.7	-4.3	1.1	5.7	-0.1
Viet Nam	-9.0	-8.2	-5.7	-3.9	4.1	3.6	2.1	-1.7	-4.9	-2.1	-1.1	-0.3	9.8	-11.8
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	-0.9	2.9	1.5	-0.5	-3.7	-2.3	-6.6	1.6	-4.5	-13.1	-12.5	-23.6	...	...
Kiribati	-4.4	-11.1	12.1	21.0	-1.3	-9.8	7.8	-2.5	-18.6	-11.1	-19.1	-2.9	3.9	...
Marshall Islands	12.1	0.6	1.4	2.6	-7.5	-0.6	4.4	3.6	10.2	6.2	-5.7	-1.6	-3.1	-1.9
Micronesia, Fed. States of	10.5	2.7	-10.6	-8.1	-4.7	-7.8	-13.4	-4.1	-0.2	-19.9	-12.5	-16.2	-12.8	-20.4
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	-55.0	-29.6	-20.5	-17.8	-4.9	-5.1	-3.3	-13.3	6.0	...
Papua New Guinea	13.9	6.1	-2.4	0.9	3.9	10.1	8.8	-4.2	3.8	4.4	13.3	8.0	2.9	9.1
Samoa	4.1	5.0	7.2	6.6	2.3	-3.3	-36.2	-22.2	-8.1	-6.9	-10.7	-16.8	-8.4	-9.5
Solomon Islands	2.5	4.0	-10.1	2.7	6.6	-12.9	-12.0	-3.1	2.2	15.2	-1.9	-6.9	-17.7	-14.0
Timor-Leste [b]	...	...	...	-5.6	2.2	11.7	-52.7	18.7	-7.7	8.4	82.3	162.5	295.3	...
Tonga	-13.7	-6.0	-1.0	-11.9	-1.0	-6.7	-9.9	4.9	-2.9	3.8	-2.7	-7.8	-9.2	-7.9
Tuvalu	4.7	-16.3	39.0	-17.7	2.1	61.5	-29.8	11.7	-63.6	...	...	...	...	...
Vanuatu	-8.0	-11.3	-7.6	-3.7	-13.2	-5.6	-6.2	-12.0	-10.3	-4.9	-3.8	-6.3	-10.8	...
Developed Member Countries														
Australia	-5.3	-3.8	-2.9	-4.9	5.4	-3.9	-2.1	-3.9	-5.6	-6.3	6.0	-5.5	-6.5	-4.4
Japan	2.1	1.4	2.3	3.1	2.6	2.6	2.1	2.9	3.2	3.7	3.6	3.9	4.8	3.2
New Zealand	-5.4	-6.0	-5.2	-4.1	6.3	-4.3	-3.1	-3.6	-3.2	-4.5	-6.5	-8.8	-7.8	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, ADB staff estimates using CEIC data.

Balance of Payments

Table 4.4 **Workers' remittances and compensation of employees, receipts**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	65.0	84.0	136.0	92.0	95.0	87.0	94.0	131.0	162.2	434.6	498.1	658.1	845.9	1062.1
Azerbaijan	3.0	...	...	6.0	54.0	57.0	104.0	181.0	171.0	227.6	693.4	812.5	1287.3	1554.3
Georgia	...	...	284.0	373.0	361.0	274.0	181.0	231.0	235.0	303.2	346.1	485.3	695.7	732.1
Kazakhstan	116.0	89.0	60.0	72.0	64.0	122.0	171.0	205.0	147.0	165.8	178.4	187.5	223.0	191.5
Kyrgyz Republic	1.0	2.0	3.0	25.0	18.0	9.0	11.0	37.0	78.0	188.7	322.0	481.2	714.8	1232.4
Pakistan	1712.0	1284.0	1707.0	1172.0	996.0	1075.0	1461.0	3554.0	3964.0	3945.0	4280.0	5121.0	5898.0	7032.0
Tajikistan	...	...	...	...	...	...	...	79.0	146.0	252.0	466.7	1018.8	1690.8	1750.0
Turkmenistan	...	4.0	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	1053.1	1790.2	4660.8	4126.9	4796.1	6244.1	8385.0	13012.0	17814.8	19014.0	20337.0	23319.0	32833.0	40641.0
Hong Kong, China	...	...	...	154.0	130.0	136.0	153.0	121.0	120.0	239.9	296.8	294.0	316.9	355.4
Korea, Rep. of	1080.0	946.0	852.0	542.0	666.0	735.0	652.0	862.0	827.0	799.5	847.7	993.6	1127.7	3062.4
Mongolia	...	...	...	6.0	7.0	12.0	25.0	56.0	129.0	202.5	180.4	181.4	194.0	200.0
Taipei,China	142.0	171.0	263.0	234.0	285.0	274.0	275.0	273.0	261.0	278.0	323.0	355.0	430.0	454.0
South Asia														
Bangladesh	1202.0	1345.0	1526.0	1606.0	1807.0	1968.0	2105.0	2858.0	3192.0	3583.8	4314.0	5427.5	6562.3	8985.2
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	6223.0	8766.0	10331.0	9479.0	11124.0	12890.0	14273.0	15736.0	20999.0	18750.4	21293.2	25426.1	38666.0	51974.0
Maldives	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.3	2.8	3.0	3.1
Nepal	57.0	44.0	49.0	68.0	83.0	111.0	147.0	678.0	771.1	822.6	1211.8	1453.2	1733.9	2734.6
Sri Lanka	809.0	852.0	942.0	1023.0	1072.0	1166.0	1185.0	1309.0	1438.0	1589.6	1990.7	2184.8	2526.7	2947.4
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	12.0	12.0	12.0	120.0	106.0	121.0	133.0	140.0	138.0	177.4	199.7	297.4	352.6	325.2
Indonesia	651.0	796.0	725.0	958.0	1109.0	1190.0	1046.0	1259.0	1489.0	1866.3	5419.6	5722.4	6174.3	6795.1
Lao PDR	22.0	45.0	41.0	50.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2
Malaysia	716.0	857.0	1074.0	856.0	1042.0	981.0	792.0	959.0	987.0	1128.0	1281.0	1550.0	1803.0	1919.7
Myanmar	81.0	124.0	149.0	137.0	136.0	104.0	117.0	106.0	85.3	117.8	130.8	116.4	125.0	150.0
Philippines	5360.0	4875.0	6799.0	5130.0	6918.0	6212.0	6164.0	9735.0	10243.0	11471.0	13566.0	15251.0	16302.0	18643.0
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	1695.0	1806.0	1658.0	1424.0	1460.0	1697.0	1252.0	1380.0	1607.0	1621.9	1187.1	1333.1	1635.0	1800.0
Viet Nam	...	...	...	...	...	...	2000.0	2714.0	2700.0	3200.0	4000.0	4800.0	5500.0	7200.0
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	33.0	33.0	35.0	26.0	24.0	24.0	24.0	24.0	123.0	171.9	184.2	165.5	165.5	175.0
Kiribati	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.6
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	16.0	15.0	14.0	10.0	8.0	7.0	6.0	11.0	13.0	15.7	13.3	13.3	13.3	13.3
Samoa	41.0	44.0	47.0	42.0	45.0	45.0	45.0	45.0	45.0	87.9	109.9	108.0	119.8	134.7
Solomon Islands	...	...	...	...	2.0	2.0	2.0	2.0	4.0	8.7	7.2	20.4	20.4	20.4
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	53.0	66.0	55.8	67.6	66.0	72.0	99.5	99.5
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	13.0	36.0	16.0	22.0	25.0	35.0	53.0	4.0	4.0	5.0	5.1	5.0	5.5	7.4
Developed Member Countries														
Australia	1651.0	2159.0	2118.0	1782.0	2029.0	1903.0	1783.0	1795.0	2326.0	2837.3	2989.8	3130.6	3828.4	4637.7
Japan	1151.0	1228.0	1345.0	1239.0	1109.0	1374.0	1984.0	1821.0	1077.9	930.6	1080.1	1379.7	1577.4	1928.8
New Zealand	1858.0	2107.0	1010.0	483.0	483.0	452.0	1034.0	1381.0	1065.3	958.4	739.4	650.2	649.5	626.4

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Financial Statistics Online (IMF 2009); World Development Indicators Online (World Bank 2009); ADB staff estimates based on the Migration & Remittances website (go.worldbank.org/QOWEWD6TA0); for Taipei,China: economy sources.

Table 4.5 **Workers' remittances and compensation of employees, receipts**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	4.4	5.3	8.3	4.9	5.1	4.6	4.4	5.5	5.8	12.1	10.2	10.3	9.2	8.9
Azerbaijan	0.1	...	...	0.1	1.2	1.1	1.8	2.9	2.4	2.6	5.2	3.9	4.1	3.4
Georgia	...	...	8.1	10.3	12.9	9.0	5.6	6.8	5.9	5.9	5.4	6.3	6.8	5.7
Kazakhstan	0.6	0.4	0.3	0.3	0.4	0.7	0.8	0.8	0.5	0.4	0.3	0.2	0.2	0.1
Kyrgyz Republic	0.1	0.1	0.2	1.5	1.4	0.7	0.7	2.3	4.1	8.5	13.1	17.0	19.1	24.4
Pakistan	2.8	2.0	2.7	1.9	1.5	1.5	2.0	4.9	4.8	4.0	3.9	4.0	4.2	5.0
Tajikistan	...	...	...	...	...	...	...	6.5	9.4	12.1	20.2	36.2	45.5	34.1
Turkmenistan	...	0.2	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	0.1	0.2	0.5	0.4	0.4	0.5	0.6	0.9	1.1	1.0	0.9	0.9	1.0	0.9
Hong Kong, China	...	...	...	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Korea, Rep. of	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Mongolia	...	...	...	0.6	0.8	1.1	2.1	4.4	8.9	11.2	7.8	5.8	4.9	3.8
Taipei,China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Asia														
Bangladesh	3.2	3.3	3.6	3.6	4.0	4.2	4.5	6.0	6.1	6.3	7.2	8.8	9.6	11.3
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	1.7	2.3	2.5	2.3	2.5	2.8	3.0	3.1	3.5	2.7	2.6	2.8	3.0	4.6
Maldives	0.5	0.7	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2
Nepal	1.3	1.0	1.0	1.4	1.6	2.0	2.4	11.2	12.2	11.3	14.8	16.1	16.8	23.2
Sri Lanka	6.2	6.1	6.2	6.5	6.8	7.1	7.5	7.7	7.6	7.7	8.2	7.7	7.8	7.2
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	0.4	0.3	0.3	3.5	2.9	3.2	3.3	3.3	2.9	3.2	3.1	4.1	4.2	3.0
Indonesia	0.3	0.4	0.3	1.0	0.8	0.7	0.7	0.6	0.6	0.7	1.9	1.6	1.4	1.3
Lao PDR	1.2	2.4	2.3	3.9	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	...
Malaysia	0.8	0.8	1.1	1.2	1.3	1.0	0.9	1.0	0.9	0.9	0.9	1.0	1.0	0.9
Myanmar	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Philippines	7.2	6.9	8.3	7.9	9.1	8.2	8.7	12.7	12.9	13.2	13.7	13.0	11.3	11.2
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thailand	1.0	1.0	1.1	1.3	1.2	1.4	1.1	1.1	1.1	1.0	0.7	0.6	0.7	0.7
Viet Nam	...	...	...	...	...	...	6.1	7.7	6.9	7.0	7.6	8.0	8.0	7.9
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	1.7	1.5	1.7	1.6	1.2	1.4	1.4	1.3	5.3	6.3	6.2	5.2	4.8	...
Kiribati	18.3	15.2	15.3	14.6	13.3	15.0	15.5	14.5	12.0	10.9	11.4	11.3	9.0	6.4
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.2	0.2	0.2
Samoa	20.5	19.5	19.2	18.7	19.6	19.4	18.8	17.2	14.1	23.3	25.9	24.0	22.8	25.2
Solomon Islands	...	...	...	...	0.6	0.7	0.7	0.9	1.7	3.3	2.5	6.1	5.3	3.9
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	39.0	44.3	32.6	34.0	30.6	30.5	39.4	35.8
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	6.0	14.7	6.3	8.7	10.4	14.3	22.6	3.5	3.2	1.5	1.4	1.2	1.2	...
Developed Member Countries														
Australia	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5
Japan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand	3.0	3.1	1.6	0.9	0.8	0.9	2.0	2.1	1.2	1.0	0.7	0.6	0.5	..

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Financial Statistics Online (IMF 2009); World Development Indicators Online (World Bank 2009); ADB staff estimates based on the Migration & Remittances website (go.worldbank.org/Q0WEWD6TA0); Taipei,China: economy sources.

Balance of Payments

Table 4.6 **Foreign direct investment, net inflows**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	241.6	288.4	...
Armenia	25.3	17.6	51.9	220.8	122.0	104.2	69.9	110.7	120.9	247.9	239.4	453.2	698.8	935.5
Azerbaijan	330.1	627.3	1114.8	1023.0	510.3	129.9	226.5	1392.4	3285.0	3556.1	1679.9	-584.0	-4748.9	14.8
Georgia	6.0	54.0	242.5	265.3	82.3	131.1	109.8	160.2	334.6	492.3	452.8	1170.1	1750.2	1280.3
Kazakhstan	964.2	1137.0	1321.4	1151.4	1587.0	1282.5	2835.0	2590.2	2092.0	4157.2	1971.2	6278.2	10188.6	14543.4
Kyrgyz Republic	96.1	47.2	83.8	109.2	44.4	-2.4	5.0	4.7	45.5	175.5	42.8	182.0	207.9	232.7
Pakistan	722.6	922.0	716.3	506.0	532.0	308.0	383.0	823.0	534.0	1118.0	2201.0	4273.0	5333.0	5438.0
Tajikistan	10.0	18.0	18.0	29.9	6.7	23.5	9.5	36.1	31.6	272.0	54.5	338.6	360.0	...
Turkmenistan	233.0	108.1	107.9	62.3	125.0	131.0	170.0	276.0	226.0	353.7	418.2	730.9	804.0	...
Uzbekistan	-24.0	90.0	166.8	139.6	121.2	74.7	82.8	65.3	70.4	187.4	87.7	194.5	262.0	...
East Asia														
China, People's Rep. of	35849.2	40180.0	44237.0	43751.0	38753.0	38399.3	44241.0	49308.0	47076.7	54936.5	79126.7	78094.7	138413.2	147791.0
Hong Kong, China	...	...	...	14765.0	24577.8	61923.9	23776.2	9682.0	13624.4	34031.6	33617.7	45053.6	54365.1	63004.8
Korea, Rep. of	1775.8	2325.4	2844.2	5412.3	9333.4	9283.4	3527.7	2392.3	3525.5	9246.2	6308.5	3586.4	1578.9	2200.3
Mongolia	9.8	15.9	25.0	18.9	30.4	53.7	43.0	77.8	131.5	92.9	184.6	344.0	327.7	...
Taipei,China	1559.0	1864.0	2248.0	222.0	2926.0	4928.0	4109.0	1445.0	453.0	1898.0	1625.0	7424.0	7769.0	5432.0
South Asia														
Bangladesh	1.9	13.5	139.4	190.1	179.7	280.4	78.5	52.3	268.3	448.9	813.3	697.2	652.8	...
Bhutan	0.1	1.4	-0.7	...	9.0	-0.1	0.3	0.3	1.1	3.5	9.0	6.1	78.3	...
India	2143.6	2426.1	3577.3	2634.7	2168.6	3584.2	5471.9	5626.0	4322.7	5771.3	6876.5	17453.1	22950.0	34982.0
Maldives	7.2	9.3	11.4	11.5	12.3	13.0	11.7	12.4	13.5	14.7	9.5	13.9	15.0	...
Nepal	...	19.2	23.1	12.0	4.4	-0.5	20.9	-6.0	14.8	-0.4	2.5	-6.7	5.7	1.0
Sri Lanka	58.0	119.9	430.1	193.4	176.4	172.9	171.8	196.5	228.7	232.8	272.4	479.7	603.0	752.2
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	74.0	234.2	114.2	80.8	175.8	88.2	...	...
Cambodia	150.8	293.6	203.7	242.8	232.2	148.5	149.4	145.1	84.0	131.4	381.2	483.2	867.6	815.2
Indonesia	4346.0	6194.0	4677.0	-240.8	-1865.6	-4550.4	-2977.4	145.1	-596.9	1896.1	8336.3	4914.2	6928.2	8340.3
Lao PDR	95.1	159.8	86.3	45.3	51.6	33.9	23.9	25.0	19.5	17.0	27.7	187.4	323.5	...
Malaysia	4178.2	5078.4	5136.5	2163.4	3895.3	3787.6	553.9	3203.4	2473.2	4624.2	3966.0	6063.6	8455.5	7983.6
Myanmar	279.9	313.4	380.8	317.8	255.6	258.3	210.3	152.1	251.5	213.6	235.1	278.6	427.7	...
Philippines	1478.0	1517.0	1222.0	2287.0	1247.0	2240.0	195.0	1542.0	491.0	688.0	1854.0	2921.0	2916.0	1520.0
Singapore	11535.3	9682.1	13752.7	7313.9	16577.9	16484.5	15620.9	7200.0	11664.2	19828.3	13930.3	24743.1	24137.1	22724.5
Thailand	2068.0	2335.9	3894.7	7314.8	6102.7	3366.0	5061.0	3335.0	5235.0	5860.3	8055.4	9452.9	11232.8	10089.5
Viet Nam	1780.4	2395.0	2220.0	1671.0	1412.0	1298.0	1300.0	1400.0	1450.0	1610.0	1954.0	2400.0	6700.0	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	69.5	2.4	15.6	107.0	-33.2	-1.7	42.6	29.8	36.7	187.1	160.0	373.7	268.9	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	454.6	111.3	28.6	109.6	296.5	95.9	62.5	18.3	101.0	55.4	33.6	-6.9	95.8	...
Samoa	3.4	1.2	20.0	3.0	2.0	-1.5	1.2	-0.1	0.5	2.3	-3.0	20.7	2.5	...
Solomon Islands	2.0	5.9	33.8	10.1	9.9	13.0	-9.3	0.4	-1.8	6.0	18.6	18.6	42.4	...
Timor-Leste	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	2.0	2.0	3.0	2.0	2.0	4.7	1.0	0.6	-0.1	6.9	12.3	11.6	27.4	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	31.0	32.7	30.2	20.4	13.4	20.3	18.0	14.2	18.0	19.8	13.3	43.5	34.2	...
Developed Member Countries														
Australia	12026.4	6181.4	7631.3	5956.9	3311.0	13618.0	8260.9	16991.8	8023.8	36826.8	-35601.0	26414.8	40080.4	42781.6
Japan	39.3	207.6	3200.1	3268.1	12308.4	8227.2	6191.0	9087.2	6238.2	7804.8	3213.6	6783.6	22180.1	24551.8
New Zealand	3316.4	2337.6	2466.6	1283.0	1145.7	3910.3	-67.9	1666.9	2474.7	2477.7	1504.2	8013.5	2752.5	2492.5

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Financial Statistics Online (IMF 2009); World Development Indicators Online (World Bank 2009); for Taipei,China: economy sources.

Table 4.7 **Foreign direct investment, net inflows**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	2.9	...	...
Armenia	1.7	1.1	3.2	11.7	6.6	5.5	3.3	4.7	4.3	6.9	4.9	7.1	7.6	7.8
Azerbaijan	10.8	19.7	28.1	23.0	11.1	2.5	4.0	22.3	45.1	41.0	12.7	-2.8	-15.2	0.0
Georgia	0.2	1.7	6.9	7.3	2.9	4.3	3.4	4.7	8.4	9.6	7.1	15.1	17.2	10.0
Kazakhstan	4.7	5.4	6.0	5.2	9.4	7.0	12.8	10.5	6.8	9.6	3.5	7.8	9.7	11.0
Kyrgyz Republic	5.8	2.6	4.7	6.6	3.6	-0.2	0.3	0.3	2.4	7.9	1.7	6.4	5.6	4.6
Pakistan	1.2	1.5	1.1	0.8	0.8	0.4	0.5	1.1	0.6	1.1	2.0	3.4	3.7	3.8
Tajikistan	0.8	1.7	2.0	2.3	0.6	2.7	0.9	3.0	2.0	13.1	2.4	12.0	9.7	...
Turkmenistan	9.4	4.5	4.4	2.4	5.1	4.5	4.8	6.2	3.8	5.2	5.2	7.0	6.2	...
Uzbekistan	-0.2	0.6	1.1	0.9	0.7	0.5	0.7	0.7	0.7	1.6	0.6	1.1	1.2	...
East Asia														
China, People's Rep. of	4.9	4.7	4.6	4.3	3.6	3.2	3.3	3.4	2.9	2.8	3.5	2.9	4.3	3.4
Hong Kong, China	...	...	...	8.8	15.1	36.6	14.3	5.9	8.6	20.5	18.9	23.7	26.2	29.3
Korea, Rep. of	0.3	0.4	0.6	1.6	2.1	1.8	0.7	0.4	0.6	1.4	0.8	0.4	0.2	0.2
Mongolia	0.8	1.3	2.4	1.9	3.4	4.9	3.7	6.1	9.1	5.1	8.0	11.0	8.3	...
Taipei,China	0.6	0.6	0.7	0.1	1.0	1.5	1.4	0.5	0.1	0.6	0.5	2.0	2.0	1.4
South Asia														
Bangladesh	0.0	0.0	0.3	0.4	0.4	0.6	0.2	0.1	0.5	0.8	1.3	1.1	1.0	...
Bhutan	0.0	0.4	-0.2	...	2.1	-0.0	0.1	0.1	0.2	0.5	1.1	0.8	7.1	...
India	0.6	0.6	0.9	0.6	0.5	0.8	1.1	1.1	0.7	0.8	0.8	1.9	2.2	3.1
Maldives	1.8	2.1	2.2	2.1	2.1	2.1	1.9	1.9	2.0	1.9	1.3	1.5	1.4	...
Nepal	...	0.4	0.5	0.2	0.1	-0.0	0.3	-0.1	0.2	-0.0	0.0	-0.1	0.1	0.0
Sri Lanka	0.4	0.9	2.8	1.2	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.7	1.9	1.8
Southeast Asia														
Brunei Darussalam [a]	...	...	...	...	...	...	1.3	4.0	1.7	1.0	1.8	0.8	...	...
Cambodia	4.7	8.3	5.5	7.0	6.4	4.0	3.7	3.5	1.8	2.4	5.9	6.6	10.0	7.4
Indonesia	2.2	2.7	2.2	-0.3	-1.3	-2.8	-1.9	0.1	-0.3	0.7	2.9	1.3	1.6	1.6
Lao PDR	5.4	8.5	4.9	3.5	3.5	2.0	1.4	1.4	0.9	0.7	1.0	5.4	7.9	...
Malaysia	4.7	5.0	5.1	3.0	4.9	4.0	0.6	3.2	2.2	3.7	2.9	3.9	4.5	3.6
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	2.0	1.8	1.5	3.5	1.6	3.0	0.3	2.0	0.6	0.8	1.9	2.5	2.0	0.9
Singapore	13.7	10.5	14.3	8.9	20.1	17.8	18.2	8.2	12.5	18.2	11.6	18.1	15.0	12.5
Thailand	1.2	1.3	2.6	6.5	5.0	2.7	4.4	2.6	3.7	3.6	4.6	4.6	4.6	3.7
Viet Nam	8.6	9.7	8.3	6.1	4.9	4.2	4.0	4.0	3.7	3.5	3.7	4.0	9.8	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	3.5	0.1	0.7	6.5	-1.7	-0.1	2.6	1.6	1.6	6.9	5.4	11.8	7.8	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	9.8	2.2	0.6	2.9	8.5	2.7	2.0	0.6	2.9	1.4	0.7	-0.1	1.5	...
Samoa	1.7	0.5	8.2	1.3	0.9	-0.7	0.5	-0.0	0.2	0.6	0.7	4.6	0.5	...
Solomon Islands	0.6	1.5	8.7	3.1	3.0	4.4	3.4	-0.2	0.8	2.3	6.3	5.6	10.9	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	1.2	1.1	1.7	1.3	1.2	3.0	0.7	0.4	-0.0	3.5	5.7	4.9	10.8	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	13.3	13.4	11.8	8.0	5.3	8.3	7.7	6.2	6.4	6.0	3.6	10.5	7.6	...
Developed Member Countries														
Australia	3.3	1.8	1.8	1.5	0.9	3.4	2.2	4.4	1.8	6.2	-5.3	3.6	4.6	4.5
Japan	0.0	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.1	-0.2	0.5	0.5
New Zealand	5.3	3.4	3.9	2.4	2.0	7.7	-0.1	2.6	2.9	2.5	1.4	7.4	2.0	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Financial Statistics Online (IMF 2009); World Development Indicators Online (World Bank 2009); for Taipei,China: economy sources.

External Trade

Table 4.8 **Merchandise exports**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	166.1	128.3	144.4	159.2	166.2	137.3	68.0	100.0	144.0	305.0	384.0	416.0	454.0	545.0
Armenia	270.9	290.3	232.5	220.5	231.7	300.5	341.8	505.2	685.6	722.9	973.9	985.1	1152.3	1069.1
Azerbaijan	637.2	631.3	781.3	606.2	929.7	1745.2	2314.3	2167.5	2590.4	3615.4	7648.9	13014.6	21269.3	30588.3
Georgia	...	...	239.8	192.3	238.2	322.8	317.6	345.9	461.4	646.9	865.5	936.2	1232.4	1497.7
Kazakhstan	5250.2	5911.0	6497.0	5334.1	5871.6	8812.2	8639.1	9670.3	12926.7	20096.2	27849.0	38250.4	47755.3	71183.5
Kyrgyz Republic	408.9	505.4	603.8	513.6	453.8	504.5	476.1	485.5	581.7	721.1	874.0	891.2	1321.1	1642.1
Pakistan	7972.3	8205.7	7977.7	8357.0	7956.3	8334.9	8764.8	9464.5	11345.7	12583.0	14453.1	16468.2	17106.6	17642.4
Tajikistan	778.6	770.1	745.7	596.6	688.7	784.3	651.5	736.9	797.2	914.9	908.7	1399.0	1468.1	1409.0
Turkmenistan	2084.4	1692.0	743.2	614.0	1154.0	2508.0	2623.0	2862.0	3465.0	3853.9	4944.1	7155.5	8932.9	...
Uzbekistan	3719.9	4590.2	4387.5	3528.2	3235.8	3264.7	3170.4	2988.4	3725.0	4853.0	5408.8	6389.8	8991.5	11572.9
East Asia														
China, People's Rep. of	148780.0	151048.0	182792.0	183712.0	194931.0	249203.0	266100.0	325600.0	438228.0	593326.0	761953.0	968969.0	1217780.0	1428545.7
Hong Kong, China	173753.4	180743.7	188056.6	173995.0	173896.2	201855.3	189900.6	200094.0	223769.4	259259.6	289324.7	316823.0	344490.2	362884.6
Korea, Rep. of	125058.0	129715.1	136164.2	132313.1	143685.5	172267.5	150439.1	162470.5	193817.4	253844.7	284418.7	325464.8	371489.1	422007.3
Mongolia	473.3	424.3	451.6	462.3	454.2	535.8	521.5	524.0	615.9	869.1	1063.9	1542.0	1947.5	2534.5
Taipei,China	111405.5	115691.1	121475.5	112439.2	123547.7	151457.7	125865.8	135079.4	150301.0	182431.6	198168.5	223762.8	246267.0	254161.2
South Asia														
Bangladesh	3259.8	3315.5	3773.8	4347.7	4247.9	4779.9	5809.2	5343.8	6464.1	7420.3	8259.3	10263.6	12210.5	14111.1
Bhutan	103.3	100.3	117.7	108.0	115.8	102.7	105.9	112.7	132.9	182.5	258.2	414.3	673.8	...
India	32797.7	33532.7	35827.3	33871.8	37059.2	45296.8	44296.2	52486.2	62976.9	82826.3	103496.1	126201.0	158617.6	176284.7
Maldives	85.0	79.9	89.7	95.5	91.5	108.7	110.2	132.4	152.0	181.0	161.6	225.2	228.0	330.5
Nepal	339.9	350.7	390.2	417.0	522.8	700.8	742.6	602.8	655.8	731.8	822.6	827.9	915.4	871.4
Sri Lanka	3805.6	4103.4	4647.8	4816.1	4603.5	5455.7	4814.9	4702.5	5132.8	5770.8	6351.1	6895.9	7644.7	8136.4
Southeast Asia														
Brunei Darussalam [a]	2391.7	2603.5	2681.3	1910.9	2551.3	3902.8	3640.0	3702.0	4421.0	5057.0	6247.1	7627.0	7668.0	9494.0
Cambodia	853.9	643.6	851.6	802.0	1130.3	1397.1	1571.2	1769.8	2086.8	2588.9	2910.3	3593.7	4089.2	4708.0
Indonesia	45418.0	49815.0	53444.0	48848.0	48665.0	62124.0	56321.0	57159.0	62527.2	69713.8	85660.0	100660.3	114100.0	137020.4
Lao PDR	307.6	317.2	312.7	336.8	301.5	330.3	319.5	300.6	335.5	363.3	553.1	882.0	923.0	1085.0
Malaysia	73864.6	78311.1	78519.6	73021.2	84620.9	98229.0	87969.4	94060.5	104705.3	126645.5	140949.4	160560.6	176040.9	198899.2
Myanmar	899.0	936.3	1042.5	1076.8	1437.7	1982.0	2562.9	3035.7	2323.6	2905.9	3583.9	5191.4	6348.7	...
Philippines	17447.0	20543.0	25228.0	29496.4	35036.9	36078.2	32150.2	35208.2	36231.2	39680.5	41254.7	47410.0	50466.0	49076.0
Singapore [b]	118186.4	125011.3	125007.9	109801.0	114628.1	137953.3	121687.0	125043.1	144127.5	198561.7	229831.8	271603.5	299003.4	338967.6
Thailand	56443.9	55720.6	57603.7	54339.5	58581.4	69152.4	64924.2	68061.8	80165.4	96306.8	110360.0	130335.6	151860.8	175714.5
Viet Nam	5448.9	7255.8	9185.1	9360.2	11541.3	14482.6	15029.3	16706.2	20149.3	26485.0	32447.1	39826.2	48561.4	62685.0
The Pacific														
Cook Islands	4.6	3.1	2.8	3.2	3.6	9.1	6.8	5.1	8.5	7.1	5.2	3.5	5.2	4.1
Fiji Islands	522.8	749.7	621.0	511.5	617.2	542.5	536.5	517.7	669.5	695.6	705.2	694.0	751.2	922.8
Kiribati	7.4	5.3	6.3	5.8	8.8	3.6	4.5	3.4	2.9	2.5	4.3	6.3	9.8	...
Marshall Islands	23.1	18.9	15.8	5.8	7.7	9.1	...	...	...	..	...	...	...	...
Micronesia, Fed. States of	39.3	10.7	8.0	3.3	2.1	16.8	18.4	14.4	18.2	14.0	13.0	8.9	16.2	...
Nauru	28.0	41.0	25.0	20.0	36.0	28.0	13.0	9.0	28.0	14.5	3.8	...	...	...
Palau	13.9	13.9	11.8	11.1	7.3	11.5	16.6	20.3	8.4	6.9	13.4	13.6	10.1	...
Papua New Guinea	2672.2	2527.5	2141.2	1787.7	1947.3	2069.4	1801.6	1639.7	2200.7	2618.1	3317.6	4204.2	4747.8	5719.4
Samoa	8.8	10.1	14.6	18.8	18.2	13.6	15.1	13.7	14.9	11.9	12.0	10.3	13.8	10.2
Solomon Islands	168.3	184.0	174.5	126.3	125.5	65.1	47.1	50.1	66.8	85.8	104.9	120.5	166.0	170.4
Timor-Leste	...	...	...	...	...	...	4.0	77.1	142.7	105.7	43.5	60.7	19.2	49.2
Tonga	14.2	12.2	10.9	7.7	12.5	9.1	6.8	13.9	16.1	15.5	10.2	9.4	8.0	9.0
Tuvalu	0.1	0.3	0.3	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	...
Vanuatu	28.3	30.1	35.3	33.9	25.8	26.3	19.9	18.6	26.5	37.3	37.8	36.9	29.7	41.7
Developed Member Countries														
Australia	53127.1	60242.9	62929.5	55902.3	56061.8	63980.2	63374.6	64903.1	70014.5	86613.7	106210.9	123310.8	140900.5	186422.4
Japan	441538.1	411212.7	421006.5	386883.6	417424.4	479322.6	403025.2	416581.7	470516.2	565378.3	595697.1	647006.2	712769.3	783850.5
New Zealand	13640.6	14349.2	14287.7	11998.1	12480.3	13291.7	13734.1	14361.1	16490.3	20357.4	21598.2	22443.8	26856.5	30164.1

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Prior to 2003, data exclude Indonesia.

Sources: Country sources, *International Financial Statistics* CD-ROM (IMF 2009).

Table 4.9 **Growth rates of merchandise exports** [a]
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	58.2	-22.8	12.6	10.3	4.4	-17.4	-50.5	47.1	44.0	111.8	25.9	8.3	9.1	20.0
Armenia	...	7.2	-19.9	-5.1	5.1	29.7	13.7	47.8	35.7	5.4	34.7	1.2	17.0	-7.2
Azerbaijan	-2.4	-0.9	23.8	-22.4	53.4	87.7	32.6	-6.3	19.5	39.6	...	70.1	63.4	43.8
Georgia	...	...	...	-19.8	23.8	35.5	-1.6	8.9	33.4	40.2	33.8	8.2	31.6	21.5
Kazakhstan	48.2	12.6	9.9	-17.9	10.1	50.1	-2.0	11.9	33.7	55.5	38.6	37.3	24.8	49.1
Kyrgyz Republic	20.2	23.6	19.5	-14.9	-11.6	11.2	-5.6	2.0	19.8	24.0	-6.5	32.2	48.2	24.3
Pakistan	18.1	2.9	-2.8	4.8	-4.8	4.8	5.2	8.0	19.9	10.9	14.9	13.9	3.9	3.1
Tajikistan	39.3	-1.1	-3.2	-20.0	15.4	13.9	-16.9	13.1	8.2	14.8	-0.7	54.0	4.9	-4.0
Turkmenistan	-4.2	-18.8	-56.1	-17.4	89.6	115.5	4.6	9.1	21.1	11.2	28.3	44.7	24.8	...
Uzbekistan	38.3	23.4	-4.4	-19.6	-8.3	0.9	-2.9	-5.7	24.6	30.3	11.5	18.1	40.7	28.7
East Asia														
China, People's Rep. of	23.0	1.5	21.0	0.5	6.1	27.8	6.8	22.4	34.6	35.4	28.4	27.2	25.7	17.3
Hong Kong, China	14.8	4.0	4.0	-7.5	-0.1	16.1	-5.9	5.4	11.8	15.9	11.6	9.5	8.7	5.3
Korea, Rep. of	30.3	3.7	5.0	-2.8	8.6	19.9	-12.7	8.0	19.3	31.0	12.0	14.4	14.1	13.6
Mongolia	32.9	-10.4	6.4	2.4	-1.8	18.0	-2.7	0.5	17.5	41.1	22.4	44.9	26.3	30.1
Taipei,China	20.0	3.8	5.0	-7.4	9.9	22.6	-16.9	7.3	11.3	21.4	8.6	12.9	10.1	3.2
South Asia														
Bangladesh	33.8	1.7	13.8	15.2	-2.3	12.5	21.5	-8.0	21.0	14.8	11.3	24.3	19.0	15.8
Bhutan	55.6	-2.9	17.4	-8.3	7.3	-11.3	3.1	6.5	17.9	37.4	41.5	60.5	62.6	...
India	24.5	2.2	6.8	-5.5	9.4	22.2	-2.2	18.5	20.0	31.5	25.0	21.9	25.7	11.1
Maldives	12.7	6.0	12.3	6.6	-4.3	18.8	1.4	20.1	14.8	19.1	-10.7	39.4	1.2	45.0
Nepal	-13.0	3.2	11.3	6.9	25.4	34.0	6.0	-18.8	8.8	11.6	12.4	0.6	10.6	-4.8
Sri Lanka	18.6	7.8	13.3	3.6	4.4	18.5	-11.7	-2.3	9.2	12.4	10.1	8.6	10.9	6.4
Southeast Asia														
Brunei Darussalam [b]	10.9	8.9	3.0	-28.7	33.5	53.0	-6.7	1.7	19.4	14.4	23.5	22.1	0.5	23.8
Cambodia	74.3	-24.6	33.9	-6.9	40.9	23.6	12.5	12.6	17.9	24.1	12.4	26.9	10.7	15.1
Indonesia	13.4	9.7	7.3	-8.6	-0.4	27.7	-9.3	1.5	9.4	11.5	22.9	17.5	13.3	20.1
Lao PDR	2.4	3.1	-1.4	7.7	-10.5	9.6	-3.3	-5.9	11.6	8.3	52.2	59.5	4.6	17.6
Malaysia	25.9	6.0	0.3	-7.0	15.9	16.1	-10.4	6.9	11.3	21.0	11.3	13.9	9.6	13.0
Myanmar	-1.1	4.2	11.3	3.3	33.5	37.9	29.3	18.4	-23.5	25.1	23.3	44.9	22.3	...
Philippines	29.4	17.7	22.8	16.9	18.8	8.7	-15.6	9.5	2.9	9.5	4.0	14.9	6.4	-2.8
Singapore [c]	22.5	5.8	-0.0	-12.2	4.4	20.3	-11.8	2.8	...	37.8	15.7	18.2	10.1	12.7
Thailand	24.8	-1.3	3.4	-5.7	7.8	18.0	-6.1	4.8	17.8	20.1	14.6	18.1	16.5	15.7
Viet Nam	34.4	33.2	26.6	1.9	23.3	25.5	3.8	11.2	20.6	31.4	22.5	22.7	21.9	29.1
The Pacific														
Cook Islands	10.5	-31.0	-10.3	14.0	10.8	154.4	-25.2	-25.5	67.6	-15.7	-26.9	-32.7	47.5	-20.1
Fiji Islands	9.4	20.4	-17.2	17.6	20.7	12.1	-1.1	-3.5	29.3	3.9	1.4	-1.6	8.2	22.8
Kiribati	43.0	-28.2	17.3	-6.6	49.8	-59.1	25.8	23.8	-15.6	14.8	74.5	46.3	54.7	...
Marshall Islands	5.4	-18.0	-16.6	-63.4	32.7	19.1	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	-50.0	-72.8	-24.8	-58.5	-36.1	688.9	9.6	-21.5	26.1	-23.1	-7.3	-31.3	81.5	...
Nauru	-15.1	46.4	-39.0	-20.0	80.0	-22.2	-53.6	-30.8	211.5	-48.4	-73.8	...	...	...
Palau	10.2	0.3	-15.1	-6.1	-34.2	57.7	44.0	22.8	-58.7	-30.1	128.1	1.3	-25.8	...
Papua New Guinea	0.8	-5.4	-15.3	-16.5	8.9	7.3	-13.8	-9.0	34.2	19.0	26.7	26.7	12.9	20.5
Samoa	149.5	15.1	45.1	28.7	-3.6	-24.9	10.8	-9.3	8.6	-20.0	0.7	-13.8	33.7	-26.2
Solomon Islands	18.4	9.4	-5.2	-27.6	-0.6	-48.1	-27.6	6.4	33.2	28.5	22.3	14.9	39.4	1.4
Timor-Leste	...	...	...	...	...	...	...	1850.9	-85.2	-26.0	-58.9	39.7	-68.4	156.3
Tonga	5.5	-13.9	-10.9	-28.8	61.3	-26.9	-25.9	104.8	16.0	-3.7	-34.4	-7.7	-14.8	12.7
Tuvalu	-51.9	101.6	-2.0	-84.8	171.3	-91.5	68.5	813.1	-36.3	40.0	-54.0	59.4	2.6	...
Vanuatu	13.2	6.5	17.0	3.9	-24.0	2.1	-24.3	-6.6	43.0	40.1	1.3	-2.4	-19.6	40.7
Developed Member Countries														
Australia	12.2	13.4	4.5	-11.2	0.3	14.1	-0.9	2.4	7.9	23.7	22.6	16.1	14.3	32.3
Japan	11.4	-6.9	2.4	-8.1	7.9	14.8	-15.9	3.1	13.2	20.2	5.4	8.6	10.2	10.0
New Zealand	12.1	5.2	-1.1	-15.4	4.0	6.5	3.3	4.5	14.9	23.5	6.6	3.4	19.7	12.3

a Rates are based on US dollar values of exports.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c Prior to 2003, data exclude Indonesia.

Sources: Country sources, *International Financial Statistics* CD-ROM (IMF 2009).

External Trade

Table 4.10 **Merchandise imports**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	387.0	661.0	604.0	462.1	1012.3	1175.9	1696.0	2452.0	2101.0	2177.0	2470.0	2744.0	3022.0	3020.0
Armenia	673.9	855.8	892.3	902.4	811.3	884.7	877.4	987.2	1279.5	1350.7	1801.7	2191.5	3267.8	4411.7
Azerbaijan	667.7	960.6	794.3	1076.5	1035.9	1172.1	1431.1	1665.5	2626.2	3515.9	4349.8	5269.3	6045.0	7574.7
Georgia	...	...	943.5	880.4	586.0	709.4	753.2	795.6	1141.2	1845.6	2490.0	3677.7	5214.9	6058.1
Kazakhstan	3806.7	4241.1	4300.8	4313.9	3655.1	5040.0	6446.0	6584.0	8408.7	12781.2	17352.5	23676.9	32756.4	37889.0
Kyrgyz Republic	522.3	837.7	709.3	841.5	599.7	554.1	467.2	586.8	717.0	946.8	1188.7	1931.2	2788.5	4072.4
Pakistan	10144.1	11023.8	11326.4	9690.1	9427.0	9967.4	10136.8	10537.6	12375.6	15425.2	20630.6	28401.3	30491.7	35688.6
Tajikistan	838.1	668.0	750.0	711.0	663.0	675.0	688.0	721.0	880.8	1191.3	1330.1	1725.4	2547.2	3273.0
Turkmenistan	1643.6	1388.3	1002.5	1137.0	1374.0	1742.0	2108.0	1832.0	2579.0	3148.4	2947.0	2557.7	3716.8	...
Uzbekistan	2892.7	4721.1	4523.0	3288.7	3110.7	2947.4	3136.9	2712.0	2964.2	3816.0	4091.3	4781.6	5235.6	7504.1
East Asia														
China, People's Rep. of	132084.0	138833.0	142370.0	140237.0	165699.0	225094.0	243550.0	295170.0	412760.0	561229.0	659953.0	791461.0	955950.0	1133086.3
Hong Kong, China	192755.1	198543.1	208611.9	184510.1	179531.6	212800.1	201062.7	207646.6	231902.9	271073.8	299520.4	334688.5	367626.8	388515.1
Korea, Rep. of	135118.9	150339.1	144616.4	93281.8	119752.3	160481.0	141097.8	152126.2	178826.7	224462.7	261238.3	309382.6	356845.7	435274.7
Mongolia	415.3	450.9	574.4	503.3	512.8	614.5	637.7	690.8	801.0	1019.3	1177.3	1435.0	2061.8	3244.5
Taipei,China	103598.5	102525.4	114302.2	105323.0	111349.1	140629.9	107815.6	113329.7	128132.1	169251.6	182708.6	203013.6	219590.8	239588.2
South Asia														
Bangladesh	5823.2	6772.2	6958.0	7287.6	7839.4	8080.1	9026.0	8473.1	9518.5	10797.2	12574.7	14380.6	17203.7	21628.8
Bhutan	112.3	132.6	143.9	167.6	187.6	193.0	190.5	205.7	248.9	411.0	386.0	419.6	525.9	...
India	37832.0	39206.1	42457.3	43222.1	49990.6	51371.8	51964.1	51140.5	77089.4	110570.1	149752.6	185513.5	244823.9	300079.1
Maldives	267.9	301.7	348.8	354.0	402.2	388.6	393.5	391.7	470.8	641.8	744.9	926.5	1096.3	1387.5
Nepal	1227.2	1313.3	1612.7	1349.0	1282.6	1526.2	1543.5	1379.0	1633.2	1849.7	2094.4	2388.5	2886.5	3241.3
Sri Lanka	5311.1	5447.2	5865.4	5898.2	5972.8	7198.1	5962.7	6110.0	6669.5	8015.7	8869.4	10264.4	11303.1	14000.3
Southeast Asia														
Brunei Darussalam [a]	2089.1	2494.8	2129.8	1398.9	1327.6	1105.8	1159.0	1556.0	1327.0	1422.0	1490.6	1673.1	2100.7	2425.0
Cambodia	1187.0	1071.6	1092.4	1165.8	1591.9	1935.7	2094.0	2360.5	2668.1	3269.5	3927.8	4749.2	5423.6	6533.8
Indonesia	40629.0	42929.0	41680.0	27337.0	24003.0	33514.8	30962.0	31229.0	33085.9	46179.7	57700.9	61078.1	74473.4	129244.1
Lao PDR	588.8	689.6	647.9	552.8	554.3	535.3	510.3	446.9	452.1	712.7	882.0	1060.0	1065.0	1303.0
Malaysia	77601.2	78411.9	78535.6	58130.1	65388.6	81962.9	73744.5	79760.6	83299.5	105166.3	114602.5	131065.8	146852.0	156366.2
Myanmar	1836.1	2009.7	2323.2	2689.2	2613.5	2345.7	2749.5	2268.2	2204.8	1973.3	1998.6	2910.7	3313.0	...
Philippines	28488.0	34701.0	38581.0	31529.9	32568.1	33807.4	34939.2	41092.0	42575.7	46102.1	49487.4	54078.0	57996.0	60420.0
Singapore [b]	124393.6	131331.7	132411.6	104485.5	111001.4	134675.4	115918.8	116337.1	127896.7	173548.6	200186.9	238477.5	262743.0	318683.8
Thailand	70783.6	72322.0	61352.6	42894.1	50441.8	62179.7	61945.3	64591.1	75661.2	94501.2	118200.2	130482.1	141090.4	178427.5
Viet Nam	8155.2	11143.5	11592.4	11499.8	11741.9	15636.5	16218.0	19745.7	25255.8	31968.8	36761.1	44891.1	62765.0	80714.0
The Pacific														
Cook Islands	48.5	43.3	47.8	37.9	41.6	50.7	46.9	47.0	70.3	75.8	81.2	99.5	106.4	149.7
Fiji Islands	891.5	986.6	964.7	721.8	933.3	856.1	886.0	900.8	1205.2	1443.5	1610.1	1804.7	1794.6	2259.3
Kiribati	35.2	38.0	39.0	32.6	40.5	39.4	40.8	49.8	51.6	59.4	76.4	63.4	70.0	...
Marshall Islands	74.7	72.6	61.0	67.3	68.9	54.7	...	67.3	75.2	67.7	68.5	67.7	...	...
Micronesia, Fed. States of [c]	99.5	84.1	75.2	49.4	12.3	106.8	113.8	104.3	117.9	132.7	130.2	138.0	142.7	...
Nauru	28.0	26.0	15.0	11.0	13.0	27.0	21.0	25.0	24.1	17.9	25.7	...	...	...
Palau	60.4	72.4	72.9	63.2	134.6	127.1	99.9	96.7	88.2	107.3	105.2	115.3	91.3	...
Papua New Guinea	1265.8	1513.2	1480.6	1075.9	1073.6	998.9	934.0	1077.5	1187.3	1459.4	1525.5	1990.4	2629.4	3123.6
Samoa [d]	92.2	99.0	100.1	95.9	115.6	90.5	119.7	129.2	128.4	155.2	187.3	218.7	226.9	249.3
Solomon Islands	154.3	118.0	147.6	127.9	110.0	92.3	81.8	69.1	93.8	121.4	185.1	183.5	240.0	319.2
Timor-Leste	...	...	...	...	...	...	253.4	316.2	222.0	146.1	109.1	100.8	206.1	268.6
Tonga	77.2	74.5	72.9	68.6	72.8	70.0	73.0	88.9	92.8	104.7	120.7	116.3	142.6	167.0
Tuvalu	4.9	4.7	6.0	7.2	8.0	5.1	3.5	11.1	15.6	11.4	12.9	13.5	15.5	...
Vanuatu	95.1	97.5	94.0	88.3	96.5	89.5	90.3	89.3	104.0	128.0	149.3	160.4	200.9	286.4
Developed Member Countries														
Australia	57425.7	61360.4	61912.7	60793.6	65497.0	67806.1	60899.2	69362.0	84300.6	103877.2	118923.7	132600.1	157206.7	189566.2
Japan	335412.4	349271.7	338506.0	280001.9	309621.1	379886.1	349015.7	336774.7	382652.3	454895.7	516997.7	579061.7	621090.8	763890.9
New Zealand	13945.0	14708.6	14522.4	12497.1	14348.8	13963.4	13318.8	14955.8	18455.2	23143.1	26247.7	26403.4	30770.3	34110.5

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Prior to 2003, data exclude Indonesia.
c Starting 2000, compilation methodology shifted from fob to cif.
d Starting 2000, compilation methodology shifted from cif to fob.

Sources: Country sources, International Financial Statistics CD-ROM (IMF 2009).

Table 4.11 **Growth rates of merchandise imports** [a]
(percent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	-1.0	70.8	-8.6	-23.5	119.1	16.2	44.2	44.6	-14.3	3.6	13.5	11.1	10.1	-0.1
Armenia	...	27.0	4.3	1.1	-10.1	9.1	-0.8	12.5	29.6	5.6	33.4	21.6	49.1	35.0
Azerbaijan	-14.2	43.9	-17.3	35.5	-3.8	13.1	22.1	16.4	57.7	33.9	...	21.1	14.7	25.3
Georgia	...	...	...	-6.7	-33.4	21.1	6.2	5.6	43.4	61.7	34.9	47.7	41.8	16.2
Kazakhstan	-28.0	11.4	1.4	0.3	-15.3	37.9	27.9	2.1	27.7	52.0	35.8	36.4	38.3	15.7
Kyrgyz Republic	39.5	60.4	-15.3	18.6	-28.7	-7.6	-15.7	25.6	22.2	32.1	25.5	62.5	44.4	46.0
Pakistan	20.0	8.7	2.7	-14.4	-2.7	5.7	1.7	4.9	16.3	24.6	33.7	37.7	7.4	17.0
Tajikistan	21.0	-20.3	12.3	-5.2	-6.8	1.8	1.9	4.8	22.2	35.3	11.7	29.7	47.6	28.5
Turkmenistan	-2.8	-15.5	-27.8	13.4	20.8	26.8	21.0	-13.1	40.8	22.1	-6.4	-13.2	45.3	...
Uzbekistan	10.9	63.2	-4.2	-27.3	-5.4	-5.2	6.4	-13.5	9.3	28.7	7.2	16.9	9.5	43.3
East Asia														
China, People's Rep. of	14.2	5.1	2.5	-1.5	18.2	35.8	8.2	21.2	39.8	36.0	17.6	19.9	20.8	18.5
Hong Kong, China	19.1	3.0	5.1	-11.6	-2.7	18.5	-5.5	3.3	11.7	16.9	10.5	11.7	9.8	5.7
Korea, Rep. of	32.0	11.3	-3.8	-35.5	28.4	34.0	-12.1	7.8	17.6	25.5	16.4	18.4	16.3	22.0
Mongolia	60.7	8.6	27.4	-12.4	1.9	19.8	3.8	8.3	16.0	27.3	15.5	21.9	43.7	57.4
Taipei,China	21.2	-1.0	11.5	-7.9	5.7	26.3	-23.3	5.1	13.1	32.1	8.0	11.1	8.2	9.1
South Asia														
Bangladesh	39.7	16.3	2.7	4.7	7.6	3.1	11.7	-6.1	13.5	12.3	16.5	14.4	19.6	25.7
Bhutan	22.5	18.0	8.6	16.4	11.9	2.9	-1.3	8.5	20.4	65.2	-6.1	8.7	25.3	...
India	31.9	3.6	8.3	1.8	15.7	2.8	1.2	17.7	26.1	43.4	35.4	23.9	32.0	22.6
Maldives	20.8	12.6	15.6	1.5	13.6	-3.4	1.3	-0.5	20.2	36.3	16.1	24.4	18.3	26.6
Nepal	17.5	7.0	22.8	16.4	-4.9	19.0	1.1	-10.7	18.4	13.3	13.2	14.0	20.8	12.3
Sri Lanka	18.5	2.6	7.7	0.6	1.3	20.5	-17.2	2.5	9.2	20.2	10.7	15.7	10.1	23.9
Southeast Asia														
Brunei Darussalam [b]	15.5	19.4	-14.6	-34.3	-5.1	-16.7	4.8	34.3	-14.7	7.2	4.8	12.2	25.6	15.3
Cambodia	59.5	-9.7	1.9	6.7	36.6	21.6	8.2	12.7	13.0	22.5	20.1	20.9	14.2	20.5
Indonesia	27.0	5.7	-2.9	-34.4	-12.2	39.6	-7.6	0.9	5.9	39.6	24.9	5.9	21.9	73.5
Lao PDR	4.4	17.1	-6.0	-14.7	0.3	-3.4	-4.7	-12.4	3.4	54.2	23.8	20.2	0.5	22.3
Malaysia	30.6	1.0	0.2	-26.0	12.5	25.3	-10.0	8.2	4.4	26.3	9.0	14.4	12.0	6.5
Myanmar	31.0	9.5	15.6	15.8	-2.8	-10.2	17.2	-17.5	2.8	-10.5	1.3	45.6	13.8	...
Philippines	25.8	21.8	11.2	-18.3	3.3	3.8	3.3	17.6	3.6	8.3	7.3	9.3	7.2	4.2
Singapore [c]	21.5	5.6	0.8	-21.1	6.2	21.3	-13.9	0.4	...	35.7	15.3	19.1	10.2	21.3
Thailand	30.0	2.2	-15.2	-30.1	17.6	23.3	-0.4	4.3	17.1	24.9	25.1	10.4	8.1	26.5
Viet Nam	40.0	36.6	4.0	-0.8	2.1	33.2	3.7	21.8	27.9	26.6	15.0	22.1	39.8	28.6
The Pacific														
Cook Islands	-0.3	-10.7	10.5	20.9	9.9	21.9	-7.5	0.2	49.4	7.9	7.0	22.7	6.8	40.7
Fiji Islands	6.2	10.7	-2.2	-25.2	29.3	-8.3	3.5	1.7	33.8	19.8	11.5	12.1	-0.6	25.9
Kiribati	33.5	7.9	2.6	-16.3	24.3	-2.8	3.6	22.0	3.6	15.2	28.7	-17.0	10.3	...
Marshall Islands	6.1	-2.8	-15.9	10.4	2.4	-20.6	...	...	11.9	-10.1	1.2	-1.1	...	...
Micronesia, Fed. States of [d]	-22.9	-15.5	-10.6	-34.3	-75.1	766.0	6.6	-8.4	13.1	12.5	-1.9	6.0	3.4	...
Nauru	-2.8	-7.1	-42.3	-26.7	18.2	107.7	-22.2	19.0	-3.5	-25.9	44.0	...	...	...
Palau	36.6	19.8	0.6	-13.3	112.9	-5.6	-21.4	-3.2	8.8	21.6	-2.0	9.6	-20.8	...
Papua New Guinea	-4.2	19.5	-2.2	-27.3	-0.2	-7.0	-6.5	15.4	10.2	22.9	4.5	30.5	32.1	18.8
Samoa [e]	15.2	7.4	1.1	-3.2	19.3	-21.7	32.2	8.0	-0.6	20.9	20.7	16.7	3.7	9.9
Solomon Islands	10.5	-23.5	25.1	-13.3	-14.0	-16.1	-11.4	-15.5	35.7	29.4	52.4	-0.9	30.8	33.0
Timor-Leste	...	...	...	...	...	...	...	24.8	-29.8	-34.2	-25.3	-7.6	104.5	30.3
Tonga	11.7	-3.4	-2.2	-5.9	6.1	-3.8	4.3	21.7	4.4	12.8	15.3	3.6	22.6	17.1
Tuvalu	-39.0	-3.5	28.8	18.8	12.2	-36.0	-32.5	218.1	40.9	-26.9	13.3	4.4	14.8	...
Vanuatu	6.4	2.5	-3.6	-6.1	9.3	-7.2	0.9	-1.1	16.4	23.1	16.7	7.4	25.3	42.6
Developed Member Countries														
Australia	15.3	6.9	0.9	-1.8	7.7	3.5	-10.2	13.9	21.5	23.2	14.5	11.5	18.6	20.6
Japan	22.0	4.1	-3.1	-17.3	10.6	22.7	-8.1	-3.5	13.6	18.9	13.6	12.1	7.3	23.0
New Zealand	17.7	5.5	-1.3	-13.9	14.8	-2.7	-4.6	12.3	23.4	25.4	13.4	0.6	16.5	10.9

a Rates are based on US dollar values of imports.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c Prior to 2003, data exclude Indonesia.
d Starting 2000, compilation methodology shifted from fob to cif.
e Starting 2000, compilation methodology shifted from cif to fob.

Sources: Country sources. International Financial Statistics CD-ROM (IMF 2009).

External Trade

Table 4.12 **Trade in goods**
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	17.1	...	...	...	...	48.4	67.4	58.1	47.1	43.3	41.7	38.6	34.2	33.4
Armenia	73.4	71.8	68.6	59.3	56.5	62.0	57.6	62.8	70.0	58.0	56.6	49.8	48.0	45.9
Azerbaijan	54.0	50.1	39.8	37.8	42.9	55.3	65.6	61.5	71.7	82.2	90.8	87.1	82.6	82.5
Georgia	...	...	33.7	29.7	29.4	33.8	33.3	33.6	40.2	48.6	52.3	59.6	63.4	59.1
Kazakhstan	54.4	48.3	48.7	43.6	56.5	75.7	68.1	66.0	69.2	76.2	79.1	76.4	76.8	82.3
Kyrgyz Republic	62.4	73.5	74.3	82.6	84.3	77.3	61.8	66.8	67.6	75.4	75.7	99.6	108.1	113.0
Pakistan	34.3	35.9	35.6	32.8	31.5	27.6	29.8	29.0	30.2	31.1	34.1	37.8	35.1	37.7
Tajikistan	284.6	137.7	162.2	99.1	124.4	169.6	123.9	119.4	107.9	101.4	96.8	110.4	108.0	91.2
Turkmenistan	118.8	139.1	71.3	64.2	103.4	140.5	131.3	104.8	108.9	112.9	106.9	109.4	119.5	...
Uzbekistan	72.1	74.4	82.7	63.4	76.7	68.8	82.8	67.7	67.7	71.1	67.0	65.6	63.8	68.4
East Asia														
China, People's Rep. of	38.6	33.9	34.1	31.8	33.3	39.6	38.5	42.7	51.9	59.8	63.6	68.2	64.3	59.2
Hong Kong, China	254.1	238.6	225.0	214.8	216.5	245.2	234.7	249.0	287.4	319.7	331.2	343.0	343.9	348.8
Korea, Rep. of	50.3	50.2	54.4	65.3	59.1	62.4	57.8	54.6	57.9	66.2	64.6	68.7	69.4	92.3
Mongolia	72.4	74.2	97.3	99.3	106.8	121.6	114.1	109.1	97.8	104.0	97.2	93.4	102.1	109.9
Taipei,China	78.5	75.4	78.5	78.8	78.6	90.9	80.1	83.4	91.1	106.2	107.0	116.5	121.1	125.8
South Asia														
Bangladesh	24.0	25.3	26.1	27.3	27.0	28.3	32.7	29.3	31.1	32.6	36.2	40.9	42.9	44.9
Bhutan	73.2	74.8	72.1	75.1	74.1	66.1	61.1	58.8	60.5	83.2	77.9	93.4	96.3	...
India	21.1	20.4	20.3	19.7	21.0	22.6	21.7	24.4	25.7	30.5	34.0	37.4	38.6	42.0
Maldives	88.4	84.7	86.3	83.2	83.8	79.7	80.6	81.8	89.9	106.0	120.9	125.8	125.6	136.3
Nepal	34.6	35.2	38.6	36.0	33.4	38.8	38.8	33.6	35.4	35.4	35.3	35.8	34.7	35.1
Sri Lanka	70.5	68.4	69.6	66.0	65.6	75.7	87.2	83.2	82.5	66.7	62.4	60.7	58.6	54.4
Southeast Asia														
Brunei Darussalam [a]	94.6	99.7	92.6	81.7	84.3	83.5	85.7	90.0	87.7	82.3	81.2	81.1	79.5	85.1
Cambodia	59.3	49.0	56.8	62.9	77.3	90.9	92.1	96.3	101.9	109.8	108.7	116.1	110.1	102.4
Indonesia	42.6	40.8	44.1	79.8	51.9	58.0	53.2	45.2	40.7	45.1	50.1	44.4	43.6	52.1
Lao PDR	50.4	53.7	55.0	69.2	58.9	52.9	50.0	42.5	39.6	45.3	52.8	54.8	47.2	...
Malaysia	170.5	155.4	156.8	181.7	189.5	192.1	174.3	172.4	170.6	185.8	185.2	186.2	173.5	160.4
Myanmar	2.5	2.2	1.9	1.5	1.2	1.1	1.0	0.6	0.4	0.3	0.3	0.3	...	...
Philippines	62.0	66.7	77.5	93.6	88.8	94.7	94.2	99.3	99.0	98.7	91.8	86.3	75.3	65.6
Singapore [b]	287.8	277.0	268.5	256.4	273.1	294.0	277.5	273.5	317.9	339.3	355.5	366.5	336.5	360.4
Thailand	75.7	70.4	78.8	86.9	88.9	107.0	109.8	104.6	109.2	118.3	129.6	126.0	119.1	129.6
Viet Nam	65.6	74.6	77.4	76.7	81.2	96.6	95.6	104.0	114.8	128.7	130.8	139.1	156.8	158.2
The Pacific														
Cook Islands	56.8	49.3	58.5	54.4	55.9	74.0	62.1	51.1	55.1	48.4	46.9	57.3	52.9	74.2
Fiji Islands	89.8	94.5	88.8	87.0	93.0	94.9	98.3	89.0	95.1	93.1	93.0	93.4	92.2	...
Kiribati	74.1	63.9	65.4	57.3	69.8	64.3	72.7	73.4	60.2	62.2	76.5	65.2	62.7	...
Marshall Islands	82.9	84.1	72.7	68.1	73.5	59.4	...	...	...	...	...	...	...	...
Micronesia, Fed. States of [c]	66.8	45.6	40.1	25.4	7.0	59.5	63.6	57.1	65.5	70.8	68.9	70.7	76.4	...
Nauru	...	...	...	...	...	...	...	...	...	114.8	113.6	...	...	...
Palau	78.0	79.8	74.8	63.3	125.0	115.7	93.4	98.0	78.8	84.7	81.5	82.3	61.7	...
Papua New Guinea	81.4	78.4	73.6	76.1	81.5	88.3	89.2	89.2	91.2	97.6	99.5	112.1	116.9	110.8
Samoa [d]	50.4	48.3	47.0	51.7	58.3	45.1	56.3	54.1	44.6	43.4	45.8	51.0	44.2	48.6
Solomon Islands	98.6	83.3	86.1	84.5	71.9	55.1	47.4	52.7	67.3	75.0	93.7	84.2	95.2	92.5
Timor-Leste [e]	...	...	...	...	...	...	69.9	138.4	122.5	81.4	46.0	49.4	57.0	...
Tonga	56.3	48.7	49.9	50.6	55.6	53.7	58.8	69.0	63.8	59.1	60.2	52.9	58.0	63.3
Tuvalu	45.4	40.4	49.8	56.5	59.6	37.0	25.6	75.1	...	...	...	...	...	...
Vanuatu	54.1	53.4	50.5	48.1	48.7	47.4	46.9	47.0	46.7	50.1	50.6	47.5	45.4	...
Developed Member Countries														
Australia	30.6	30.0	30.8	32.2	31.0	35.2	34.9	33.6	30.4	30.8	32.8	35.1	34.1	39.6
Japan	14.8	16.4	17.8	17.3	16.6	18.4	18.4	19.2	20.2	22.2	24.4	28.1	30.5	31.5
New Zealand	45.0	43.2	42.7	44.3	46.2	51.8	51.6	48.4	43.0	43.8	43.1	45.4	44.2	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
b Prior to 2003, data exclude Indonesia.
c Starting 2000, compilation methodology for imports shifted from fob to cif.
d Starting 2000, compilation methodology for imports shifted from cif to fob.
e GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Sources: Country sources, *International Financial Statistics* CD-ROM (IMF 2009).

Table 4.13 Direction of trade: merchandise exports

(percent of total merchandise exports)

From \ To	Asia		Europe		North and Central America		Middle East		South America		Africa		Oceania		Rest of the World	
	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008
Developing Member Countries																
Central and West Asia [a]																
Afghanistan	17.6	52.0	73.7	19.8	4.4	20.6	3.9	5.0	0.0	0.1	0.1	2.4	0.3	0.1	0.0	0.0
Armenia	4.2	12.2	73.3	74.0	20.7	4.6	0.0	7.4	0.0	1.1	0.0	0.1	0.0	0.2	1.8	0.4
Azerbaijan	22.0	10.4	55.7	62.3	2.6	21.6	19.4	4.4	0.0	0.3	0.1	0.0	0.2	0.0	0.0	0.9
Georgia	3.6	32.1	86.3	46.3	9.9	14.4	0.2	5.5	0.0	0.9	0.0	0.3	0.0	0.3	0.0	0.3
Kazakhstan	57.5	25.0	31.7	59.5	8.9	3.3	0.8	4.3	0.0	0.1	0.0	0.1	0.0	0.1	1.2	7.8
Kyrgyz Republic	41.1	50.8	57.5	40.0	0.5	0.3	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.4
Pakistan	30.6	29.2	40.7	23.9	14.3	18.0	8.9	20.0	0.2	1.3	4.0	5.7	1.4	0.9	0.0	1.0
Tajikistan	37.0	20.0	52.8	33.4	2.5	0.5	0.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0
Turkmenistan	4.4	10.3	91.8	65.9	3.2	2.4	0.0	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8
Uzbekistan	12.7	47.6	80.6	43.8	0.4	4.8	0.1	3.6	0.0	0.1	0.0	0.1	0.0	0.0	6.2	0.0
East Asia																
China, People's Rep. of	68.3	40.3	14.7	23.7	10.0	22.0	2.3	4.4	0.4	2.9	1.9	2.9	0.9	1.8	1.5	1.9
Hong Kong, China	42.4	66.8	20.2	13.6	27.2	12.8	1.6	1.7	0.5	0.9	1.7	0.6	1.9	1.6	4.5	2.1
Korea, Rep. of	34.0	51.0	15.5	15.6	33.4	16.2	3.0	5.3	0.8	2.7	1.4	2.7	1.7	3.2	10.2	4.2
Mongolia	31.6	79.5	45.2	8.0	2.4	12.0	0.1	0.2	0.0	0.4	20.7	0.0	0.0	0.0	0.0	0.0
Taipei,China [b]	38.2	66.3	18.2	11.7	36.0	13.9	2.1	2.2	0.6	1.7	1.9	1.1	2.3	1.7	0.6	1.3
South Asia																
Bangladesh	14.8	9.5	41.8	49.1	32.3	24.7	5.0	1.4	0.4	0.4	3.3	0.6	2.0	0.3	0.5	14.0
Bhutan [c]	99.3	94.1	0.6	2.8	0.0	2.9	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
India	21.0	35.4	47.2	22.7	16.3	15.2	7.1	15.8	0.1	2.4	1.8	5.7	1.2	1.0	5.2	1.8
Maldives	47.0	46.6	26.5	39.5	26.3	2.0	0.0	0.1	0.0	0.0	0.0	11.5	0.2	0.1	0.0	0.1
Nepal	14.7	77.4	60.0	10.7	24.1	8.6	0.1	0.4	0.1	0.0	0.0	0.1	0.1	0.4	0.9	2.5
Sri Lanka	14.8	16.2	30.9	41.6	28.8	23.5	17.8	10.7	0.7	0.8	1.2	0.7	1.6	1.3	4.4	5.1
Southeast Asia																
Brunei Darussalam [d]	91.6	82.8	0.2	0.3	3.4	1.2	0.0	0.3	0.0	0.0	0.0	0.5	1.3	14.9	3.4	0.0
Cambodia	90.9	11.0	7.8	18.9	0.4	47.8	0.1	21.3	0.4	0.2	0.1	0.1	0.2	0.4	0.0	0.3
Indonesia	64.4	63.5	12.8	12.7	13.8	10.9	3.0	3.7	0.2	1.2	0.5	1.6	1.9	3.4	3.4	3.0
Lao PDR	85.2	64.8	11.1	11.4	1.7	2.8	0.0	0.1	0.6	0.0	1.0	0.1	0.1	0.0	0.3	20.8
Malaysia	58.0	60.9	16.6	11.7	18.1	15.0	2.5	3.5	0.3	0.6	0.4	1.3	2.0	4.3	2.2	2.7
Myanmar	67.4	88.7	10.3	3.9	2.5	0.1	1.5	1.0	0.0	0.2	14.3	4.6	0.7	0.3	3.4	1.3
Philippines	34.8	67.9	18.8	11.4	40.2	14.4	1.6	1.0	0.1	0.3	0.2	0.3	1.6	1.5	2.6	3.1
Singapore	47.2	66.1	17.2	10.1	23.0	10.0	2.6	2.5	0.4	0.5	1.9	1.7	4.0	5.7	3.8	3.3
Thailand	37.9	54.7	25.3	14.9	25.3	13.2	5.4	5.4	0.2	1.7	2.1	3.3	1.9	4.9	2.0	2.0
Viet Nam	39.1	39.8	48.1	20.6	0.6	22.0	0.9	0.6	0.0	0.4	0.2	0.2	0.3	8.3	10.7	8.1
The Pacific																
Cook Islands [e]	55.4	74.0	0.0	0.0	6.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	32.4	14.9	6.1	9.4
Fiji Islands	10.6	5.9	23.3	8.9	10.6	11.5	0.0	30.6	0.0	0.0	0.0	0.1	29.3	27.7	26.2	15.4
Kiribati [e]	13.0	5.1	77.8	0.5	8.9	1.3	0.0	91.2	0.0	0.0	0.0	0.0	0.3	1.0	0.0	1.0
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of [f]	88.9	...	0.0	...	10.7	...	0.0	...	0.0	...	0.0	...	0.4	...	0.0	...
Nauru [e]	11.2	53.3	1.1	2.4	2.2	7.2	0.0	0.0	0.0	0.0	1.2	1.2	84.3	35.7	0.0	0.1
Palau [e]	97.8	99.8	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.1	0.0	0.0
Papua New Guinea	44.9	22.7	24.7	45.3	2.7	1.2	0.0	0.3	0.0	0.0	0.2	0.0	27.2	30.0	0.3	0.5
Samoa	11.2	6.8	18.0	0.4	6.1	2.9	0.0	0.1	0.0	0.2	0.1	0.0	58.4	81.1	6.2	8.5
Solomon Islands	59.8	73.3	21.1	9.5	3.6	0.7	0.0	0.0	0.0	0.0	0.0	0.1	11.0	10.2	4.5	6.2
Timor-Leste [g]	...	7.7	...	7.0	...	24.3	...	0.5	...	2.2	...	1.4	...	55.5	...	1.5
Tonga	30.1	21.7	1.6	6.1	25.9	30.1	0.0	0.2	0.0	0.1	0.0	0.0	40.3	36.6	2.0	5.3
Tuvalu	0.3	3.7	43.7	18.7	0.0	2.9	0.0	0.0	0.0	0.3	0.0	3.8	56.0	69.5	0.0	1.1
Vanuatu	22.8	93.2	58.2	2.5	3.9	0.8	0.3	0.4	0.1	0.0	0.2	0.2	14.3	2.6	0.3	0.2
Developed Member Countries																
Australia	50.6	64.4	17.1	11.4	12.9	6.6	4.5	4.1	0.7	1.1	0.6	1.9	7.8	5.6	5.9	5.0
Japan	26.1	43.9	23.0	17.1	36.2	22.3	3.4	4.7	1.1	1.8	1.6	1.4	3.1	2.7	5.4	6.0
New Zealand	30.3	33.0	21.6	14.3	16.8	13.5	2.7	4.9	1.0	2.4	1.4	2.7	22.1	26.2	4.0	3.0

a Except for Afghanistan and Pakistan, data for 1990 refer to 1992.
b Economies are classified following Taipei,China's trade groupings. Data under the heading "Middle East" refer to those of "Middle and Near East" economies.
c Based on reporting partner-country data. For Palau, data for 1990 refer to 2000.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
e Data for 1990 refer to 1993.
f Data for 1990 refer to 1991.
g Data for 2008 refer to 2005.

Sources: *Direction of Trade Statistics* CD-ROM (IMF 2009); for Cook Islands; Federated States of Micronesia; Taipei,China; and Timor-Leste: economy sources.

External Trade

Table 4.14 **Direction of trade: merchandise imports**
(percent of total merchandise imports)

From / To	Asia		Europe		North and Central America		Middle East		South America		Africa		Oceania		Rest of the World	
	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008
Developing Member Countries																
Central and West Asia [a]																
Afghanistan	79.1	65.5	17.1	21.7	1.3	9.7	0.4	1.3	0.2	0.0	0.0	1.5	0.1	0.3	1.6	0.0
Armenia	2.7	23.4	43.4	60.8	53.3	5.9	0.1	7.3	0.1	1.8	0.0	0.3	0.1	0.3	0.3	0.3
Azerbaijan	20.2	34.3	70.8	56.9	2.6	3.2	6.2	3.1	0.2	1.6	0.0	0.2	0.0	0.6	0.0	0.1
Georgia	13.7	34.6	56.5	47.7	29.8	9.6	0.0	6.0	0.0	1.3	0.0	0.2	0.0	0.5	0.1	0.2
Kazakhstan	59.9	32.6	35.8	62.8	3.5	3.5	0.7	0.6	0.0	0.2	0.0	0.2	0.0	0.1	0.1	0.1
Kyrgyz Republic	38.7	80.7	55.1	18.1	6.2	0.6	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pakistan	31.6	38.2	29.3	17.3	14.2	6.1	19.1	33.0	0.9	0.7	2.5	2.6	2.4	1.0	0.1	1.2
Tajikistan	4.2	56.3	82.4	35.0	13.3	3.4	0.0	4.7	0.0	0.5	0.0	0.0	0.0	0.1	0.1	0.0
Turkmenistan	8.2	38.3	65.0	37.6	26.7	1.6	0.0	22.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Uzbekistan	19.1	43.7	61.8	51.3	19.0	4.3	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
East Asia																
China, People's Rep. of	48.6	39.0	24.1	14.0	15.8	8.4	0.9	7.1	2.0	5.5	0.6	4.6	2.8	3.3	5.2	18.0
Hong Kong, China	66.7	76.0	12.4	8.9	8.6	5.5	0.8	1.3	0.7	0.6	0.6	0.3	1.1	0.7	9.1	6.7
Korea, Rep. of	33.5	47.1	13.1	12.3	25.3	10.1	7.0	19.9	1.7	2.4	0.6	1.5	4.3	4.1	14.4	2.6
Mongolia	33.1	54.7	66.0	40.5	0.0	2.4	0.0	0.3	0.1	0.0	0.7	0.0	0.1	0.7	0.0	1.3
Taipei,China [b]	43.6	60.3	17.5	8.7	24.9	10.5	6.0	13.9	2.1	0.0	2.2	2.8	3.4	3.3	0.2	0.0
South Asia																
Bangladesh	47.7	58.2	22.0	11.0	8.4	3.2	5.1	15.0	1.4	1.4	0.2	0.8	1.8	1.6	13.3	8.7
Bhutan [c]	11.2	91.0	72.1	7.2	11.3	1.8	0.0	0.0	3.1	0.0	0.0	0.0	2.2	0.0	0.0	0.0
India	17.4	32.3	41.3	20.2	12.9	8.2	18.3	6.9	1.7	1.7	2.8	1.6	3.4	4.3	2.3	24.9
Maldives	85.2	63.6	13.3	11.8	0.5	2.1	0.5	18.6	0.0	0.0	0.0	0.5	0.3	2.9	0.1	0.4
Nepal	69.4	80.2	20.1	4.1	2.8	1.0	0.0	2.8	0.5	0.0	0.2	0.1	5.8	0.9	1.2	10.9
Sri Lanka	47.5	58.3	17.8	16.0	8.9	5.1	11.7	14.1	0.8	0.3	4.4	0.3	2.8	3.3	6.1	2.5
Southeast Asia																
Brunei Darussalam [d]	61.5	80.6	18.6	11.3	15.4	4.9	0.0	0.7	0.2	0.0	0.0	0.1	2.6	1.3	1.7	1.2
Cambodia	64.8	87.1	28.5	3.3	0.1	2.2	3.5	0.1	0.5	0.1	0.1	0.0	2.5	0.6	0.0	6.7
Indonesia	43.6	70.8	22.5	8.5	13.7	6.1	5.0	6.0	2.0	1.3	0.7	1.5	6.0	3.7	6.5	2.1
Lao PDR	87.7	92.5	9.7	3.9	0.8	1.4	0.1	0.0	0.2	0.0	0.1	0.0	0.9	0.8	0.6	1.6
Malaysia	50.6	65.8	17.9	11.5	18.0	8.8	1.2	3.7	1.6	1.1	0.5	1.1	4.3	2.5	5.7	5.4
Myanmar	69.2	95.4	23.3	3.5	3.1	0.2	0.1	0.2	0.0	0.0	0.4	0.1	3.7	0.5	0.1	0.1
Philippines	40.0	57.8	13.2	8.6	21.1	12.8	11.8	9.5	2.5	1.4	0.7	0.1	4.3	2.7	6.4	7.1
Singapore	48.2	53.0	15.9	13.8	16.9	12.1	11.0	12.4	0.9	1.3	0.7	0.4	2.2	1.7	4.3	5.4
Thailand	53.4	53.8	20.0	12.4	12.1	7.2	4.1	15.6	1.8	1.7	0.9	1.3	1.7	3.2	6.0	4.9
Viet Nam	34.1	70.0	21.3	9.0	0.4	4.1	0.0	0.6	0.0	1.0	0.1	0.1	0.4	2.4	43.8	12.8
The Pacific																
Cook Islands	1.9	2.0	32.5	0.0	5.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	51.1	89.3	9.2	7.0
Fiji Islands	26.4	51.7	5.6	3.6	13.4	3.5	0.0	0.1	0.0	0.2	0.0	0.2	44.1	37.5	10.5	3.2
Kiribati	14.4	15.1	6.0	4.6	48.9	9.0	0.0	0.0	0.1	0.6	0.0	0.0	30.6	69.9	0.1	0.8
Marshall Islands [e]	18.5	16.2	0.0	0.0	74.9	45.8	0.0	0.0	0.0	0.0	0.0	0.0	5.5	12.2	1.2	25.9
Micronesia, Fed. States of	19.7	37.0	0.0	0.0	72.1	55.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.1	5.6	3.3
Nauru [c]	31.2	47.1	7.4	8.6	0.6	13.9	0.0	0.0	0.0	0.0	2.2	1.4	58.6	28.4	0.0	0.5
Palau [c]	98.5	91.7	0.9	2.2	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	6.1	0.0	0.0
Papua New Guinea	29.4	44.4	7.0	3.7	11.5	2.8	0.1	0.1	0.5	0.0	0.3	0.4	50.2	46.6	1.0	2.0
Samoa	24.6	38.1	28.9	25.3	7.0	4.5	0.0	0.4	0.0	0.8	0.0	0.0	23.7	27.3	15.9	3.7
Solomon Islands	41.1	51.9	6.4	8.9	6.1	4.2	0.0	0.0	0.0	0.0	0.1	0.6	45.1	32.5	1.2	1.9
Timor-Leste [f]	...	76.7	...	2.7	...	0.2	...	0.0	...	0.0	...	0.0	...	13.0	...	7.4
Tonga	15.3	12.0	1.8	1.8	10.3	9.6	0.0	0.0	0.0	0.5	0.0	3.5	62.6	70.6	9.9	1.9
Tuvalu [c]	29.8	69.6	33.9	1.2	0.0	0.1	0.0	0.0	0.5	0.0	0.0	0.0	35.8	29.1	0.0	0.0
Vanuatu	62.7	36.0	21.9	4.6	2.3	16.3	0.0	0.0	0.3	0.1	0.0	0.6	12.4	40.1	0.3	2.2
Developed Member Countries																
Australia	32.4	50.6	27.5	22.4	26.4	13.7	3.2	2.6	1.0	1.0	0.4	1.0	5.5	5.4	3.7	3.1
Japan	25.3	38.1	19.8	12.2	27.2	12.7	13.3	22.1	3.0	2.7	1.6	2.5	6.3	6.8	3.6	2.9
New Zealand	24.0	42.1	25.0	16.4	20.0	11.2	5.4	6.5	1.0	0.8	0.2	1.6	21.3	19.0	3.2	2.4

a Except for Afghanistan and Pakistan, data for 1990 refer to 1992.
b Economies are classified following Taipei,China's trade groupings. Data under the heading "Middle East" refer to those of "Middle and Near East" economies.
c Based on reporting partner country data. For Palau, data for 1990 refer to 2000.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
e Data for 2008 refer to 2006.
f Data for 2008 refer to 2005.

Sources: *Direction of Trade Statistics* CD-ROM (IMF 2009); for Cook Islands; Federated States of Micronesia; Taipei,China; and Timor-Leste: economy sources.

Table 4.15 **International reserves** [a]
(end of year; US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	7	7	7	7	7	6	6	7	1	0	0	0	0	...
Armenia	110	168	239	293	304	314	330	431	502	548	669	1072	1659	1405
Azerbaijan	121	214	467	449	673	680	725	720	803	1075	1178	2500	4273	6467
Georgia	199	191	202	133	144	116	162	202	196	387	479	931	1361	1480
Kazakhstan	1660	1961	2221	1965	2002	2096	2508	3141	4962	9277	7070	19127	17629	19872
Kyrgyz Republic	124	123	199	188	254	262	287	317	399	565	612	817	1177	1225
Pakistan	2453	1238	1830	1546	2054	2056	4235	8762	11674	10616	10948	12816	15689	8903
Tajikistan	0	3	39	56	57	94	94	90	118	172	189	204	48	75
Turkmenistan	1170	1172	1285	1379	1607	1808	2055	2346	2673	2714	3600	...	...	...
Uzbekistan	...	...	1167	1168	1242	1273	1212	1215	1659	2147	2895	4459	7413	10145
East Asia														
China, People's Rep. of	76036	107676	143363	149812	158336	168856	218698	295202	412225	618574	825588	1072564	1534354	1953334
Hong Kong, China	55424	63833	92823	89669	96255	107560	111174	111919	118388	123569	124278	133210	152693	182539
Korea, Rep. of	32712	34073	20405	52041	74054	96198	102821	121414	155355	199069	210391	238956	262224	201220
Mongolia	152	161	200	103	137	202	257	399	243	250	430	1061	1395	...
Taipei,China	95911	93594	88186	95084	111061	111370	126572	166046	211140	246560	257952	270840	275027	296389
South Asia														
Bangladesh	2367	1863	1607	1928	1623	1516	1305	1722	2624	3222	2825	3877	5278	5789
Bhutan	130	190	189	257	292	318	323	355	367	399	467	545	699	765
India	21691	23784	27568	29833	35069	40155	48200	70377	102261	130401	136026	176105	273859	247419
Maldives	48	76	98	119	127	123	93	133	159	204	186	231	308	241
Nepal	593	578	633	763	852	952	1044	1024	1229	1469	1504	...	...	...
Sri Lanka	2094	1967	2029	1984	1639	1147	1357	1705	2334	2205	2737	2947	3644	...
Southeast Asia														
Brunei Darussalam [b]	...	...	...	...	517	408	382	449	475	489	492	514	667	700
Cambodia	192	256	299	439	509	611	698	914	982	1118	1159	1411	2143	2641
Indonesia	14787	19281	17396	23517	27257	29268	28018	32047	36253	36303	34731	42588	56925	51641
Lao PDR	93	170	113	113	105	140	133	194	213	227	239	336	540	...
Malaysia	23899	27130	20899	25675	30645	28383	29574	33416	43883	65945	69917	82194	101084	91212
Myanmar	573	241	261	326	277	234	411	481	562	685	782	1248	...	...
Philippines	7799	11773	8769	10829	15052	15063	15692	16365	17063	16228	18494	22967	33751	37551
Singapore	68816	76964	71390	75077	77047	80170	75677	82221	96246	112579	116172	136260	162957	174193
Thailand	35945	38645	26893	29536	34781	32661	33041	38915	42148	49831	52065	66985	87455	111008
Viet Nam	1379	1814	2098	2101	3423	3510	3765	4232	6359	7186	9216	13591	23748	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	349	428	361	386	429	412	367	359	424	478	315	...	...	...
Kiribati	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	69	90	86	102	93	113	98	117	90	55	50	47	48	40
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	263	605	379	206	215	296	430	343	520	660	749	1427	2087	1987
Samoa	55	61	64	61	68	64	57	62	84	86	82	81	95	88
Solomon Islands	16	33	36	49	51	32	19	18	37	81	95	104	119	...
Timor-Leste	...	...	...	...	...	...	...	43	61	182	153	84	230	...
Tonga	29	31	27	29	24	25	24	25	40	55	47	48	65	70
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	48	44	37	45	41	39	38	37	44	62	67	105	120	115
Developed Member Countries														
Australia	14951	17402	17585	15377	21956	18817	18664	21567	33258	38926	43257	55079	26908	32924
Japan	184510	217867	220792	216665	288080	356021	396237	462357	664569	835228	835506	880977	954145	1010686
New Zealand	4410	5953	4451	4204	4455	3952	3565	4963	6085	6947	8893	14069	17247	11153

a Data refer to international reserves with gold at national valuation unless otherwise specified. For Afghanistan, Bhutan, Samoa, Solomon Islands, Timor-Leste, Tonga, Turkmenistan, and Vanuatu, data refer to international reserves without gold.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: *International Financial Statistics* CD-ROM (IMF 2009); for Taipei,China: economy sources.

International Reserves

Table 4.16 **Ratio of international reserves to imports** [a]
(months)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	0	0	0	0	0	0	...
Armenia	2	3	4	4	5	5	5	6	5	5	5	7	7	4
Azerbaijan	1	2	4	3	6	5	6	5	4	4	3	6	8	10
Georgia	3	3	2	2	2	1	2	2	2	2	2	3	3	3
Kazakhstan	4	4	4	4	4	4	4	5	6	8	5	10	6	6
Kyrgyz Republic	3	2	4	3	6	6	8	7	7	7	7	5	5	4
Pakistan	3	1	2	2	3	3	5	11	12	9	7	6	7	3
Tajikistan	...	0	1	1	1	1	1	1	1	2	2	1	0	0
Turkmenistan	9	10	15	15	14	12	12	15	12	10	15	...	...	...
Uzbekistan	...	...	4	5	6	6	6	7	8	8	10	14	16	16
East Asia														
China, People's Rep. of	8	10	13	13	12	9	11	13	13	14	16	17	20	22
Hong Kong, China	...	...	5	6	6	6	7	7	6	6	5	5	5	6
Korea, Rep. of	3	3	2	7	8	7	9	10	11	11	10	9	9	6
Mongolia	4	4	5	2	3	4	5	7	3	3	4	9	8	...
Taipei,China	11	11	10	11	12	10	14	18	20	18	17	16	15	15
South Asia														
Bangladesh	5	3	3	3	3	2	2	3	4	4	3	3	4	4
Bhutan	16	21	17	23	22	21	21	21	21	18	12	15	16	17
India	6	6	6	8	8	8	10	13	15	13	10	11	13	10
Maldives	2	3	4	5	4	4	3	5	5	4	3	3	4	2
Nepal	6	5	5	6	8	7	8	8	9	10	9	...	..	...
Sri Lanka	5	4	4	4	3	2	3	3	4	3	4	3	4	...
Southeast Asia														
Brunei Darussalam [b]	...	...	...	...	...	...	4	4	5	4	4	4	4	3
Cambodia	2	3	3	5	4	4	4	5	4	4	4	4	5	5
Indonesia	4	5	5	9	11	9	10	11	11	9	6	7	8	5
Lao PDR	2	3	2	2	2	3	3	5	6	4	3	4	6	...
Malaysia	4	4	3	6	6	4	5	5	7	8	8	8	9	7
Myanmar	4	2	1	2	2	1	2	3	4	4	5	6	...	...
Philippines	4	4	3	4	4	4	5	5	5	4	5	5	7	7
Singapore	7	7	6	9	8	7	8	8	9	8	7	7	8	7
Thailand	6	7	5	9	9	6	7	7	7	6	5	6	8	8
Viet Nam	2	2	2	2	4	3	3	3	3	3	3	4	5	...
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	6	6	5	8	7	6	6	5	5	4	3	...	...	...
Kiribati	0	0	0	0	0	0	0	0	0	0	0	0	0	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	9	10	10	12	11	12	10	13	9	5	4	4	4	3
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	2	5	3	2	2	4	5	4	5	5	6	9	10	7
Samoa	7	7	8	8	7	2	2	2	7	7	5	4	5	4
Solomon Islands	1	3	2	4	6	4	3	5	6	13	9	7	6	...
Timor-Leste	...	...	...	...	...	...	...	3	5	14	12	7	18	...
Tonga	5	6	5	4	5	5	5	5	6	8	5	5	7	6
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	7	6	6	7	8	6	6	5	6	7	6	8	8	6
Developed Member Countries														
Australia	2	2	2	1	2	1	1	1	2	2	3	3	1	1
Japan	7	8	9	10	12	12	15	18	23	24	21	20	20	17
New Zealand	4	5	4	4	4	4	3	4	4	4	5	7	7	5

a Merchandise imports from the balance of payments were used in the computation.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: *International Financial Statistics* CD-ROM (IMF 2009), European Bank for Reconstruction and Development Transition Report 2007, country sources, ADB staff estimates.

Table 4.17 **Official flows [a] from all sources to developing member countries**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia	**3254.6**	**3230.5**	**2724.1**	**2919.3**	**3368.3**	**2422.2**	**3618.6**	**3961.3**	**4314.5**	**3330.0**	**4999.6**	**7034.2**	**8142.8**
Afghanistan [b]	212.5	169.4	229.7	154.2	142.5	136.0	404.6	1300.5	1590.7	2169.2	2748.6	2999.4	3951.1
Armenia	228.9	254.8	149.8	146.2	172.4	205.1	190.4	257.6	193.0	203.7	204.7	226.2	350.7
Azerbaijan	190.7	107.0	78.2	140.8	240.4	277.0	190.5	312.9	268.2	171.2	202.2	374.2	331.9
Georgia	219.3	219.8	165.7	174.7	159.4	136.7	247.6	282.7	204.6	208.2	251.5	227.5	313.3
Kazakhstan	460.0	444.7	538.9	462.6	345.7	151.4	141.8	136.4	260.3	220.7	-661.4	130.1	59.5
Kyrgyz Republic	201.3	224.6	203.3	234.6	271.9	216.8	167.4	183.5	177.9	246.2	272.8	273.1	282.0
Pakistan	1300.7	1471.7	1075.8	1143.0	1169.7	614.2	1709.6	1264.2	1365.3	-277.1	1663.2	2484.6	2442.8
Tajikistan	93.8	109.5	77.4	79.8	105.9	83.9	145.2	154.7	163.7	196.9	230.7	370.6	392.3
Turkmenistan	26.7	-61.7	112.3	123.7	283.6	267.2	85.1	-36.6	3.9	-31.0	-55.4	-98.9	-46.7
Uzbekistan	320.6	280.7	93.0	259.7	476.9	334.1	336.5	105.4	87.0	221.8	142.7	47.5	66.0
East Asia	**9083.6**	**5237.2**	**5120.0**	**3375.7**	**4499.8**	**2377.1**	**3016.8**	**-211.1**	**-2471.3**	**1559.5**	**2304.0**	**2453.3**	**1679.3**
China, People's Rep. of	8798.0	5181.6	5047.2	3139.7	4322.0	2362.2	2925.5	-327.4	2021.3	1342.8	2079.3	2242.6	1454.6
Hong Kong, China [b]	17.7	13.2	8.4	6.8	3.8	4.3	3.6	4.0	5.0	7.0	...	...	...
Korea, Rep. of [b]	57.0	148.7	-159.5	-50.3	-55.0	-198.0	-111.1	-81.7	-457.7	-67.6	...	...	...
Mongolia	212.7	175.4	218.2	203.0	215.7	199.0	189.0	186.6	9.1	262.2	224.7	210.7	224.7
Taipei,China [b]	0.2	15.8	5.7	76.5	13.3	9.7	9.8	7.4	11.8	15.1	...	...	...
South Asia	**2373.5**	**3659.1**	**2635.0**	**4100.9**	**3859.9**	**2408.3**	**3298.6**	**-899.3**	**830.5**	**5037.6**	**6146.3**	**6837.4**	**6355.0**
Bangladesh	1239.9	1420.8	1076.7	1229.7	1223.1	1140.9	1193.7	964.5	1187.3	1601.1	1200.6	1603.2	1703.9
Bhutan	71.5	67.3	73.5	103.7	63.6	72.4	122.0	145.1	151.9	150.0	147.5	120.1	82.4
India	-46.3	1182.3	476.8	1782.8	1833.7	515.9	1232.6	-2794.6	-1706.1	2276.3	2868.5	3682.6	3151.6
Maldives	59.9	31.8	23.4	28.6	26.5	17.2	23.7	27.9	24.1	21.8	79.7	65.1	58.5
Nepal	437.3	400.5	469.2	389.9	364.6	344.1	352.0	331.3	426.7	409.1	546.4	496.8	558.4
Sri Lanka	611.2	556.4	515.4	566.2	348.5	317.7	374.8	426.4	746.7	579.3	1305.7	869.7	800.3
Southeast Asia	**4637.5**	**1932.4**	**9389.8**	**7754.0**	**9653.8**	**6265.4**	**5741.8**	**-1271.7**	**-460.9**	**-870.4**	**1613.9**	**2138.6**	**1374.8**
Brunei Darussalam [b, c]	4.3	3.2	0.4	0.3	1.4	0.6	0.3	-1.7	0.5	0.8	...	...	...
Cambodia	517.6	418.5	333.3	346.4	251.8	372.3	405.4	460.2	526.1	499.8	574.1	651.2	686.4
Indonesia	1869.8	-142.5	1112.2	3349.6	4184.7	2239.5	1177.2	477.2	-18.0	1909.0	895.5	-388.2	-434.7
Lao PDR	279.4	347.7	322.5	272.8	275.1	263.6	237.8	260.5	282.6	246.0	319.6	325.0	385.9
Malaysia	513.3	-674.0	-69.5	323.2	696.7	696.2	2163.4	-103.7	8.9	738.4	-186.6	-351.1	-1422.8
Myanmar	79.6	132.1	77.0	153.8	81.4	105.5	120.3	104.7	67.8	66.5	90.5	89.9	53.4
Philippines	-132.5	470.1	535.0	445.2	344.0	338.5	99.0	312.8	520.9	-125.7	-249.0	379.8	736.7
Singapore [b]	16.7	14.9	2.8	1.6	-1.1	1.1	1.0	7.4	7.1	9.2	...	...	...
Thailand	858.6	751.2	6234.8	1377.0	2520.8	725.5	32.6	-3958.5	-3881.5	-2407.0	-1619.1	-330.3	-894.2
Viet Nam	635.0	614.4	841.8	1484.3	1290.5	1523.1	1505.3	1167.7	2023.1	2011.5	1768.8	1762.4	2264.1
Pacific	**915.1**	**825.9**	**695.0**	**747.3**	**718.0**	**994.0**	**933.3**	**811.9**	**817.9**	**852.4**	**1065.1**	**1160.7**	**1213.8**
Cook Islands [b]	13.0	11.3	10.1	8.1	6.0	4.3	4.8	3.8	5.8	8.8	7.8	32.3	9.3
Fiji Islands	37.4	42.7	45.7	31.8	25.0	21.5	21.7	30.8	49.9	62.4	72.7	64.9	61.0
Kiribati [b]	15.3	12.8	15.7	17.3	20.9	17.9	12.4	20.9	18.4	16.7	27.8	25.2	27.1
Marshall Islands [b]	38.9	72.9	62.9	50.3	62.9	57.2	74.0	62.4	56.5	51.1	56.6	55.0	52.1
Micronesia, Fed. States of [b]	77.2	112.8	95.8	79.9	107.8	101.5	137.6	111.7	114.9	86.3	106.4	108.5	114.9
Nauru [b]	2.7	3.3	2.6	2.1	6.6	4.0	7.3	11.7	16.1	13.7	9.1	17.4	25.6
Palau [b]	142.3	63.0	38.4	89.1	28.8	39.1	34.2	31.3	25.5	19.6	23.5	37.3	22.3
Papua New Guinea	397.7	357.0	292.0	322.2	183.1	351.1	268.9	182.1	175.0	216.9	253.8	255.0	236.6
Samoa	47.5	33.9	28.2	31.8	21.5	24.9	37.0	37.6	31.0	29.5	42.4	66.6	43.3
Solomon Islands	50.1	43.3	38.7	42.3	36.2	70.2	78.4	39.0	80.8	121.0	199.4	204.0	243.8
Timor-Leste [b]	0.0	0.1	0.4	1.7	152.8	231.3	194.2	219.1	175.0	161.2	184.8	209.3	278.3
Tonga	38.5	31.5	27.0	24.7	23.1	21.0	23.3	22.7	30.0	19.1	31.7	21.2	30.9
Tuvalu [b]	7.9	10.3	10.1	5.2	6.8	4.0	9.5	11.7	6.2	8.0	9.0	15.3	11.7
Vanuatu	46.7	31.0	27.5	40.8	36.6	46.0	30.2	27.2	32.7	38.1	40.2	48.6	56.9
TOTAL DMCs	**20264.3**	**14885.1**	**20563.9**	**18897.2**	**22099.8**	**14467.1**	**16609.3**	**2391.2**	**3030.8**	**9909.2**	**16128.9**	**19624.4**	**18765.7**
TOTAL DEVELOPING COUNTRIES [d]	**72827.4**	**47648.1**	**50096.3**	**63428.6**	**60653.6**	**47640.9**	**51767.5**	**44452.7**	**53105.7**	**63951.3**	**49110.0**	**87519.3**	**98849.2**

a Refers to net flows of long-term public and publicly guaranteed debt from official creditors and grants, including technical cooperation grants.
b Refers to net official development assistance only, i.e., concessional flows to developing countries and multilateral institutions provided by official agencies, including state and local governments, or by their executing agencies, administered with the objective of promoting the economic development and welfare of developing countries, and containing a grant element of at least 25%.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
d Includes data for all developing countries as reported in World Bank's Global Development Finance Online. For developing member countries not covered by the World Bank, data are from OECD's Geographical Distribution of Financial Flows to Aid Recipients.

Sources: Global Development Finance Online (World Bank 2009). For Afghanistan; Brunei Darussalam; Cook Islands; Hong Kong, China; Kiribati; Republic of Korea; Marshall Islands; Federated States of Micronesia; Nauru; Palau; Singapore; Taipei,China; Timor-Leste; and Tuvalu: Statistics website (OECD 2009, stats.oecd.org/wbos/Default.aspx) and Statistical Compendium 2005-1 CD-ROM (OECD 2005).

Capital Flows

Table 4.18 **Net private flows [a] from all sources to developing member countries**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia	**3151.9**	**4685.7**	**7150.9**	**5584.1**	**3883.9**	**2532.8**	**4930.7**	**6084.4**	**9421.8**	**18776.3**	**14896.6**	**43347.9**	**39169.3**
Afghanistan [b]	0.0	-30.0	-10.9	-6.1	6.0	21.0	-18.7	-0.2	15.1	34.5	-11.7	18.7	12.9
Armenia	25.3	19.5	52.4	226.5	135.6	124.0	70.5	103.9	121.2	262.5	304.8	503.2	1201.5
Azerbaijan	330.1	627.3	1122.9	1089.7	606.1	167.1	207.1	1383.9	3264.2	3678.2	1691.1	-648.3	-4653.0
Georgia	6.0	54.0	244.8	272.0	92.8	157.0	123.2	143.6	317.0	555.0	501.7	1240.3	1835.8
Kazakhstan	1204.4	1399.0	2098.1	2007.9	1816.3	2171.3	5019.5	4142.5	5875.2	12321.8	8727.7	34834.5	32302.4
Kyrgyz Republic	96.1	54.2	106.8	88.4	31.3	-62.7	-73.1	-10.7	-3.5	121.7	42.1	263.9	190.6
Pakistan	1049.8	1762.5	2257.4	853.1	120.5	-17.8	-325.8	349.6	-58.2	1342.4	3406.8	6229.9	7112.3
Tajikistan	10.0	18.0	17.7	22.9	39.4	12.3	26.2	17.2	-7.6	248.7	51.9	345.5	363.3
Turkmenistan	253.0	274.0	894.5	449.5	199.6	-40.5	-166.5	-38.2	0.6	191.6	333.5	655.4	762.3
Uzbekistan	177.2	507.2	367.2	580.3	836.3	1.2	68.5	-7.1	97.8	19.8	-151.3	-95.4	40.3
East Asia	**52639.0**	**66264.0**	**84650.7**	**61962.5**	**53544.9**	**41035.5**	**57062.2**	**42617.7**	**87150.5**	**90505.7**	**107009.3**	**128815.2**	**172945.7**
China, People's Rep. of	40862.0	46633.5	58028.4	42167.3	36526.9	40643.7	41073.4	47107.3	53514.9	73698.1	106824.9	128456.2	172538.3
Hong Kong, China [b]	3758.4	7773.2	14584.0	9625.5	11712.4	-1924.2	6631.7	2454.1	5494.6	-1359.7	...	...	...
Korea, Rep. of [b]	7596.3	9405.8	10175.8	9402.3	2877.0	2132.9	5180.0	2216.7	5985.1	7762.8	...	...	...
Mongolia	-3.8	-3.2	8.7	3.8	27.5	51.0	41.7	77.6	131.4	92.8	184.5	359.0	407.4
Taipei,China [b]	426.1	2454.7	1853.9	763.5	2601.1	132.0	4135.4	-4329.9	22024.5	10331.7	...	...	...
South Asia	**5114.6**	**6317.7**	**8000.0**	**5809.3**	**3252.5**	**10676.5**	**7240.0**	**7599.8**	**14818.4**	**20166.8**	**20098.7**	**47384.9**	**85814.7**
Bangladesh	-34.5	-133.4	99.4	156.7	166.4	317.5	307.5	135.7	252.2	437.7	818.7	704.3	785.5
Bhutan	-2.2	-0.9	-3.0	-2.3	9.0	0.1	0.3	0.3	1.1	3.5	9.0	5.1	78.3
India	4988.0	6238.5	7221.6	5208.9	2975.0	10032.8	5870.7	7346.0	14420.1	19495.4	19193.9	46453.9	83867.1
Maldives	8.8	11.7	17.4	22.2	16.8	13.1	12.2	27.0	23.9	55.0	13.8	17.3	14.2
Nepal	-4.9	15.5	12.0	-0.6	-8.3	-8.3	20.7	-6.3	14.4	-0.7	1.8	-7.1	5.4
Sri Lanka	159.5	186.4	652.5	424.4	93.8	321.6	28.6	97.1	106.7	176.0	61.4	210.4	1064.1
Southeast Asia	**35514.0**	**56082.7**	**36202.6**	**16119.7**	**22722.9**	**6322.7**	**4086.6**	**15564.7**	**11837.4**	**21697.5**	**34682.0**	**47387.6**	**64939.7**
Brunei Darussalam [b, c]	31.8	-66.4	-13.2	779.6	-83.1	-93.3	21.6	-122.2	-126.0	-116.1	...	...	...
Cambodia	163.6	290.4	200.5	239.6	229.0	148.5	149.4	145.1	84.0	131.4	381.2	483.2	867.3
Indonesia	8144.9	14886.2	5686.0	-7892.9	-9709.6	-10638.8	-6739.2	-5251.6	-4622.4	1941.8	9717.4	11387.0	15647.5
Lao PDR	95.1	159.8	86.3	45.3	51.6	33.9	23.9	160.7	265.9	282.9	390.9	489.5	628.1
Malaysia	7849.8	8452.3	9831.6	4859.3	5068.2	4957.2	1504.7	5149.7	2107.2	9157.3	1862.0	10640.0	6489.5
Myanmar	315.4	332.6	933.2	401.1	242.1	191.8	147.3	92.0	216.3	181.7	209.1	270.7	290.4
Philippines	2372.3	5784.3	3968.7	3722.4	6108.3	3781.7	2224.1	1917.1	1570.3	2515.4	4402.5	4457.2	8764.5
Singapore [b]	4290.1	10285.7	5049.0	7285.6	18724.9	8393.4	7548.3	11823.9	5992.4	-1952.5	...	...	...
Thailand	10146.3	13279.5	7935.5	6153.8	1377.4	-1137.1	-1478.6	772.6	5032.9	7820.9	15023.9	16013.3	19395.4
Viet Nam	2136.4	2611.9	2511.7	1305.4	631.0	592.0	706.6	755.2	1190.9	1618.7	2694.9	3646.6	12857.1
The Pacific	**241.2**	**119.8**	**266.1**	**382.3**	**271.0**	**157.9**	**900.0**	**1115.9**	**486.0**	**1861.0**	**3023.8**	**1928.5**	**5069.1**
Cook Islands [b]	27.0	-54.5	-3.5	10.0	-47.7	-31.3	0.0	-1.9	-22.7	-4.3	-29.3	2.7	1.1
Fiji Islands	49.1	-13.3	4.1	98.0	-40.7	-7.4	36.5	24.3	35.6	185.6	158.7	370.8	418.3
Kiribati [b]	0.0	-0.0	0.8	-0.5	7.6	0.0	0.3	-0.1	0.0	0.3	0.8	-1.3	-8.3
Marshall Islands [b]	4.9	33.0	5.7	-17.1	56.3	106.1	788.9	967.6	395.6	1132.2	2733.3	1393.4	4319.8
Micronesia, Fed. States of [b]	-0.1	-71.0	-20.9	1.3	-0.5	0.0	-0.3	-0.0	0.0	0.0	0.0	0.6	16.3
Nauru [b]	0.5	-13.3	-3.0	1.9	-0.6	2.1	0.2	1.2	6.3	223.4	2.3	-0.3	-0.0
Palau [b]	...	-23.8	78.3	-2.5	6.2	17.8	11.2	1.2	1.6	6.9	0.9	1.3	0.7
Papua New Guinea	111.2	227.1	133.6	132.9	268.1	45.3	1.7	-77.4	2.1	-84.5	123.1	127.0	198.9
Samoa	3.4	1.2	20.0	3.0	2.0	-1.5	1.2	-0.1	0.5	2.3	-3.0	20.7	2.5
Solomon Islands	3.8	1.8	30.2	6.6	6.4	9.5	-12.8	-3.1	-4.4	-1.8	12.2	19.2	59.6
Timor-Leste [b]	8.9	0.0	0.0	128.2	0.0	0.0	53.6	164.4	53.4	374.1	0.1	-64.3	-0.6
Tonga	2.0	2.2	1.9	1.2	0.7	3.4	1.0	0.6	-0.1	6.9	12.3	11.6	27.4
Tuvalu [b]	-0.3	-2.2	-11.1	-0.9	-0.2	-4.3	0.6	25.0	0.0	0.0	-0.7	3.7	-0.7
Vanuatu	30.9	32.6	30.1	20.3	13.3	20.3	18.0	14.2	18.0	19.8	13.3	43.5	34.2
TOTAL DMCs	**96660.7**	**133469.9**	**136270.3**	**89857.9**	**83675.2**	**60725.4**	**74219.5**	**72982.5**	**123714.1**	**153007.3**	**179710.3**	**268864.0**	**367938.4**
TOTAL DEVELOPING COUNTRIES [d]	**176849.2**	**258284.9**	**308289.0**	**274842.6**	**231705.1**	**195030.6**	**198761.3**	**170576.6**	**247416.4**	**344443.8**	**485849.7**	**630558.4**	**959316.9**

a Refers to the sum of net foreign direct investment, portfolio equity flows, net flows of long-term public and publicly guaranteed debt from private creditors, and net flows of total private nonguaranteed debt.
b Refers to the sum of direct investment, portfolio investment, and private net exports credits of Development Assistance Committee countries only.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
d Includes data for all developing countries as reported in World Bank's Global Development Finance Online. For developing member countries not covered by the World Bank, data are from OECD's Geographical Distribution of Financial Flows to Aid Recipients.

Sources: Global Development Finance Online (World Bank 2009). For Afghanistan; Brunei Darussalam; Cook Islands; Hong Kong, China; Kiribati; Republic of Korea; Marshall Islands; Federated States of Micronesia; Nauru; Palau; Singapore; Taipei,China; Timor-Leste; and Tuvalu: Statistics website (OECD 2009, stats.oecd.org/wbos/Default.aspx) and *Statistical Compendium* 2005-1 CD-ROM (OECD 2005).

Table 4.19 **Aggregate net resource flows [a] from all sources to developing member countries**
(US$ million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries													
Central and West Asia	**6406.5**	**7916.2**	**9875.0**	**8503.4**	**7252.2**	**4955.1**	**8549.3**	**10045.8**	**13736.3**	**22106.3**	**19896.2**	**50382.1**	**47312.1**
Afghanistan	212.6	139.4	218.8	148.1	148.5	156.9	385.9	1300.3	1605.8	2203.7	2737.0	3018.1	3964.0
Armenia	254.2	274.3	202.3	372.7	308.0	329.1	260.9	361.5	314.2	466.3	509.4	729.4	1552.2
Azerbaijan	520.8	734.3	1201.1	1230.5	846.5	444.1	397.6	1696.8	3532.3	3849.4	1893.3	-274.1	-4321.1
Georgia	225.3	273.8	410.5	446.7	252.2	293.6	370.8	426.4	521.6	763.2	753.2	1467.8	2150.1
Kazakhstan	1664.4	1843.7	2637.0	2470.5	2162.0	2322.7	5161.3	4278.9	5935.5	12542.5	8066.3	34964.7	32361.8
Kyrgyz Republic	297.4	278.8	310.1	323.0	303.3	154.1	94.2	172.8	174.4	368.0	314.9	537.0	472.6
Pakistan	2350.5	3234.1	3333.2	1996.1	1290.2	596.3	1383.8	1613.7	1307.1	1065.3	5070.0	8714.5	9555.1
Tajikistan	103.8	127.5	95.0	102.7	145.3	96.2	171.4	171.9	156.1	445.6	282.6	716.1	755.6
Turkmenistan	279.7	212.4	1006.7	573.2	483.2	226.8	-81.5	-74.8	4.5	160.7	278.1	556.5	715.6
Uzbekistan	497.8	797.9	460.2	839.9	1313.1	335.3	405.0	98.3	184.8	241.6	-8.6	-47.9	106.2
East Asia	**61722.6**	**71501.2**	**89770.7**	**65338.2**	**58044.7**	**43412.6**	**60079.1**	**42406.6**	**84679.2**	**92065.2**	**109313.3**	**131268.6**	**174625.0**
China, People's Rep. of	49658.1	51815.1	63075.5	45307.0	40849.0	43005.9	43999.0	46780.0	51493.6	75041.0	108904.2	130698.8	173992.9
Hong Kong, China	3776.1	7786.4	14592.4	9632.3	11716.2	-1919.9	6635.3	-2450.1	5499.6	-1362.7	...	...	...
Korea, Rep. of	7653.3	9257.1	10016.3	9352.0	2622.0	1934.9	5068.9	2135.0	5527.4	7695.2	...	...	...
Mongolia	208.8	172.1	226.9	206.9	243.1	250.0	230.7	264.2	122.3	354.9	409.1	569.7	632.1
Taipei,China	426.3	2470.5	1859.6	840.0	2614.4	141.7	4145.2	-4322.5	22036.3	10335.8	...	...	...
South Asia	**7488.1**	**9976.8**	**10635.0**	**9910.2**	**7112.4**	**13084.8**	**10538.7**	**6700.5**	**15649.0**	**25204.4**	**26245.0**	**54222.4**	**92169.7**
Bangladesh	1205.4	1287.4	1176.1	1386.3	1389.5	1458.4	1501.2	1100.2	1439.5	2038.8	2019.3	2307.5	2489.4
Bhutan	59.3	66.4	70.5	101.4	72.6	72.4	122.3	145.4	153.0	153.5	156.5	126.2	160.7
India	4941.7	7420.8	7698.4	6991.7	4808.6	10548.7	8103.3	4551.5	12714.0	21771.6	22060.4	50136.5	87018.7
Maldives	68.7	43.5	40.9	50.8	43.1	30.2	35.9	55.0	48.0	76.8	93.5	82.4	72.7
Nepal	432.3	415.9	481.3	389.3	356.3	335.8	372.6	325.0	441.1	408.4	548.2	489.6	563.9
Sri Lanka	770.7	742.8	1167.9	990.5	442.3	639.3	403.3	523.5	853.4	755.3	1367.1	1080.1	1864.4
Southeast Asia	**40151.5**	**58015.2**	**45592.4**	**23873.7**	**32376.7**	**12588.2**	**9828.4**	**14293.0**	**11376.6**	**20827.1**	**36295.8**	**49526.2**	**66314.4**
Brunei Darussalam [b]	36.1	-63.2	-12.8	779.9	-81.7	-92.7	21.9	-123.9	-125.5	-115.3	...	...	...
Cambodia	681.2	706.9	533.8	586.0	480.8	520.8	554.8	605.3	610.1	631.2	955.3	1134.4	1553.7
Indonesia	10014.7	14743.7	6798.3	-4543.3	-5514.9	-8399.2	-5562.0	4774.4	-4638.4	32.9	10612.9	10998.8	15212.7
Lao PDR	374.5	507.5	408.8	318.1	326.7	297.5	261.7	421.1	548.5	528.8	710.6	814.5	1014.0
Malaysia	8363.1	7778.3	9762.1	5182.5	5764.9	5653.5	3668.1	5046.0	2116.1	9895.6	1685.3	10288.9	5066.7
Myanmar	395.1	464.7	1010.2	555.0	323.5	297.3	267.5	196.7	284.1	248.1	299.6	360.5	343.8
Philippines	2239.8	6254.5	4503.7	4167.6	6452.3	4120.3	2323.1	2230.0	2091.3	2389.7	4153.6	4837.0	9501.2
Singapore	4306.8	10300.6	5051.8	7287.2	18723.8	8394.5	7549.3	11831.3	5999.5	-1943.3	...	...	...
Thailand	11004.9	14030.7	14170.3	7530.9	3898.2	-411.6	-1446.0	-3185.9	1151.4	5413.9	13404.8	15683.1	18501.3
Viet Nam	2771.4	3226.3	3353.5	2789.7	1921.5	2115.1	2211.9	1922.8	3214.0	3630.2	4463.7	5409.0	15121.2
The Pacific	**1156.3**	**945.7**	**961.1**	**1129.6**	**989.0**	**1151.9**	**1833.3**	**1927.8**	**1303.9**	**2713.4**	**4088.9**	**3089.2**	**6282.9**
Cook Islands	40.0	-43.3	6.6	18.1	-41.8	-27.0	4.8	1.9	-16.9	4.5	-21.6	34.9	10.4
Fiji Islands	86.4	29.4	49.8	129.7	-15.7	14.1	58.1	55.1	85.5	248.0	231.4	435.6	479.2
Kiribati	15.3	12.8	16.4	16.8	28.5	17.9	12.7	20.8	18.4	17.0	28.5	23.9	18.8
Marshall Islands	43.8	105.9	68.6	33.3	119.2	165.4	862.9	1030.0	452.1	1183.3	2789.9	1448.4	4371.9
Micronesia, Fed. States of	77.0	41.8	74.8	81.2	107.3	101.6	137.3	111.6	115.0	86.4	106.4	109.1	131.2
Nauru	3.2	-10.0	-0.4	4.0	5.9	1.8	7.5	13.0	22.4	237.1	11.5	17.1	25.6
Palau	142.3	39.2	116.7	86.6	35.0	56.9	45.3	32.4	27.1	26.4	24.3	38.6	23.1
Papua New Guinea	508.8	584.1	425.5	455.0	461.2	396.4	270.6	104.7	177.1	132.3	376.9	382.0	435.5
Samoa	51.0	35.1	48.2	34.8	23.5	23.4	38.2	37.5	31.5	31.8	39.4	87.3	45.8
Solomon Islands	53.9	45.1	68.9	48.9	42.6	79.7	65.6	35.9	76.4	119.3	211.6	223.1	303.4
Timor-Leste	8.9	0.1	0.4	129.9	152.8	231.3	247.7	383.4	228.5	535.4	184.9	145.0	277.7
Tonga	40.5	33.7	28.8	25.8	23.8	24.4	24.3	23.3	30.0	26.1	43.9	32.8	58.2
Tuvalu	7.5	8.2	-1.0	4.3	6.6	-0.3	10.1	36.7	6.3	8.0	8.3	19.0	11.0
Vanuatu	77.5	63.6	57.6	61.1	50.0	66.3	48.2	41.4	50.7	57.9	53.4	92.1	91.0
TOTAL DMCs	**116925.0**	**148355.1**	**156834.2**	**108755.0**	**105775.0**	**75192.6**	**90828.7**	**75373.7**	**126744.9**	**162916.5**	**195839.2**	**288488.4**	**386704.1**
TOTAL DEVELOPING COUNTRIES [c]	**249676.6**	**305933.0**	**358385.3**	**338271.1**	**292358.7**	**242671.4**	**250528.8**	**215029.3**	**300522.2**	**408395.1**	**534959.7**	**718077.6**	**1058166.1**

a Refers to the sum of official and net private flows.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c Includes data for all developing countries as reported in World Bank's Global Development Finance Online. For developing member countries not covered by the World Bank, data are from OECD's Geographical Distribution of Financial Flows to Aid Recipients.

Sources: Global Development Finance Online (World Bank 2009); Statistics website (OECD 2009, stats.oecd.org/wbos/Default.aspx). For Afghanistan; Brunei Darussalam; Cook Islands; Hong Kong, China; Kiribati; Republic of Korea; Marshall Islands; Federated States of Micronesia; Nauru; Palau; Singapore; Taipei,China; Timor-Leste; and Tuvalu: *Statistical Compendium* 2005.1 CD-ROM (OECD 2005).

External Indebtedness

Table 4.20 **Total external debt of developing member countries** [a]
(US$ million)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	1654	2041
Armenia	...	371	521	638	804	902	916	1291	1592	1864	1970	1842	2004	2888
Azerbaijan	...	321	438	508	709	1073	1328	1278	1480	1727	1949	1815	1986	3021
Georgia	...	1240	1361	1466	1648	1653	1638	1729	1839	1935	2064	1911	1973	2292
Kazakhstan	...	3750	2922	4078	6084	6129	12433	14887	17981	22767	32815	43378	74148	96133
Kyrgyz Republic	...	609	1137	1341	1505	1736	1827	1717	1851	2024	2111	2027	2346	2401
Pakistan	20663	30229	29829	30073	32261	33890	32781	31655	33586	35741	35536	33158	35877	40680
Tajikistan	...	634	699	1065	1243	1275	1034	1058	1142	1152	1041	1065	1016	1228
Turkmenistan	...	402	756	1866	2397	2636	2518	2271	1975	1743	1522	1058	886	743
Uzbekistan	...	1799	2377	2916	3372	4939	4634	4877	4798	4921	4831	4290	4038	3876
East Asia														
China, People's Rep. of	55301	118090	128817	146697	143982	152064	145711	184803	186114	208431	247679	283803	325077	373635
Hong Kong, China [b, c]	12339	29177	37894	40422	336552	277281	208260	179877	174527	...	...	...	...	...
Korea, Rep. of	34968	85810	115803	136984	139097	130316	148119	128687	141471	157394	172259	187882	260061	383152
Mongolia	...	520	530	581	699	893	885	874	995	1190	1351	1302	1394	1596
Taipei,China [b]	17703	27077	27506	33550	29165	38628	34757	34336	45033	63054	80888	86732	85833	94525
South Asia														
Bangladesh	12439	15927	15341	14424	15670	16587	15717	15250	17046	18774	20129	18919	20491	22033
Bhutan	84	106	113	120	171	184	204	265	378	486	593	649	713	775
India	83628	94464	93466	94317	97637	98313	99099	98485	105020	112883	124399	123145	175540	220956
Maldives	78	155	168	171	194	219	206	235	272	285	372	387	477	562
Nepal	1627	2410	2398	2414	2671	3021	2869	2734	2992	3164	3358	3197	3409	3645
Sri Lanka	5863	8395	8298	8118	9048	9815	9157	8731	9740	10441	11085	11268	11642	14020
Southeast Asia														
Brunei Darussalam [d]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	1845	2284	2354	2383	2465	2517	2628	2697	2900	3193	3439	3515	3527	3761
Indonesia	69872	124398	128985	136316	151460	151460	144286	133817	132966	136845	139555	132794	130800	140783
Lao PDR	1768	2165	2263	2327	2451	2535	2508	2494	2948	2194	2521	2707	3037	3337
Malaysia	15328	34343	39673	47228	42409	41903	41874	45089	48272	48557	52156	51981	56491	53717
Myanmar	4695	5771	5184	5503	5647	6004	5928	5670	6583	7319	7239	6645	6828	7373
Philippines	30580	39379	44001	50706	53608	58321	58304	58252	59906	62589	60968	61658	60282	65845
Singapore [b, c]	3772	8368	9803	13803	266860	223834	220298	222073	234393	245233	287785	300359	313551	...
Thailand	28094	100039	112838	109699	104917	96770	79720	67191	59381	51793	51295	51411	55023	63067
Viet Nam	23270	25428	26255	21777	22458	23210	12825	12585	13344	15991	18049	19211	20202	24222
The Pacific														
Cook Islands [b, c]	4	92	133	112	46	49	56	54	54	64	71	68	...	...
Fiji Islands	403	246	213	215	190	161	134	115	140	203	202	229	234	387
Kiribati	3	7	10	9	7	8	8	10	10	16	13	11	13	13
Marshall Islands	72	149	133	126	115	88	69	90	88	91	95	92	100	99
Micronesia, Fed. States of	20	127	119	107	110	98	86	69	61	63	64	65	68	68
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau [b, c]	...	...	...	...	1	2	10	20	20	19	20	19	18	23
Papua New Guinea	2594	2506	2507	2590	2712	2644	2556	2478	2436	2464	2286	2276	2372	2245
Samoa	92	170	167	156	180	192	197	204	234	373	571	656	858	1140
Solomon Islands	120	159	147	140	155	165	155	163	180	178	177	166	173	178
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	54	64	64	59	65	69	65	63	72	86	86	82	85	91
Tuvalu [b, c]	...	...	...	...	1	4	4	5	5	...	...	...	...	...
Vanuatu	38	49	48	49	64	66	74	72	90	97	121	82	86	94

a Refers to the sum of public and publicly guaranteed long-term debt, private nonguaranteed long-term debt, use of IMF credit, and estimated short-term debt.
b Total external debt refers to long-term debt to OECD countries and capital market, multilateral loans, and long-term debts to non-OECD creditor countries only. This applies to Taipei,China for data prior to 1999 and to Palau for data prior to 2001.
c Beginning 1998, OECD applied a new data series that provides total identified external debt and no longer distinguishes between long-term and short-term debts. Henceforth, short-term debt refers to debt due within a year of the reference period and long-term debt refers to the residual.
d Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Global Development Finance Online (World Bank 2009); *Statistical Compendium 2004-1, 2005-1, 2005-2* CD-ROM (OECD 2004 and 2005); country sources.

Table 4.21 **Total external debt of developing member countries**
(percent of GNI)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	19.7	...
Armenia	...	25.3	31.7	36.7	41.2	47.5	46.6	59.2	64.6	64.2	53.5	36.6	30.4	30.5
Azerbaijan	...	10.6	14.1	12.9	16.0	23.7	26.6	23.8	25.3	25.3	24.4	15.6	10.9	11.5
Georgia	...	48.2	45.0	40.3	43.3	56.1	51.6	53.2	53.6	48.1	39.5	29.4	24.9	22.0
Kazakhstan	...	18.6	14.0	18.7	27.9	37.5	72.5	70.8	76.5	78.3	81.4	83.8	103.4	103.7
Kyrgyz Republic	...	37.5	63.6	78.7	96.1	147.7	141.9	117.1	119.6	109.0	100.1	85.5	84.2	65.0
Pakistan	49.5	49.5	47.3	48.6	52.4	54.3	44.9	44.4	46.2	41.6	35.5	29.7	27.6	28.0
Tajikistan	...	53.6	72.3	118.6	96.6	120.6	132.3	102.7	98.1	78.6	52.1	47.6	37.5	34.0
Turkmenistan	...	16.1	31.5	73.6	90.9	107.8	92.3	66.2	45.5	29.5	22.6	14.0	9.0	5.9
Uzbekistan	...	13.5	17.1	20.0	22.7	29.2	34.2	43.6	50.3	49.1	40.3	30.0	23.7	17.3
East Asia														
China, People's Rep. of	15.4	16.5	15.3	15.6	14.4	14.2	12.3	14.2	12.9	12.8	12.8	12.6	12.2	11.6
Hong Kong, China [a]	16.4	15.2	13.7	15.2	20.1	20.6	24.2	23.3	21.0	24.0	25.0	35.0	32.0	...
Korea, Rep. of	13.3	16.7	20.8	26.7	40.9	29.6	27.9	25.6	24.6	24.4	23.8	22.3	27.3	36.4
Mongolia	...	43.3	45.4	55.8	71.8	98.7	81.7	74.5	78.4	82.8	74.9	57.7	45.8	41.5
Taipei,China [a]	10.8	9.9	9.5	11.2	10.6	12.9	10.8	11.8	15.1	20.6	24.4	24.4	23.5	24.6
South Asia														
Bangladesh	40.4	40.7	36.6	33.0	34.4	35.1	32.2	31.4	34.3	34.3	33.8	29.9	31.1	30.0
Bhutan	29.3	39.2	39.6	35.1	52.3	51.9	45.6	54.7	70.5	78.8	85.2	79.5	76.5	68.6
India	26.7	26.8	24.3	23.2	23.7	22.0	21.8	20.8	20.8	19.0	17.9	15.3	19.3	18.9
Maldives	40.2	40.9	39.3	35.6	37.8	39.2	34.7	40.1	45.0	43.5	51.7	53.2	54.4	56.4
Nepal	44.7	54.7	52.9	49.0	54.9	59.9	52.0	45.3	49.5	50.0	46.3	39.0	37.4	35.0
Sri Lanka	73.5	65.3	60.6	54.4	58.2	63.8	57.2	56.5	57.8	55.8	54.2	46.7	41.7	43.8
Southeast Asia														
Brunei Darussalam [b]	...	...	...	...	...	..	...	...	...	...	...	...	...	...
Cambodia	165.5	71.8	68.4	65.4	72.8	71.7	72.5	69.8	72.0	70.3	65.0	56.7	50.4	47.1
Indonesia	64.0	63.4	58.3	65.1	168.2	117.1	93.6	86.6	70.1	60.6	56.9	48.8	37.5	33.9
Lao PDR	204.3	123.2	121.3	136.5	197.2	177.1	150.7	146.7	167.0	107.8	104.2	98.4	92.4	84.4
Malaysia	36.4	40.6	41.3	49.8	62.1	57.0	48.6	52.4	51.2	46.6	44.1	39.5	37.2	29.4
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	69.4	51.7	51.0	59.1	78.2	72.7	72.9	76.6	73.3	73.2	65.1	57.7	47.3	41.9
Singapore	12.4	9.8	10.4	13.7	14.0	16.0	16.0	21.0	23.0	...	...	...	...	...
Thailand	33.3	60.6	63.5	74.6	97.2	81.3	66.0	59.7	48.5	37.9	33.3	30.6	27.8	26.5
Viet Nam	384.0	124.0	108.2	82.6	84.1	82.0	41.7	39.0	38.7	41.8	40.5	37.1	34.5	36.3
The Pacific														
Cook Islands [a]	6.3	98.5	141.2	129.4	80.9	60.6	69.3	62.7	53.2	44.5	41.2	36.7	...	...
Fiji Islands	31.3	12.8	10.2	10.5	11.8	8.6	7.8	7.0	7.6	8.8	7.4	7.6	7.7	11.4
Kiribati	5.6	8.9	10.9	10.1	8.1	9.2	8.6	11.7	10.2	14.7	11.1	8.9	10.1	8.5
Marshall Islands [a]	92.9	125.9	122.0	119.0	107.1	84.7	63.8	77.0	70.6	71.2	72.1	66.3	68.5	65.9
Micronesia, Fed. States of [a]	13.7	61.2	57.5	56.1	53.8	48.3	39.5	31.1	27.5	27.8	28.4	27.9	28.4	28.6
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau [a]	...	...	...	...	0.9	1.8	8.3	16.0	16.7	15.8	15.2	12.8	...	...
Papua New Guinea	83.8	57.3	53.4	56.1	77.0	82.9	77.4	87.5	87.8	78.7	64.2	50.0	48.0	40.0
Samoa	56.0	88.0	73.5	64.0	80.0	83.6	85.2	86.1	89.5	118.2	154.0	163.2	194.7	223.0
Solomon Islands	58.1	49.5	43.6	36.5	48.8	50.6	51.8	59.0	80.7	78.0	66.6	56.4	51.3	46.4
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	46.1	39.0	34.6	32.4	41.8	42.2	44.2	48.3	49.8	51.3	45.2	37.8	37.6	37.6
Tuvalu [a]	...	...	...	...	7.7	29.0	32.6	38.9	34.2	...	...	...	...	...
Vanuatu	23.5	22.6	21.7	21.4	26.3	26.7	32.2	31.1	41.5	36.6	38.8	23.9	21.9	22.4

a GDP is used in lieu of GNI.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Global Development Finance Online (World Bank 2009), Statistical Compendium 2004-1 CD-ROM (OECD 2004), country sources.

External Indebtedness

Table 4.22 **Total external debt of developing member countries**
(percent of exports of goods, services, and income)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	101.1	113.8	133.6	169.9	183.4	163.7	137.6	188.6	172.7	130.4	95.4	90.7	107.7
Azerbaijan	...	40.4	54.2	43.3	67.7	79.6	59.5	50.8	51.6	52.9	43.4	20.1	13.3	12.6
Georgia	...	...	...	169.6	157.6	182.3	174.5	173.7	147.5	126.4	105.2	75.1	64.8	58.6
Kazakhstan	...	62.3	41.6	52.2	88.6	87.2	117.9	141.9	151.0	149.4	142.1	138.7	172.1	173.2
Kyrgyz Republic	...	134.5	199.7	195.7	245.7	321.7	308.6	296.1	273.5	245.6	188.9	158.9	130.4	86.7
Pakistan	231.2	249.6	248.9	254.2	307.0	333.5	289.8	260.2	210.7	188.3	175.8	137.9	135.2	139.2
Tajikistan	...	...	...	...	...	...	...	...	134.7	100.9	70.7	61.6	38.0	36.0
Turkmenistan	...	...	39.8	155.2	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	91.4	77.3	71.3	67.5	67.5	66.2	49.8	59.7	49.6	41.3	36.4	32.2	28.9	26.0
Hong Kong, China [a]	14.7	6.0	17.4	18.0	161.9	132.3	86.0	77.9	71.3	137.0	136.1	128.3	132.4	165.1
Korea, Rep. of [a]	47.4	57.6	74.5	81.9	87.2	74.9	72.0	71.4	74.2	69.1	58.4	56.6	68.9	87.1
Mongolia	...	101.6	107.6	92.7	125.7	164.2	138.7	129.2	127.8	121.7	95.0	77.9	62.6	...
Taipei,China [a]	23.5	20.9	20.4	23.5	22.4	27.3	20.1	23.4	28.6	36.2	38.7	37.9	33.6	33.4
South Asia														
Bangladesh	427.9	269.8	252.0	202.0	207.4	203.9	169.9	169.3	173.0	166.2	155.9	126.4	110.9	105.5
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	325.4	207.0	183.8	166.7	171.2	152.9	131.8	123.4	117.4	103.4	89.3	66.9	75.7	...
Maldives	42.4	48.0	44.9	41.9	44.5	49.4	44.5	50.4	55.3	48.4	53.3	78.0	60.2	64.1
Nepal	363.7	213.4	196.0	177.4	230.2	214.8	195.7	202.4	181.4	169.3	160.7	125.4	123.3	110.2
Sri Lanka	210.4	149.1	141.4	121.7	130.4	144.8	119.4	117.4	132.9	128.5	123.1	113.5	106.0	113.0
Southeast Asia														
Brunei Darussalam [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	230.9	283.9	258.3	224.6	161.8	131.9	119.1	114.0	113.9	95.9	82.6	67.0	63.4
Indonesia	233.9	226.7	219.4	207.1	262.4	257.4	194.3	203.0	194.4	190.2	161.3	123.5	106.2	100.6
Lao PDR	1690.3	521.5	518.7	534.8	496.2	529.5	488.7	516.3	612.4	470.4	461.6	355.0	270.7	268.1
Malaysia	44.4	39.9	41.8	49.3	49.9	42.8	36.6	43.2	43.7	39.8	35.2	31.2	29.6	24.9
Myanmar	1433.2	411.0	343.0	330.4	303.8	307.1	263.3	185.7	222.4	240.1	219.2	158.6	134.8	...
Philippines	230.1	118.3	109.7	103.2	122.9	127.8	118.5	131.6	124.0	125.8	110.5	103.8	86.3	85.8
Singapore [a, c]	5.6	5.3	5.8	8.2	187.5	147.4	121.4	135.4	137.8	123.9	116.9	105.0	92.5	...
Thailand	89.8	135.0	149.7	144.0	151.5	129.9	92.7	84.0	70.0	53.4	43.7	38.6	35.0	33.7
Viet Nam	...	...	272.4	183.8	185.5	163.7	73.4	69.3	67.3	67.9	59.1	51.9	44.3	43.5
The Pacific														
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	45.7	21.6	15.8	17.0	19.2	14.5	12.8	11.4	12.7	14.1	13.1	13.3	13.9	...
Kiribati [d]	80.8	81.4	164.1	131.9	106.7	86.1	182.4	248.8	238.8	438.6	414.0	213.3	404.7	127.5
Marshall Islands [d]	2849.2	651.8	664.0	889.4	1534.7	1226.4	781.8	898.0	768.4	642.3	509.1	382.1	461.6	446.6
Micronesia, Fed. States of [d]	431.5	577.7	608.6	633.4	486.8	545.3	429.4	298.2	256.6	264.0	375.2	351.2	397.1	346.2
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau [d]	...	...	...	...	...	27.4	87.0	120.7	98.3	230.7	344.9	139.0	128.7	226.7
Papua New Guinea	174.4	83.1	83.7	99.9	128.4	120.6	107.9	117.0	132.8	100.4	82.1	63.0	...	...
Samoa	97.7	157.2	135.4	119.8	139.4	151.6	...	...	...	...	513.6	499.8	573.0	714.5
Solomon Islands	123.2	75.1	68.0	61.0	77.7	72.9	120.6	165.2	338.4	184.4	137.1	105.6	82.8	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	80.8	...	...	...	...	...	...	74.5	66.3	80.3	74.9	64.9	70.4	60.8
Tuvalu [d]	...	...	...	...	256.7	1139.7	1393.8	2416.8	2283.6	...	...	...	...	...
Vanuatu	33.9	37.9	34.5	35.2	36.7	38.9	39.9	41.6	66.4	59.9	64.3	40.1	40.0	36.6

a External debt as percent of exports was derived using exports of goods and services data from the national accounts.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c Data from 1998 and before 1998 are not comparable due to a change in coverage/compilation methodology.
d External debt as percent of exports was derived using exports data from the balance of payments.

Sources: Global Development Finance Online (World Bank 2009), *Statistical Compendium 2004-1* CD-ROM (OECD 2004), country sources.

Table 4.23 **Total debt service paid by developing member countries**
(US$ million)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	9.3	19.6
Armenia	...	11.3	42.7	24.0	61.4	58.5	45.8	54.5	80.5	116.0	168.8	138.3	149.8	189.0
Azerbaijan	...	10.1	9.8	77.9	23.9	60.4	129.9	126.2	164.8	209.0	232.3	231.1	244.6	167.5
Georgia	...	20.0	12.9	46.4	212.5	108.5	117.7	77.4	128.9	180.7	233.7	187.3	267.7	181.0
Kazakhstan	...	234.6	322.3	483.0	991.7	1363.1	3370.5	3354.3	4106.9	5302.3	8774.3	13180.8	14532.0	27522.7
Kyrgyz Republic	...	59.9	74.2	77.8	114.8	110.2	173.2	177.0	128.9	163.0	160.7	127.0	96.6	186.9
Pakistan	1901.9	3215.5	3286.4	4083.3	2297.8	2935.0	2853.8	2995.4	2887.6	3075.6	4271.0	2424.2	2291.0	2601.4
Tajikistan	...	0.0	1.1	47.7	91.9	79.1	62.9	80.9	95.6	82.1	98.9	70.4	69.1	79.0
Turkmenistan	...	104.4	193.9	286.0	322.4	331.1	468.1	543.6	557.5	449.0	405.0	307.3	254.8	200.0
Uzbekistan	...	244.6	300.2	510.4	351.8	564.3	882.6	862.0	759.9	810.3	871.1	786.6	851.6	819.3
East Asia														
China, People's Rep. of	7057.0	15065.7	15755.6	18444.7	18434.9	26858.8	27089.2	24535.0	31082.7	36988.6	23254.0	27365.7	27469.6	32119.2
Hong Kong, China [a]	1700.0	3159.0	3568.0	3206.0	3061.0	...	...	...	...	...	...	...	...	...
Korea, Rep. of [a]	8274.2	11870.2	13561.6	13777.9	16938.7	31495.7	22905.0	22712.0	25001.6	16287.7	9080.9	7223.9	7339.9	4538.4
Mongolia	...	51.6	52.6	62.3	29.6	20.2	37.8	44.9	51.9	286.3	34.3	38.1	46.6	55.8
Taipei,China [a]	1715.0	2677.0	3087.0	2898.0	3200.0	18.0	45.5	11.4	10.0	10.9	5916.0	11006.0	9001.0	7546.0
South Asia														
Bangladesh	749.1	779.9	672.2	689.9	643.7	718.0	799.3	675.0	726.4	671.6	670.5	804.6	706.4	813.9
Bhutan	5.2	9.8	6.9	7.2	9.2	7.0	6.7	6.3	6.5	7.2	12.0	6.8	10.1	31.2
India	8186.8	13565.8	11980.6	12413.3	12084.4	10106.7	10867.5	11720.7	15493.9	20622.7	19256.7	24341.0	17845.5	40718.5
Maldives	8.8	10.8	11.7	28.6	15.9	17.7	19.8	21.7	22.2	21.7	32.9	34.5	35.0	44.6
Nepal	67.8	85.0	78.0	92.0	88.6	108.2	101.7	94.3	103.6	114.0	117.1	118.7	139.8	148.5
Sri Lanka	384.4	451.9	466.8	531.3	585.9	756.7	789.4	753.7	721.4	607.8	770.7	449.7	958.2	824.9
Southeast Asia														
Brunei Darussalam [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	30.0	7.3	8.8	8.9	11.7	32.5	31.5	22.1	21.5	25.5	27.8	31.0	30.6	29.3
Indonesia	9946.3	16416.0	21542.9	19736.8	18309.7	17664.7	16622.2	15473.8	16872.8	18471.6	20441.7	16460.5	22930.7	14646.8
Lao PDR	9.1	26.0	29.1	27.7	30.9	36.9	40.4	43.7	84.5	100.4	121.0	176.0	218.5	235.2
Malaysia	4333.2	6041.1	8427.4	7109.2	6073.9	4774.7	6444.8	6231.1	7938.4	9592.9	9191.0	9389.4	7630.1	10006.1
Myanmar	60.4	249.9	158.0	116.1	93.0	96.5	87.0	83.9	113.3	121.1	125.4	106.7	86.4	355.3
Philippines	3589.8	5363.5	5370.9	4654.3	4741.8	6439.3	7059.5	9363.1	10201.3	10199.9	11477.8	9962.1	13698.8	10480.0
Singapore [a]	525.0	1349.0	2295.0	1997.0	1351.0	...	...	...	...	...	...	...	...	...
Thailand	5290.3	8586.5	9524.0	11810.4	12747.6	16230.1	13991.5	20311.5	18719.8	15068.4	12448.1	18058.9	14608.2	15167.3
Viet Nam	174.1	363.9	395.9	913.9	1095.7	1412.4	1309.5	1219.0	1196.3	806.9	786.7	956.5	917.8	1255.9
The Pacific														
Cook Islands [a]	–	5.0	6.0	5.0	4.0	...	1.5	1.0	1.3	1.5	1.8	1.6	...	...
Fiji Islands	105.5	66.2	47.7	34.7	33.5	37.8	29.7	22.0	21.7	18.3	14.6	17.3	16.3	29.2
Kiribati	...	1.4	0.9	0.7	0.9	1.0	0.9	0.6	...	...	0.7	1.2	0.4	2.2
Marshall Islands	14.0	24.0	25.3	26.4	26.1	26.0	21.6	26.3	3.2	4.1	4.1	6.2	5.3	12.9
Micronesia, Fed. States of	–	18.5	24.1	22.2	20.8	19.4	22.9	10.9	2.4	2.4	2.6	2.5	3.4	2.9
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	553.1	626.3	489.3	531.8	311.7	211.9	304.5	268.8	276.1	294.0	475.8	403.0	362.2	426.2
Samoa	5.5	4.6	5.0	5.0	5.1	6.5	8.5	7.4	7.8	13.2	21.2	22.4	29.5	42.9
Solomon Islands	11.6	8.1	8.4	5.7	11.9	10.9	9.1	7.1	5.7	9.4	16.6	14.0	4.3	14.9
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	1.9	3.2	3.4	4.1	3.7	4.1	4.4	2.5	3.2	3.0	3.6	4.0	3.2	4.1
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	2.4	1.6	1.6	1.9	1.4	1.6	1.9	1.5	1.9	2.2	3.5	2.6	3.7	3.8

a Refers to principal repayments on long-term debt plus interest on short-term and long-term debts.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Global Development Finance Online (World Bank 2009), Statistical Compendium 2004-1 CD-ROM (OECD 2004), country sources.

External Indebtedness

Table 4.24 **Total debt service paid by developing member countries**
(percent of exports of goods, services, and income)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	3.1	9.3	5.0	13.0	11.9	8.2	8.3	9.5	10.8	11.2	7.2	6.8	7.0
Azerbaijan	...	1.3	1.2	6.6	2.3	4.5	5.8	5.0	5.7	6.4	5.2	2.6	1.6	0.7
Georgia	...	...	...	5.4	20.3	12.0	12.5	7.8	10.3	11.8	11.9	7.4	8.8	4.6
Kazakhstan	...	3.9	4.6	6.2	14.4	19.4	32.0	32.0	34.5	34.8	38.0	42.2	33.7	49.6
Kyrgyz Republic	...	13.2	13.0	11.4	18.7	20.4	29.3	30.5	19.0	19.8	14.2	10.0	5.4	6.7
Pakistan	21.3	26.5	27.4	34.5	21.9	28.9	25.2	24.6	18.1	16.2	21.1	10.1	8.6	8.9
Tajikistan	...	...	...	...	...	...	...	...	11.3	7.2	6.7	4.1	2.6	2.3
Turkmenistan	...	...	10.2	22.1	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	11.7	9.9	8.7	8.5	8.6	11.7	9.3	7.9	8.3	7.3	3.4	3.1	2.4	2.2
Hong Kong, China [a]	2.1	1.8	1.8	1.7	1.8	...	...	...	...	...	...	...	...	...
Korea, Rep. of	11.3	8.0	8.8	8.4	13.1	25.1	10.9	13.9	...	...	...	...	...	...
Mongolia	...	10.1	10.7	9.9	5.3	3.7	5.9	6.6	6.7	29.3	2.4	2.3	2.1	...
Taipei,China [b]	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	4.9	3.6	2.7
South Asia														
Bangladesh	25.8	13.2	11.0	9.7	8.5	8.8	8.6	7.5	7.4	5.9	5.2	5.4	3.8	3.9
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	31.9	29.7	23.6	21.9	21.2	15.7	14.5	14.7	17.3	18.9	13.8	13.2	7.7	...
Maldives	4.8	3.4	3.1	7.0	3.7	4.0	4.3	4.7	4.5	3.7	4.7	7.0	4.4	5.1
Nepal	15.2	7.5	6.4	6.8	7.6	7.7	6.9	7.0	6.3	6.1	5.6	4.7	5.1	4.5
Sri Lanka	13.8	8.0	8.0	8.0	8.4	11.2	10.3	10.1	9.8	7.5	8.6	4.5	8.7	6.7
Southeast Asia														
Brunei Darussalam [c]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	0.7	1.1	1.0	1.1	2.1	1.8	1.0	0.8	0.9	0.8	0.7	0.6	0.5
Indonesia	33.3	29.9	36.6	30.0	31.7	30.0	22.4	23.5	24.7	25.7	23.6	15.3	18.6	10.5
Lao PDR	8.7	8.3	6.7	6.4	6.3	7.7	7.9	9.0	17.6	21.5	22.2	23.1	19.5	18.9
Malaysia	12.6	7.0	8.9	7.4	7.2	4.9	5.6	6.0	7.2	7.9	6.2	5.6	4.0	4.6
Myanmar	18.4	17.8	10.5	7.0	5.0	4.9	3.9	2.7	3.8	4.0	3.8	2.5	1.7	...
Philippines	27.0	16.1	13.4	9.3	10.9	14.1	14.3	21.2	21.1	20.5	20.8	16.8	19.6	13.7
Singapore	0.8	0.9	1.5	1.3	1.0	...	...	...	...	...	...	...	...	...
Thailand	16.9	11.6	12.6	15.5	18.4	21.8	16.3	25.4	23.2	15.5	10.6	13.6	9.3	8.1
Viet Nam	...	...	4.1	7.7	9.1	10.0	7.5	6.7	6.0	3.4	2.6	2.6	2.0	2.3
The Pacific														
Cook Islands [a]	...	0.1	0.1	0.1	0.1	...	...	...	...	...	...	...	...	...
Fiji Islands	12.0	5.8	3.5	2.7	3.4	3.4	2.8	2.2	2.0	1.3	0.9	1.0	1.0	...
Kiribati	...	...	9.1	7.1	9.5	7.6	9.3	7.9	...	...	5.2	7.6	2.9	15.4
Marshall Islands	39.8	47.8	58.8	70.6	83.7	84.4	57.9	135.8	15.1	16.9	12.9	17.6	19.0	37.0
Micronesia, Fed. States of	...	46.0	61.0	64.0	55.0	58.0	59.0	27.0	6.0	6.0	7.0	7.0	9.0	8.0
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	37.2	20.8	16.3	20.5	14.8	9.7	12.9	12.7	15.1	12.0	17.1	11.2	...	...
Samoa	5.8	4.3	4.0	3.8	3.9	5.1	...	...	...	...	19.1	17.1	19.7	26.9
Solomon Islands	11.8	3.8	3.9	2.5	6.0	4.8	7.1	7.1	10.7	9.7	12.9	8.9	2.0	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	2.9	...	...	...	...	...	...	2.9	2.9	2.8	3.1	3.2	2.7	2.8
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	2.1	1.2	1.2	1.4	0.8	1.0	1.0	0.9	1.4	1.3	1.8	1.3	1.7	1.5

a Refers to debt service as a percentage of total exports as reflected under direction of trade.
b Refers to debt service as a percentage of exports of goods and services.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Global Development Finance Online (World Bank 2009), Statistical Compendium 2004-1 CD-ROM (OECD 2004), country sources.

Infrastructure

The People's Republic of China and India account for most of the **road** and **rail** networks in the region. **Household electrification rates** are particularly low in the Pacific economies although good progress has been made by several large Asian countries over the last decade. **Fixed broadband internet** has so far achieved limited penetration outside the small group of high-income economies.

Introduction

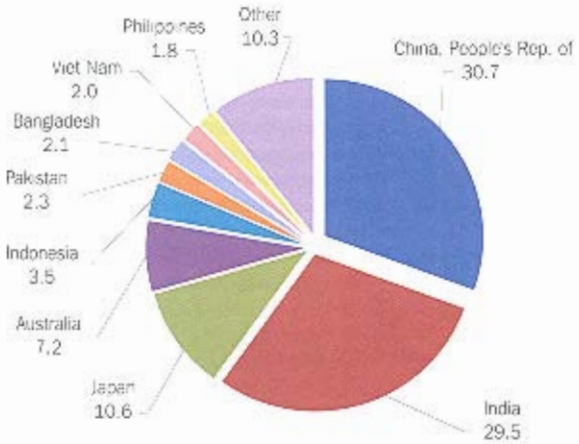
This **infrastructure** theme covers transport statistics on road and rail networks, plus statistics on household electrification, ownership of personal computers, fixed broadband internet subscribers, and information and communications expenditures.

Additional indicators on the communications sector are also shown under Millennium Development Goal 8: *Develop a global partnership for development.*

Key Trends

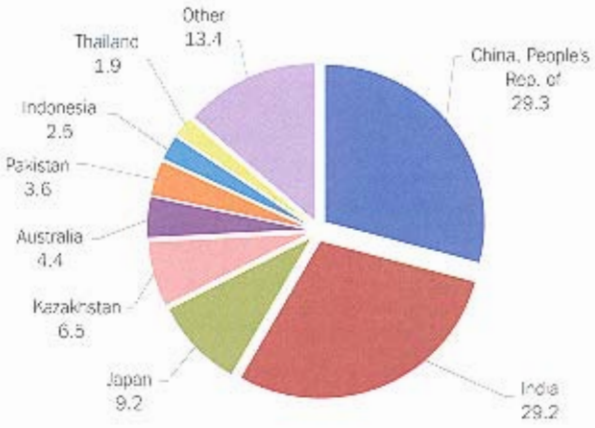
Road and rail networks in the region: Where are they located? Figures 5.1 and 5.2 present the distribution of road and rail networks in the Asia and Pacific region respectively. The People's Republic of China (PRC) and India account for most of the road and rail networks in the region. Both road and rail networks are of a similar size in both countries although PRC has a much larger land mass.

Figure 5.1 **Percentage Breakdown of Road Networks in Asia and the Pacific, Latest Year**



Source: Derived from Table 5.1.

Figure 5.2 **Percentage Breakdown of Rail Networks in Asia and the Pacific, Latest Year**

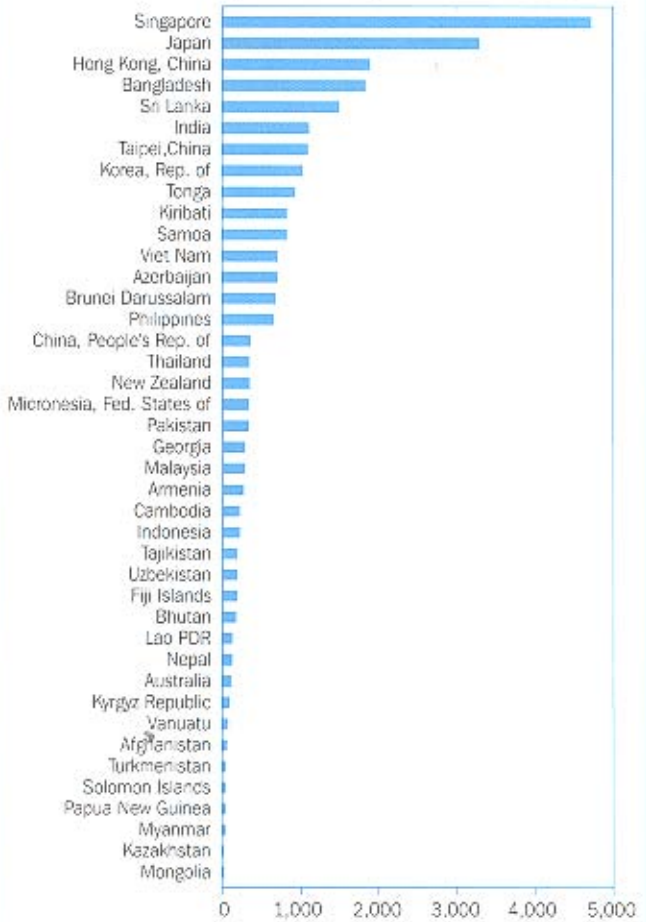


Source: Derived from Table 5.2.

Road density tends to be correlated with population density. Figure 5.3 shows road density. Road density tends to be correlated with population density; densely populated economies like Bangladesh; Hong Kong, China; Japan; and Singapore have high road densities while thinly populated economies like Kazakhstan and Mongolia have low road densities.

However there are exceptions. Economies such as Azerbaijan and Samoa that are not so densely populated also have rather high road densities.

Figure 5.3 **Road Density, Latest Year**
(kilometers of road per thousand square kilometers of land)



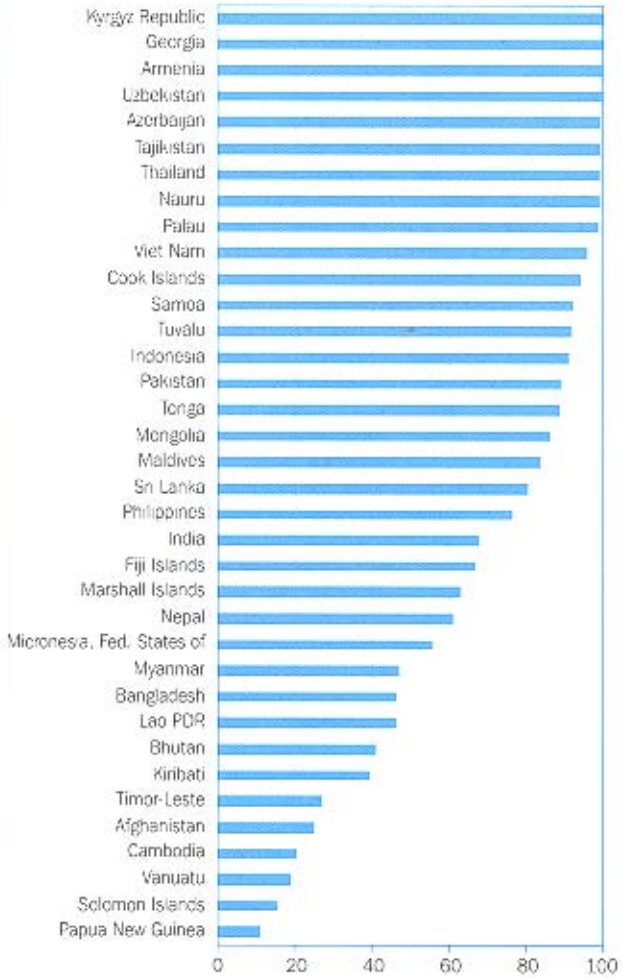
Source: Table 5.1.

Several economies have made good progress in household electrification rates. Figure 5.4 shows the percentage of households with access to electricity. Besides heating and lighting, electrification is essential for access to modern information and communications technology.

Table 5.3 shows that data are missing for several countries where electrification rates are probably very high—Australia; Hong Kong, China; Japan; and Singapore, for example.

Of the 36 economies shown in Figure 5.4, 14 report household electrification rates in excess of 90% but in seven economies, less than 40% of households are connected: Afghanistan, Cambodia, and five Pacific economies—Kiribati, Papua New Guinea, Solomon Islands, Timor-Leste, and Vanuatu. Residents in these economies will have limited chances to use modern information technology.

Figure 5.4 **Household Electrification Rate, Latest Year**
(percent of households)



Source: Table 5.3.

Table 5.3 shows that several countries have made good progress over recent years in household electrification. In the last decade or so, increases of 15 percentage points or more were recorded by Bangladesh, India, Indonesia, Mongolia, Nepal, Pakistan, and Viet Nam.

Fixed broadband internet has had limited penetration so far. Box 5.1 shows the extent of penetration of fixed broadband internet in the Asia and Pacific region. Broadband is the most efficient way to access the internet. Clearly, broadband has so far achieved limited penetration outside the small group of high-income economies. PRC, Kazakhstan, Malaysia, and Viet Nam are in the middle group but have a long way to go before reaching double figures, which is the norm for the high-income economies.

Box 5.1 **Fixed Broadband Internet Subscribers, 2008 or Latest Year (per 100 people)**

Less than 1			
Afghanistan	0.00	Indonesia	0.11
Myanmar	0.00	Solomon Islands	0.20
Timor-Leste	0.00	Uzbekistan	0.24
Bangladesh	0.03	Mongolia	0.28
Nepal	0.04	India	0.45
Cambodia	0.06	Sri Lanka	0.52
Kyrgyz Republic	0.06	Philippines	0.56
Lao PDR	0.06	Azerbaijan	0.70
Pakistan	0.10	Tonga	0.71
1 to 10			
Georgia	1.06	Tuvalu	3.27
Fiji Islands	1.38	Kazakhstan	3.63
Thailand	1.43	Malaysia	4.82
Viet Nam	1.52	Maldives	5.05
Brunei Darussalam	2.87	China, People's Rep. of	6.24
More than 10			
New Zealand	21.71	Australia	24.53
Taipei,China	21.81	Hong Kong, China	26.77
Singapore	22.34	Korea, Rep. of	31.98
Japan	23.53		

Source: Table 5.4.

Data Issues and Comparability

Data on rail networks may not be strictly comparable, as the statistics are not compiled according to international standards. National road associations are the main suppliers of data on road networks. Secondary suppliers include the appropriate government agencies. The statistics may not be strictly comparable because of differences in definitions and data collection methods.

Data on household electrification rates are typically collected from household surveys since they overcome the weaknesses in data provided by national power utilities, which often do not include households that, for various reasons, do not have a meter.

Data on fixed broadband internet subscribers are collected by the International Telecommunication Union using questionnaires sent to government telecommunications agencies. Annual reports of industry organizations are also used by International Telecommunication Union to cross-check reported data and to fill in the gaps. These data are considered to be reliable.

Transport

Table 5.1 **Road indicators**

	Roads, Total Network (kilometers)		Road Density (kilometers of road per thousand square kilometers of land area)		Paved Roads (percent of total roads)		Access to an All-Season Road (percent of rural population)
	1990	Latest Year	1990	Latest Year	1990	Latest Year	Latest Year
Developing Member Countries							
Central and West Asia							
Afghanistan	21000	42150 (2006)	32.2	64.6 (2006)	13.3	29.3 (2006)	...
Armenia	7690	7504 (2006)	272.7	266.1 (2006)	99.2	89.0 (2006)	80.0 (2003)
Azerbaijan	52394	59141 (2004)	629.6	715.4 (2004)	93.9 (1994)	49.4 (2004)	67.0 (2002)
Georgia	21600	20329 (2006)	310.8	292.5 (2006)	93.8	38.6 (2006)	82.0 (2003)
Kazakhstan	158342	91563 (2006)	58.7	33.9 (2006)	55.1	91.4 (2006)	...
Kyrgyz Republic	18890	18500 (2001)	98.5	96.5 (2001)	90.0	91.1 (2001)	75.6 (1998)
Pakistan	169202	260420 (2005)	219.5	337.8 (2005)	54.0	65.4 (2006)	61.3 (2004)
Tajikistan	29861	27767 (2000)	213.4	198.4 (2001)	71.6	82.7 (1995)	73.7 (2003)
Turkmenistan	21300	24000 (2001)	45.3	51.1 (2001)	73.5	81.2 (2001)	...
Uzbekistan	72500	81600 (2001)	170.4	191.8 (2001)	79.0	87.3 (2001)	57.0 (2000)
East Asia							
China, People's Rep. of	1181033	3456999 (2006)	126.6	370.6 (2006)	72.1	70.7 (2007)	...
Hong Kong, China	1484	1983 (2006)	1424.2	1903.1 (2006)	100.0	100.0 (2006)	...
Korea, Rep. of	56715	102062 (2006)	574.4	1033.7 (2006)	71.5	88.6 (2006)	...
Mongolia	42418	49250 (2002)	27.1	31.4 (2002)	10.2	3.5 (2002)	36.0 (2003)
Taipei,China	20042	39670 (2007)	553.9	1096.2 (2007)	...	...	...
South Asia							
Bangladesh	188000	239226 (2003)	1444.3	1837.8 (2003)	7.2 (1991)	9.5 (2003)	37.0 (2000)
Bhutan	2336	8050 (2003)	49.7	171.3 (2003)	77.1	62.0 (2003)	47.0 (2003)
India	2000000	3316452 (2006)	672.7	1115.5 (2006)	47.3 (1991)	47.4 (2002)	60.0 (2001)
Maldives	...	...	...	...	...	...	...
Nepal	6840	17280 (2004)	47.8	120.8 (2004)	37.5	56.9 (2004)	17.2 (2003)
Sri Lanka	93000	97286 (2003)	1439.0	1505.3 (2003)	32.0 (1991)	81.0 (2003)	...
Southeast Asia							
Brunei Darussalam [a]	1010	3650 (2005)	191.7	692.6 (2005)	31.4	77.2 (2005)	...
Cambodia	35800	38257 (2004)	202.8	216.7 (2004)	7.5	6.3 (2004)	80.7 (2003)
Indonesia	288727	391009 (2005)	159.4	215.8 (2005)	45.1	55.4 (2005)	94.0 (2003)
Lao PDR	13971	29811 (2006)	60.5	129.2 (2006)	24.0	13.4 (2006)	59.0 (2003)
Malaysia	86115	93109 (2005)	262.1	283.4 (2005)	70.0	79.8 (2005)	...
Myanmar	25000	2700 (2005)	38.0	41.1 (2005)	10.9	11.9 (2005)	...
Philippines	160558	200037 (2003)	538.5	670.9 (2003)	16.6 (1994)	9.9 (2003)	...
Singapore	2798	3262 (2006)	4176.1	4734.4 (2006)	97.1	100.0 (2006)	...
Thailand	72170	180053 (2006)	141.3	352.4 (2006)	55.3	98.5 (2000)	...
Viet Nam	96100	222179 (2004)	295.2	716.5 (2004)	23.5	25.1 (1998)	83.5 (2004)
The Pacific							
Cook Islands	...	...	...	...	...	...	...
Fiji Islands	3050	3440 (2001)	166.9	188.3 (2001)	44.5	49.2 (2001)	...
Kiribati	...	670 (2001)	...	827.2 (2000)	...	...	...
Marshall Islands	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	240 (2001)	...	342.9 (2001)	15.9	17.5 (2001)	...
Nauru	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...
Papua New Guinea	18500	19600 (2001)	40.9	43.3 (2001)	3.2	3.5 (2001)	68.0 (1996)
Samoa	...	2337 (2001)	...	825.8 (2001)	42.0 (1995)	14.2 (2001)	...
Solomon Islands	1210	1391 (2001)	43.2	49.7 (2001)	2.1	2.4 (2001)	...
Timor-Leste	...	...	...	...	...	...	89.5 (2001)
Tonga	...	680 (2001)	...	944.4 (2001)	27.0 (1995)	27.0 (2001)	...
Tuvalu	...	...	...	...	...	...	...
Vanuatu	...	1070 (2001)	...	87.8 (2001)	21.6	23.9 (2001)	...
Developed Member Countries							
Australia	810264	812972 (2003)	105.5	105.8 (2003)	35.0	38.7 (1998)	...
Japan	1114697	1196999 (2006)	3058.2	3283.9 (2006)	69.2	79.3 (2006)	...
New Zealand	92674	93576 (2006)	345.8	349.5 (2006)	57.0	65.6 (2006)	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); IDA14 Results Measurement System (World Bank 2009); for Taipei,China: economy sources.

Table 5.2 Rail indicators

	Rail Lines (total route, kilometers)			Rail Network, Length per Land Area (kilometers per thousand square kilometers)		
	1990	1995	2007	1990	1995	2007
Developing Member Countries						
Central and West Asia						
Afghanistan	...	...	...	...	...	...
Armenia	845	845	711 (2005)	30.0	30.0	25.2 (2005)
Azerbaijan	...	2117 (1998)	2122 (2006)	...	25.5 (1998)	25.7 (2006)
Georgia	1583	1575	1513	22.8	22.7	21.8
Kazakhstan	14465	13660 (1997)	14205	5.4	5.1 (1997)	5.3
Kyrgyz Republic	...	...	...	...	...	...
Pakistan	8775	8775	7791	11.4	11.4	10.1
Tajikistan	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...
Uzbekistan	...	3641 (1997)	4005	...	8.6 (1997)	9.4
East Asia						
China, People's Rep. of	53378	54618	63637	5.7	5.9	6.8
Hong Kong, China	...	...	...	...	...	...
Korea, Rep. of	3091	3101	3399	31.3	31.4	34.4
Mongolia	1920	1810 (1997)	1810	1.2	1.2 (1997)	1.2
Taipei,China	1105	1157	1681	30.5	32.0	46.4
South Asia						
Bangladesh	2748	2706	2855	21.1	20.8	21.9
Bhutan	...	...	...	...	...	...
India	62367	62660	63327	21.0	21.1	21.3
Maldives	...	...	...	...	...	...
Nepal	...	...	...	...	...	...
Sri Lanka	1453	1491	1200 (2005)	22.5	23.1	18.6 (2005)
Southeast Asia						
Brunei Darussalam [a]	...	...	...	...	...	...
Cambodia	600	600	650 (2005)	3.4	3.4	3.7 (2005)
Indonesia	...	5041	5324 (1998)	...	2.8	2.9 (1998)
Lao PDR	...	...	...	...	...	...
Malaysia	1668	1668	1667	5.1	5.1	5.1
Myanmar	3336	...	...	5.1	...	...
Philippines	479	456	491 (2006)	1.6	1.5	1.6 (2006)
Singapore	...	...	...	...	...	...
Thailand	3861	4041	4044 (2006)	7.6	7.9	7.9 (2006)
Viet Nam	2832	2832	3147	8.7	8.7	10.1
The Pacific						
Cook Islands	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...
Nauru	...	...	...	...	...	...
Palau	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...
Samoa	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...
Tonga	...	..	...	...	...	...
Tuvalu	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...
Developed Member Countries						
Australia	6612	9458 (1997)	9639	0.9	1.2 (1997)	1.3
Japan	20254	20134	20050	55.6	55.2	55.0
New Zealand	4029	3913	3913 (1999)	15.0	14.6	14.6 (1999)

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); ADB staff estimates; for Taipei,China: Directorate-General of Budget, Accounting and Statistics.

Communications and Electrification

Table 5.3 **Household electrification rate**
(percent of households)

	Earliest Year	Latest Year
Developing Member Countries		
Central and West Asia		
Afghanistan	...	25.0 (1995)
Armenia	98.9 (2000)	99.8 (2005)
Azerbaijan	97.0 (1999)	99.5 (2006)
Georgia	...	99.9 (2002)
Kazakhstan	...	...
Kyrgyz Republic	99.8 (1997)	100.0 (2002)
Pakistan	59.6 (1990)	89.2 (2006)
Tajikistan	97.0 (1999)	99.3 (2003)
Turkmenistan	...	...
Uzbekistan	99.6 (1996)	99.7 (2002)
East Asia		
China, People's Rep. of	...	...
Hong Kong, China	...	...
Korea, Rep. of	...	...
Mongolia	67.3 (2000)	86.2 (2005)
Taipei,China	...	...
South Asia		
Bangladesh	17.8 (2000)	46.5 (2007)
Bhutan	...	41.1 (2003)
India	50.9 (1991)	67.9 (2005)
Maldives	...	83.8 (2000)
Nepal	17.9 (1996)	61.2 (2006)
Sri Lanka	...	80.7 (2002)
Southeast Asia		
Brunei Darussalam [a]	...	...
Cambodia	16.6 (2000)	20.5 (2005)
Indonesia	48.9 (1991)	91.1 (2007)
Lao PDR	...	46.3 (2002)
Malaysia	...	...
Myanmar	...	47.0 (2002)
Philippines	65.4 (1993)	76.6 (2003)
Singapore	...	...
Thailand	...	99.2 (2005)
Viet Nam	78.4 (1997)	96.1 (2005)
The Pacific		
Cook Islands	...	94.4 (2001)
Fiji Islands	...	66.8 (1996)
Kiribati	...	39.3 (2005)
Marshall Islands	...	63.0 (1999)
Micronesia, Fed. States of	...	55.8 (2000)
Nauru	...	99.0 (2002)
Palau	...	98.9 (2005)
Papua New Guinea	...	11.0 (1996)
Samoa	78.8 (1991)	92.2 (2006)
Solomon Islands	...	15.8 (1999)
Timor-Leste	...	27.0 (2002)
Tonga	80.0 (1994)	88.8 (2006)
Tuvalu	...	92.0 (2002)
Vanuatu	18.0 (1994)	19.1 (1999)
Developed Member Countries		
Australia	...	...
Japan	...	...
New Zealand	...	...

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: Demographic and Health Surveys Online, IDA 14 Results Measurement System Online, PRISM website (www.spc.int/prism/other/electricity.html).

Table 5.4 **Computer and broadband indicators**

	Personal Computers (per 100 people)		Fixed Broadband Internet Subscribers (per 100 people)					
	1990	2007	2003	2004	2005	2006	2007	2008
Developing Member Countries								
Central and West Asia								
Afghanistan	...	0.32 (2006)	...	...	...	...	...	...
Armenia	0.29 (1997)	9.85 (2005)	0.00	0.03	0.07	...	...	...
Azerbaijan	0.71 (2001)	2.43	0.01	0.01	0.03	0.02	0.07	0.70
Georgia	2.09 (1999)	5.41	0.03	0.04	0.05	0.61	1.06	...
Kazakhstan	...	...	0.01	0.01	0.02	0.20	1.75	3.63
Kyrgyz Republic	0.52 (2000)	1.90 (2005)	0.00	0.04	0.04	0.05	0.06	...
Pakistan	0.14	0.46 (2002)	–	0.01	–	0.02	0.03	0.10
Tajikistan	...	1.30 (2005)	0.00	0.00	0.00	...	...	...
Turkmenistan	1.53 (2001)	7.20 (2005)	...	...	...	...	...	...
Uzbekistan	1.60 (2003)	3.08 (2006)	0.01	0.02	0.03	...	...	0.24
East Asia								
China, People's Rep. of	0.04	5.60 (2006)	0.87	1.92	2.86	3.88	5.04	6.24
Hong Kong, China	4.56	65.91	18.75	22.36	24.35	26.20	27.42	26.77
Korea, Rep. of	3.72	57.83	23.36	24.82	25.32	29.08	30.36	31.99
Mongolia	0.33 (1995)	13.44 (2006)	0.02	0.04	0.07	0.14	0.28	...
Taipei,China	...	76.02	...	...	...	...	...	21.81
South Asia								
Bangladesh	0.02 (1997)	2.42 (2006)	–	–	–	...	...	...
Bhutan	0.47 (1998)	0.60 (2005)	–	–	–	–	–	...
India	0.03	3.17	0.01	0.02	0.12	0.21	0.28	0.45
Maldives	1.21 (1995)	20.08 (2006)	0.18	0.25	1.10	2.25	3.62	5.05
Nepal	0.05 (1993)	0.49 (2005)	–	–	–	–	0.04	...
Sri Lanka	0.02	3.54 (2005)	0.02	0.11	...	0.12	0.32	0.52
Southeast Asia								
Brunei Darussalam [a]	1.10 (1992)	8.83 (2005)	1.07	1.71	2.17	2.35	2.87	...
Cambodia	0.04 (1995)	0.36	0.00	0.01	0.01	0.03	0.06	...
Indonesia	0.11	2.00 (2006)	0.03	0.04	0.05	0.09	0.13	...
Lao PDR	0.10 (1996)	1.69 (2005)	0.00	0.00	0.01	0.01	0.06	0.06
Malaysia	0.83	23.41 (2006)	0.45	1.00	1.88	2.84	3.81	4.82
Myanmar	0.11 (1999)	0.88 (2006)	–	–	0.00	0.00	0.00	...
Philippines	0.34	7.46 (2006)	0.07	0.11	0.15	0.31	0.56	...
Singapore	6.56	76.87	10.14	13.08	15.38	17.90	19.51	22.34
Thailand	0.42	6.86 (2005)	0.07	0.12	0.17	...	1.43	...
Viet Nam	0.01 (1992)	9.51 (2006)	0.01	0.06	0.25	0.61	1.52	...
The Pacific								
Cook Islands	...	...	...	...	...	...	...	...
Fiji Islands	4.06 (1998)	5.90 (2005)	–	–	0.85	1.02	1.38	...
Kiribati	0.74 (1998)	1.03 (2004)	...	...	...	...	...	...
Marshall Islands	0.01	8.37 (2004)	–	...	...	...	...	...
Micronesia, Fed. States of	1.30 (2001)	5.43 (2005)	0.01	0.02	0.04	...	...	...
Nauru	...	...	...	...	...	...	...	...
Palau	...	...	...	0.37	0.50	0.48	...	...
Papua New Guinea	3.92 (1998)	6.64 (2005)	–	–	–	...	...	...
Samoa	0.06 (1995)	2.33 (2006)	–	0.02	0.04	...	...	...
Solomon Islands	2.35 (1997)	4.60 (2005)	–	0.04	0.10	0.13	0.20	...
Timor-Leste	...	...	0.00	0.00	0.00	0.00	0.00	...
Tonga	0.61 (1997)	5.86 (2005)	0.02	0.33	0.64	0.62	0.76	0.71
Tuvalu	...	8.05 (2005)	...	...	...	...	...	...
Vanuatu	0.73 (1997)	1.42 (2005)	0.01	0.01	0.03	...	...	...
Developed Member Countries								
Australia	14.98	60.83 (2003)	2.60	5.03	9.88	18.84	22.98	24.53
Japan	5.99	40.72 (2003)	11.68	15.31	18.24	20.69	22.14	23.53
New Zealand	9.53 (1991)	54.15 (2006)	2.06	4.69	7.77	11.24	20.17	21.71

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: International Telecommunication Union (ITU) through the World Development Indicators Online (World Bank 2009), ITU World Communication/ICT Indicators Database (ITU 2009).

Communications and Electrification

Table 5.5 Expenditures on information and communications technology

	Information and Communications Technology Expenditures (per capita US Dollars)					Information and Communications Technology Expenditures (percent of GDP)				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Developing Member Countries										
Central and West Asia										
Afghanistan	...	...	...	...	...	...	...	...	...	...
Armenia	...	...	...	...	...	...	...	...	...	...
Azerbaijan	...	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...	...	...
Kazakhstan	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	...	...	...	...	...	...	...	...	...	...
Pakistan	25.4	29.2	33.8	42.7	49.4	4.5	4.5	4.8	5.3	5.6
Tajikistan	...	...	...	...	...	...	...	...	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...
East Asia										
China, People's Rep. of	94.1	115.8	132.3	157.0	192.9	7.4	7.8	7.7	7.7	7.9
Hong Kong, China	1227.2	1274.2	1284.2	1387.8	1414.4	5.2	5.2	4.9	5.0	4.7
Korea, Rep. of	984.5	1062.0	1177.0	1291.8	1414.0	7.7	7.5	7.2	7.0	7.1
Mongolia	...	...	...	...	...	...	...	...	...	...
Taipei,China	...	...	...	...	...	...	...	...	...	...
South Asia										
Bangladesh	14.8	16.7	21.2	26.5	34.6	4.2	4.5	5.4	6.7	8.0
Bhutan	...	...	...	...	...	...	...	...	...	..
India	21.4	29.6	38.7	42.5	58.4	3.8	4.6	5.2	5.2	5.6
Maldives	...	...	...	...	...	...	...	...	...	...
Nepal	...	...	...	...	...	...	...	...	...	...
Sri Lanka	43.8	53.0	65.3	87.8	97.3	4.5	5.0	5.3	6.2	6.0
Southeast Asia										
Brunei Darussalam [a]	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...
Indonesia	33.6	40.3	46.5	60.5	74.0	3.1	3.4	3.6	3.7	3.9
Lao PDR	...	...	...	...	...	...	...	...	...	...
Malaysia	314.9	355.3	383.8	413.5	475.1	7.1	7.2	7.1	6.9	6.8
Myanmar	...	...	...	...	...	...	...	...	...	...
Philippines	54.5	61.0	65.7	80.0	94.2	5.6	5.8	5.6	5.9	5.7
Singapore	1766.7	1934.1	1975.5	2135.6	2291.9	7.8	7.4	7.0	6.9	6.5
Thailand	127.3	147.2	165.5	199.3	235.5	5.5	5.7	5.9	6.1	6.1
Viet Nam	33.8	38.2	40.7	43.5	48.8	7.0	6.9	6.4	6.1	6.1
The Pacific	...	...	...	...	...	...	...	...	...	...
Cook Islands	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...
Developed Member Countries										
Australia	1653.2	1912.7	2040.7	2211.9	2561.3	7.2	6.4	6.2	6.3	6.6
Japan	2175.8	2385.3	2426.3	2411.9	2455.5	6.6	6.6	6.8	7.0	7.2
New Zealand	1295.9	1462.0	1564.2	1565.7	1835.2	6.1	6.0	6.0	6.0	5.7

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: World Development Indicators Online (World Bank 2009).

Government and Governance

In more than half of the economies in the region, governments run **budget deficits**. **Tax burdens** are tending to grow but are still low by comparison with the developed countries. In about half of the economies the share of government **expenditure on education** lies between 2% and 4% of GDP and the share on **health services** between 1% and 3%. As a measure of the "ease of **doing business**", the number of days it takes to register a new business ranges from 1 day to over 100. The Asia and Pacific region has some of the cleanest and some of the most **corrupt economies** in the world.

Introduction

Governments affect the daily life of people in several ways, notably through their powers to tax and spend. This theme provides the standard indicators of the impact of **government** on economic and social life such as fiscal balances; tax revenues; and government spending on health, education, and other social services.

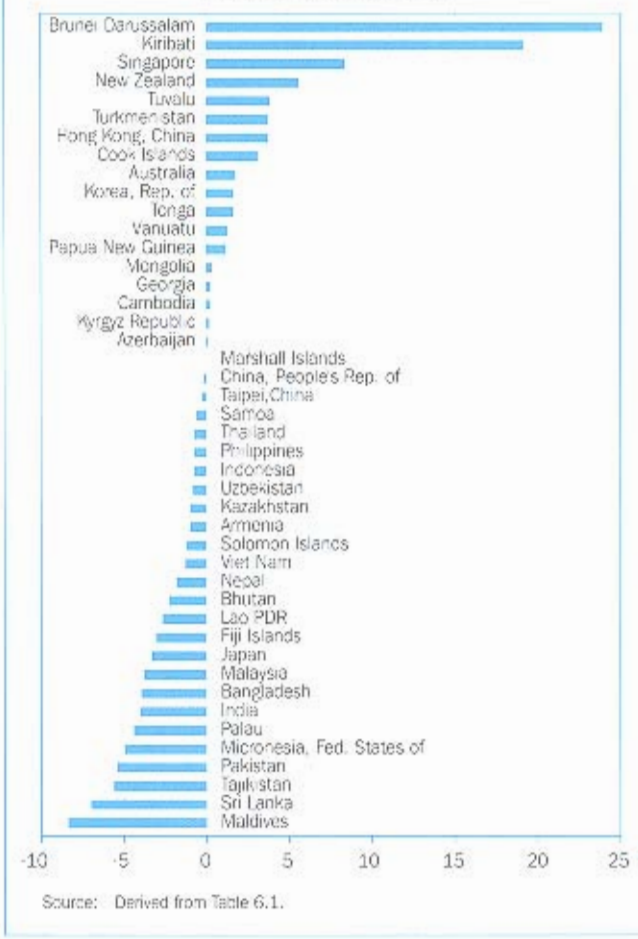
In addition however, governments can promote economic growth by creating a level playing field for business. They can make it easier to set up a new company by simplifying administrative procedures. They can actively fight bribery, corruption, and other disincentives to business investment. These aspects of **governance** are highlighted in the tables below based on statistics on the costs and time needed to set up a new business. A corruption perceptions index is also included to present a picture of the ranking of certain economies in terms of perceived corruption among public officials and politicians.

Key Trends

Budget management: How prudent are governments around the region? Figure 6.1 shows the overall fiscal position of governments. The "fiscal balance" is the difference between total government revenue and grants, and total current expenditure. Although it is not possible to say what the "correct" fiscal balance is, two points should be noted. First, countries can expect to have deficits on their fiscal balance when economic conditions are poor and surpluses in good times. This is because government revenues tend to respond quickly to economic conditions but it takes longer to raise or lower government expenditures. Second, European countries that use the *Euro* are required to keep their fiscal deficit to no more than 3% of GDP. This is regarded by the *European Central Bank* (ECB) as evidence of prudent budget management.

In more than half of the economies in the region, governments run budget deficits. The five most populous Asian economies are in this group. Ten economies have exceeded the "3% prudent management" rule, including Bangladesh, India, Japan, Malaysia, and Pakistan. It is likely that the current economic crisis will force many economies past the 3% line and it is worth noting that several members of the Euro zone are now questioning whether it is reasonable to hold to some fixed percentage in times of crisis.

Figure 6.1 **Government Fiscal Balance as a Percentage of GDP, Average of Latest Three Years**

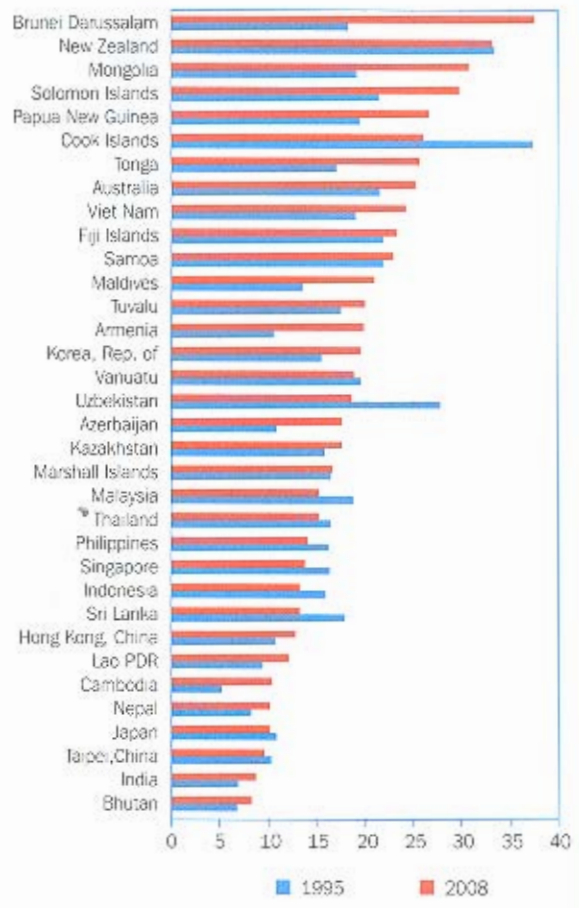


Source: Derived from Table 6.1.

Tax burdens are growing but still low by international standards. Figure 6.2 shows government tax revenue as a percentage of GDP. This is usually referred to as the "tax-burden." The data are for central government. Taxes include taxes on products—value-added tax (VAT), sales taxes, import duties—income taxes, profit taxes, property taxes, capital gains taxes, and compulsory social security charges.

In 2008, tax burdens were higher than in 1995 in all but 12 of the 34 economies shown in Figure 6.2. In 1995, the simple average of the tax burdens in these countries was 17% and it had risen to 19% by 2008. Even the 2008 percentage is low by comparison with the developed countries of Europe and North America. The average tax burden for the Organisation for Economic Co-operation and Development (OECD) countries is now over 35% and tax burdens for a few countries often exceed 45%.

Figure 6.2 **Tax Revenue as a Percentage of GDP, 1995 and 2008 or Nearest Years**



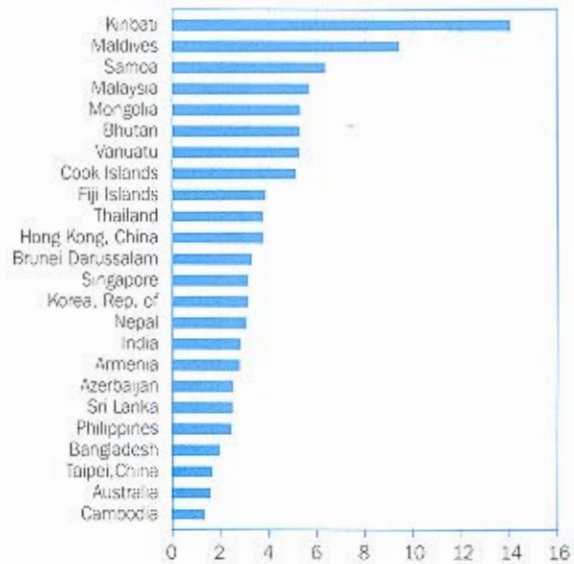
Source: Table 6.2.

High tax burdens may be seen as an impediment to economic growth as they discourage entrepreneurship and risk-taking. However, Figure 6.2 shows that some rich countries have relatively high tax burdens (Australia, Brunei Darussalam, and New Zealand) while other rich countries have relatively low ones (Hong Kong, China; Japan; Singapore; and Taipei,China). Rather than looking at tax burdens in isolation it is important to consider what services governments provide from their tax revenues and how efficiently they do it.

How much are governments investing in human capital? Figures 6.3 and 6.4 show government outlays on education and health, both of which may be seen as investment in human capital designed to boost long-term economic growth. The expenditure data in these two figures refer to total outlays, including investment, as well as current expenditures, and are confined to central government.

Economies where education spending exceeds 4% of GDP include many Pacific economies. Much of this expenditure could be to provide university education abroad because it is not usually available at home. In half of the economies the percentages lie between 2% and 4%. India is in this group.

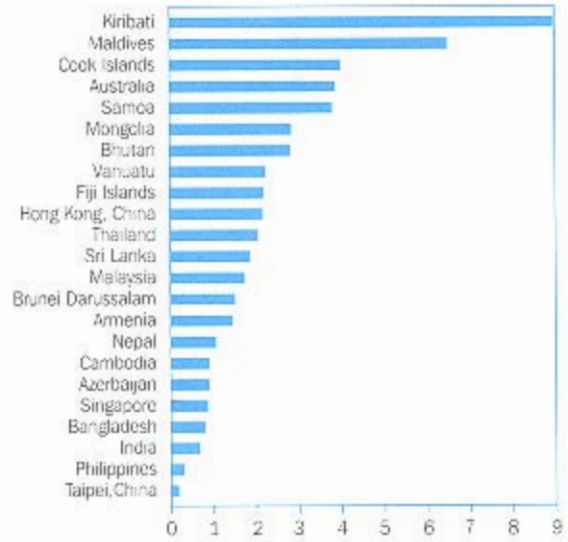
Figure 6.3 **Government Expenditure on Education as a Percentage of GDP, Average of Latest Three Years**



Source: Derived from Table 6.5.

Figure 6.4 shows that in about half of the economies, government spending on health services is between 1% and 3% of GDP. Philippines and Taipei,China report rather low shares of below 0.5%, while five economies report shares above 3%. Four of the latter are small economies—Cook Islands, Kiribati, Maldives, and Samoa.

Figure 6.4 **Government Expenditure on Health as a Percentage of GDP, Average of Latest Three Years**

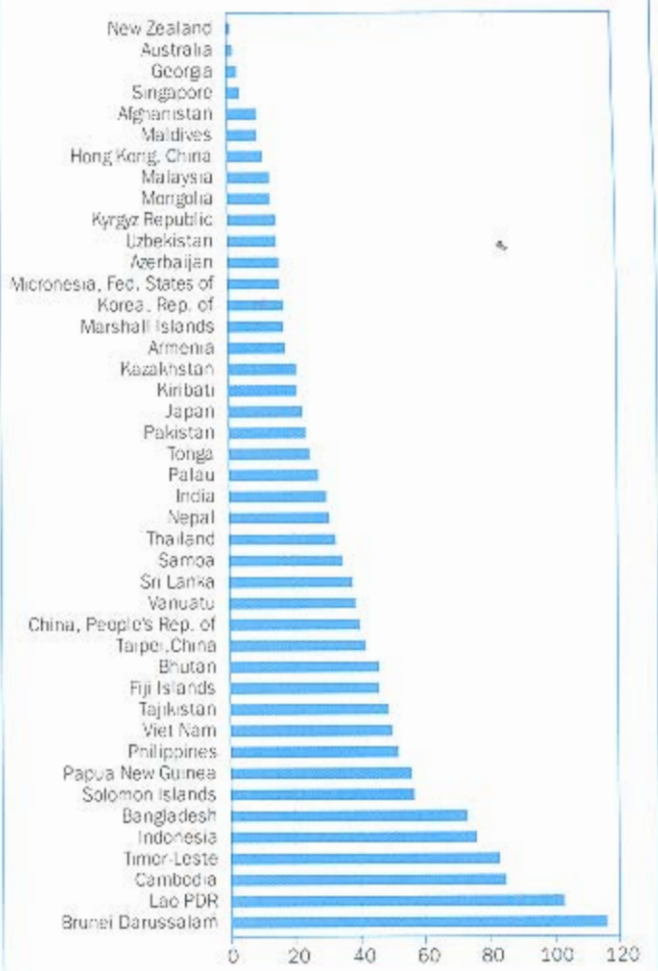


Source: Derived from Table 6.6.

The time it takes to register a new business varies widely across the region. The cost and time taken to register a new business vary enormously across the region. Clearly, a costly procedure discourages new businesses while lengthy registration procedures are a disincentive in themselves, but also provide opportunities for extorting bribes to "cut red tape" and speed up the process.

Figure 6.5 shows the number of days needed to register a new business. In Brunei Darussalam and Lao People's Democratic Republic, registration takes more than 100 days, compared with less than a week in Australia, Georgia, New Zealand, and Singapore. Lengthy registration procedures are a disincentive for foreign and domestic investors alike.

Figure 6.5 **Number of Days Required to Register a New Business, 2008**



Source: Table 6.8.

Corruption: The Asia and Pacific region includes both some of the cleanest and some of the most corrupt economies. In Box 6.1, economies are ranked by a private research institute, Transparency International, according to corruption as perceived by a panel of business people and others whom Transparency International considers to have special knowledge of each economy. Corruption refers basically to persons in positions of power using those powers to extort unauthorized payments. Respondents were asked to rate each economy on a scale of 0 (highly corrupt) to 10 (highly clean). It is evident that there is a strong subjective element in the assessments of perceived corruption. It is also likely that Transparency International had fewer candidates for its panels of experts for small economies compared to large ones.

The rankings shown in Box 6.1 should be treated with some caution, and differences in ranks of a few points are unlikely to be significant. Of the five most populous economies, the People's Republic of China (72) and India (85) are in the top half (least corrupt) of the 180 economies covered in the survey. Bangladesh, Indonesia, and Pakistan are in the bottom third. The Asia and Pacific region includes three economies in the top 10 (Australia, New Zealand, and Singapore), as well as two in the bottom 10 (Afghanistan and Myanmar).

Box 6.1 **Rank in Perceived Corruption, 2008 (Out of 180 economies)**

New Zealand	1	Maldives	115
Singapore	4	Nepal	121
Australia	9	Viet Nam	121
Hong Kong, China	12	Indonesia	126
Japan	18	Pakistan	134
Taipei,China	39	Tonga	138
Korea, Rep. of	40	Philippines	141
Bhutan	45	Kazakhstan	145
Malaysia	47	Timor-Leste	145
Samoa	62	Bangladesh	147
Georgia	67	Lao PDR	151
China, People's Rep. of	72	Papua New Guinea	151
Thailand	80	Tajikistan	151
India	85	Azerbaijan	158
Sri Lanka	92	Kyrgyz Republic	166
Kiribati	96	Cambodia	166
Mongolia	102	Turkmenistan	166
Armenia	109	Uzbekistan	166
Solomon Islands	109	Afghanistan	176
Vanuatu	109	Myanmar	178

Source: Table 6.9.

Data Issues and Comparability

Data on government expenditures and revenue are mostly taken from country sources. The coverage of the budget data is not standard throughout the region. Data provided by many countries refer only to the central government, but cover provincial and local governments in other countries. Most countries try to follow the International Monetary Fund's *Government Finance Statistics* guidelines; some countries are still using the 1986 version; others have switched to the 2001 *Government Finance Statistics* guidelines.

The statistics on the time and cost for registering new businesses and on perceived corruption are all taken from nonofficial sources. Common procedures are used in all countries and the researchers producing these data have refined their procedures over several successive surveys. However, because of the subjective nature of many of these data, they can only be used to give a broad idea of trends, levels, and rankings.

Table 6.1 **Fiscal balance** [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	-6.0	-4.4	-1.7	-3.8	-5.2	-4.9	-4.3	-2.6	-1.3	-1.7	-1.9	-1.5	-1.5	-0.0
Azerbaijan	-5.2	-2.9	-2.4	-1.8	-2.4	-1.0	-0.4	-0.4	-0.2	0.1	-0.7	0.4	-0.3	0.2
Georgia	...	-6.7	-7.2	-6.1	-3.4	-3.6	-2.2	-1.6	-0.6	3.7	2.2	2.7	0.3	-2.0
Kazakhstan	-4.0	-2.6	-3.7	-3.9	-3.5	-0.1	-0.4	-0.3	-0.9	-0.3	0.6	0.8	-1.7	-2.1
Kyrgyz Republic	-11.5	-5.4	-5.2	-3.0	-2.0	-2.2	0.4	-1.0	-0.8	-0.5	0.2	-0.2	0.1	0.8
Pakistan	-5.6	-6.5	-6.4	-7.6	-6.1	-5.4	-4.3	-4.3	-3.7	-2.3	-3.3	-4.3	-4.4	-7.6
Tajikistan	-7.4	-5.8	-4.1	-2.7	-2.4	-0.6	0.1	0.7	1.1	0.2	0.2	0.5	-8.1	-9.2
Turkmenistan	0.4	0.3	-0.2	-2.6	0.0	-0.3	0.6	0.2	-1.4	0.5	0.9	6.0	4.5	...
Uzbekistan	-2.9	-2.0	-2.4	-2.0	-1.7	-1.0	0.2	-0.9	-1.3	0.0	-1.0	-1.3	...	...
East Asia														
China, People's Rep. of	...	-1.8	-1.9	-2.4	-3.0	-2.8	-2.5	-2.6	-2.2	-1.3	-1.2	-0.8	0.6	-0.4
Hong Kong, China	-0.3	2.1	6.4	-1.8	0.8	-0.6	-4.9	-4.8	-3.2	1.7	1.0	4.0	7.7	-0.3
Korea, Rep. of	0.3	0.2	-1.4	-3.9	-2.5	1.1	1.1	3.1	1.0	0.6	0.4	0.4	3.5	1.2
Mongolia	-1.5	-2.6	-9.1	-14.3	-11.6	-7.7	-4.5	-5.8	-3.7	-1.8	2.6	3.3	2.9	-5.0
Taipei,China	-1.1	-1.4	-1.6	0.1	-1.2	-4.6	-6.4	-2.9	-2.3	-2.5	-0.3	-0.2	-0.2	...
South Asia														
Bangladesh	-2.2	-3.0	-2.0	-2.1	-3.2	-4.5	-4.1	-3.7	-3.4	-3.4	-3.7	-3.3	-3.2	-5.3
Bhutan	0.1	2.2	-2.3	0.9	-1.7	-3.8	10.6	-4.6	9.8	1.8	-6.6	0.8	0.6	...
India	-4.2	-4.1	-4.8	-5.1	-5.4	-5.7	-6.2	-5.9	-4.5	-4.0	-4.1	-3.5	-2.7	-6.0
Maldives	-6.4	-2.5	-1.4	-1.9	-4.1	-4.4	-4.7	-4.9	-3.4	-1.6	-10.9	-6.8	-4.7	-13.6
Nepal	-4.5	-5.2	-4.8	-5.5	-4.9	-4.3	-5.5	-5.0	-1.4	-0.9	-0.8	-1.6	-1.8	-2.0
Sri Lanka	-8.8	-8.4	-7.0	-8.2	-6.7	-9.3	-10.2	-8.2	-7.3	-7.5	-7.0	-7.0	-6.9	-7.0
Southeast Asia														
Brunei Darussalam [b]	15.1	0.5	1.7	5.4	-1.4	10.9	0.4	-9.9	-1.5	11.3	21.1	21.5	21.8	28.7
Cambodia	-7.2	-6.2	-0.9	-2.4	-1.2	-2.1	-3.1	-3.2	-3.4	-1.6	-0.3	0.3	-0.1	0.7
Indonesia	2.2	1.0	0.5	-1.7	-2.5	-1.1	-2.4	-1.5	-1.7	-1.0	-0.5	-0.9	-1.2	-0.1
Lao PDR	-12.9	-5.7	-5.2	-6.6	-2.5	-4.6	-4.5	-3.4	-5.7	-2.6	-4.5	-3.1	-2.6	-2.2
Malaysia	0.8	0.7	2.4	1.8	3.2	5.5	5.2	5.3	5.0	4.1	3.6	3.3	3.2	4.8
Myanmar	-3.3	-2.2	-0.1	0.8	0.3	0.7	...	...	...	...	...	...	...	...
Philippines	0.6	0.3	0.1	-1.9	-3.8	-4.0	-4.0	-5.3	-4.6	-3.8	-2.7	-1.1	-0.2	-0.9
Singapore	14.5	10.4	11.6	3.4	7.1	10.0	5.1	4.8	3.1	4.1	6.7	6.6	12.0	...
Thailand	2.6	2.2	-2.2	-7.1	-9.9	-2.8	-2.7	-8.1	0.1	-0.4	0.1	-0.3	-1.3	-0.4
Viet Nam	-1.3	-0.9	-3.9	-1.6	-3.3	-4.3	-3.5	-2.3	-2.2	0.2	-1.1	1.3	-3.1	-2.0
The Pacific														
Cook Islands	-2.8	-7.8	-0.2	-2.5	-2.4	-1.8	1.3	-4.2	-0.8	-1.0	2.1	2.1	3.6	3.7
Fiji Islands	-0.3	-4.6	-6.7	-0.9	-3.6	-3.1	-7.7	-5.5	-5.8	-3.1	-3.4	-3.4	-2.2	...
Kiribati	15.9	9.4	62.9	70.2	37.5	42.7	10.1	3.8	9.9	12.3	7.7	12.0	37.9	...
Marshall Islands	-27.2	16.5	8.2	14.2	9.8	8.4	8.7	-9.0	-1.8	-1.3	4.6	1.0	-0.7	-0.3
Micronesia, Fed. States of	-0.5	2.5	2.8	-3.5	-5.6	-3.7	-5.9	7.8	2.8	-16.0	-5.3	-6.4	-3.3	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	-18.2	-15.1	-20.1	-29.2	-1.4	-9.5	-0.7	-1.2	-7.5	-4.6
Papua New Guinea	-0.5	0.5	0.2	-1.8	-2.4	-2.0	-3.4	-3.8	-0.9	1.7	0.1	3.2	2.6	-2.2
Samoa	-7.0	1.4	2.2	2.0	0.3	-0.7	-2.2	-2.0	-0.6	-0.8	0.3	0.3	1.1	-3.3
Solomon Islands	-4.6	-4.3	-3.6	3.0	5.0	-0.6	-7.4	-20.2	-5.8	4.9	-0.9	-3.9	0.5	-0.0
Timor-Leste [c]	...	...	...	...	...	...	2.0	0.5	4.3	13.2	80.2	129.7	220.6	...
Tonga	1.2	0.9	-4.8	-2.4	-0.2	-0.4	-1.5	-1.4	-3.1	0.9	2.4	1.5	1.4	2.0
Tuvalu	...	-92.9	-31.8	19.1	-3.5	-2.2	-45.7	33.7	-33.3	-14.7	-7.4	18.7	-14.3	7.2
Vanuatu	-2.7	-1.7	-0.5	-9.4	-1.5	-7.0	-3.7	-2.2	-1.8	0.9	3.2	0.4	0.3	...
Developed Member Countries														
Australia	2.9	2.1	1.1	0.0	0.8	1.8	0.9	-0.5	0.8	0.8	1.3	1.7	1.7	1.9
Japan	-4.4	-4.1	-3.5	-10.6	-7.3	-6.4	-5.9	-6.7	-6.7	-5.2	-6.2	-1.0	-2.6	...
New Zealand	3.1	3.1	1.7	0.4	0.1	2.1	2.0	3.9	4.2	4.4	5.4	6.3	5.3	...

a Data refer to central government, except for Bangladesh, People's Republic of China, Georgia, Kiribati, Kyrgyz Republic, Federated States of Micronesia, Pakistan, and Tajikistan, where data refer to consolidated government or general government.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

c GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Source: Country sources.

Government Finance

Table 6.2 **Tax revenue** [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	3.7	2.8	...	...
Armenia	10.6	10.5	12.8	13.6	16.1	14.8	14.4	14.6	14.0	14.0	14.3	14.5	16.1	19.9
Azerbaijan	10.8	13.6	14.7	12.3	12.4	12.2	13.4	13.8	14.1	14.4	14.0	16.3	18.4	17.7
Georgia	...	10.0	12.9	12.9	13.9	14.1	14.5	14.4	12.0	15.6	17.1	19.2	21.6	24.9
Kazakhstan	15.8	12.6	12.2	12.4	16.4	20.2	19.6	19.9	20.5	20.2	26.3	21.6	18.3	17.7
Kyrgyz Republic	15.1	12.6	12.5	14.2	12.2	11.7	12.4	13.9	14.2	14.8	16.2	17.6	18.7	19.4
Pakistan	13.8	14.4	13.4	13.2	13.3	10.6	10.5	10.7	11.4	10.8	10.1	10.5	10.3	10.2
Tajikistan	8.4	11.7	14.4	10.9	11.8	13.1	13.7	14.7	15.0	15.1	16.5	16.8	17.9	18.7
Turkmenistan	...	...	...	...	...	23.0	22.0	17.4	18.3	20.9	21.7	21.8	...	...
Uzbekistan	27.8	32.3	28.7	29.3	27.9	...	23.4	22.9	22.4	22.7	20.9	18.6	...	...
East Asia														
China, People's Rep. of	9.9	9.7	10.4	11.0	11.9	12.7	14.0	14.7	14.7	15.1	15.7	16.4	17.7	18.0
Hong Kong, China	10.7	11.2	11.5	8.8	8.7	9.5	9.5	9.1	10.6	12.0	12.6	12.7	14.2	12.8
Korea, Rep. of	15.6	16.1	16.0	16.2	16.6	17.9	17.4	17.2	14.9	14.2	14.7	15.2	19.6	...
Mongolia	19.2	18.7	19.7	18.8	19.6	25.6	29.4	29.0	25.4	27.1	24.9	30.4	32.7	30.8
Taipei,China	10.3	9.3	9.1	9.6	8.4	13.6	9.0	8.0	7.8	8.2	9.3	9.2	9.5	...
South Asia														
Bangladesh	7.9	7.3	7.9	7.7	7.4	6.8	7.8	7.8	8.3	8.5	8.6	8.7	8.3	8.8
Bhutan	6.8	7.7	6.6	8.2	7.2	9.8	8.4	10.1	10.0	8.3	9.3	10.2	8.3	...
India	6.9	6.8	6.3	6.0	6.6	6.5	5.9	6.5	6.8	7.1	7.5	8.5	9.3	8.8
Maldives	13.6	13.5	14.4	14.2	14.1	13.8	13.7	13.3	14.3	16.6	18.0	20.2	21.5	21.0
Nepal	8.4	8.1	8.1	8.0	7.8	8.1	8.8	8.6	8.7	9.0	9.2	8.8	9.8	10.4
Sri Lanka	17.9	16.9	16.0	14.1	14.6	14.2	14.4	13.6	12.7	13.5	13.7	14.6	14.2	13.3
Southeast Asia														
Brunei Darussalam [b]	18.4	19.6	20.4	14.3	17.2	23.4	23.0	22.3	30.0	27.7	33.1	30.3	34.3	37.5
Cambodia	5.3	5.8	5.9	5.8	7.1	7.3	7.0	7.6	6.8	7.7	7.7	8.0	10.2	10.5
Indonesia	16.0	10.8	11.3	10.7	10.3	8.3	11.0	11.6	12.0	12.2	12.5	12.3	12.5	13.3
Lao PDR	9.4	10.2	8.6	6.8	7.2	10.6	11.0	10.6	9.1	9.3	9.7	9.9	11.7	12.2
Malaysia	18.7	18.6	19.0	16.0	15.1	13.2	17.4	17.4	15.5	15.2	15.4	15.1	14.9	15.3
Myanmar	3.7	4.0	4.4	3.5	2.3	2.0	...	...	...	...	...	...	...	...
Philippines	16.3	16.9	17.0	15.6	14.5	13.7	13.6	12.8	12.8	12.4	13.0	14.3	14.0	14.1
Singapore	16.4	16.5	16.0	14.6	15.2	15.4	15.3	13.3	13.0	12.2	12.2	12.6	13.9	...
Thailand	16.5	16.7	15.9	13.9	13.2	13.2	13.4	14.0	15.2	15.8	16.4	16.3	15.5	15.2
Viet Nam	19.1	19.2	17.7	16.5	16.7	18.0	19.1	19.8	20.9	21.7	22.8	24.3	...	...
The Pacific														
Cook Islands	37.5	32.9	28.6	23.9	24.9	25.3	26.9	27.3	24.7	23.2	25.1	24.4	24.3	26.2
Fiji Islands	21.9	21.1	22.0	22.0	20.6	19.9	19.6	19.6	21.2	21.9	21.4	22.5	23.4	...
Kiribati	21.7	20.5	20.0	19.4	21.1	21.7	21.6	20.8	21.4	23.4	22.1	21.3	21.8	...
Marshall Islands	16.5	17.8	17.9	17.7	16.2	15.8	16.7	16.8	18.6	17.1	17.6	17.2	16.5	16.7
Micronesia, Fed. States of	10.2	10.2	10.8	13.0	12.4	12.8	12.0	11.9	10.6	12.2	12.6	12.5	11.8	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	16.7	19.1	19.3	18.5	18.5	19.6	20.7	18.8	18.1	18.9
Papua New Guinea	19.5	22.5	23.7	20.5	20.2	23.8	22.1	20.0	20.2	23.9	24.8	29.3	31.3	26.7
Samoa	22.0	22.1	21.6	20.9	21.2	20.6	21.0	20.5	21.6	20.5	20.5	22.5	23.3	23.0
Solomon Islands	21.4	20.3	18.5	21.5	22.5	19.1	14.4	15.9	19.0	22.8	24.3	25.2	28.6	29.9
Timor-Leste	...	...	...	...	...	...	...	8.7	14.6	20.3	72.0	113.2	133.9	...
Tonga	17.1	19.7	21.2	19.5	19.2	20.3	18.9	22.8	22.0	21.5	23.3	28.1	26.5	25.7
Tuvalu	17.5	16.1	17.3	19.2	19.5	24.2	24.6	22.4	19.8	19.8	20.3	18.5	19.9	20.0
Vanuatu	19.6	20.3	19.3	18.3	18.3	17.5	17.0	18.3	17.6	18.0	17.6	17.7	18.9	...
Developed Member Countries														
Australia	21.6	22.3	22.8	22.7	23.3	23.7	25.5	24.2	24.9	24.9	25.5	25.3	25.1	25.2
Japan	10.8	10.8	10.6	10.1	9.8	10.5	10.1	9.2	9.1	9.5	10.3	10.6	10.1	...
New Zealand	33.5	32.5	32.2	30.6	29.7	30.5	29.6	30.9	31.2	31.2	32.7	33.3	33.2	...

a Data refer to central government, except for Bangladesh, People's Republic of China, Georgia, Kiribati, Kyrgyz Republic, Federated States of Micronesia, Pakistan, and Tajikistan, where data refer to consolidated government or general government.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Country sources.

Table 6.3 **Total government revenue** [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	0.3	...	...	...	...	0.4	0.9	3.0	4.4	5.2	6.8	7.6	...	...
Armenia	14.4	13.4	13.9	16.0	17.8	15.9	15.7	15.5	14.9	15.1	16.2	16.0	17.9	21.3
Azerbaijan	11.8	14.0	16.2	13.5	14.5	14.7	14.7	14.8	17.0	17.7	16.3	20.6	21.2	28.3
Georgia	...	11.4	15.9	16.2	16.9	15.2	15.6	15.4	15.8	22.5	27.1	30.6	33.9	31.1
Kazakhstan	19.6	17.1	16.7	17.5	19.6	22.9	23.0	21.7	22.2	21.9	27.6	22.9	20.5	18.6
Kyrgyz Republic	16.7	16.0	15.8	17.8	16.2	14.2	16.1	18.0	18.8	18.7	19.8	21.8	24.1	24.4
Pakistan	17.3	17.9	15.8	16.0	15.9	13.4	12.2	12.1	12.3	13.5	13.5	13.5	14.6	14.6
Tajikistan	10.0	12.1	14.8	11.2	12.2	14.1	14.9	16.5	17.0	17.2	19.2	19.3	18.9	19.5
Turkmenistan	20.5	16.6	24.9	22.0	19.4	23.5	22.1	18.2	19.2	22.2	22.5	23.3	19.9	...
Uzbekistan	29.7	34.3	30.1	31.1	29.3	28.0	25.7	25.0	23.5	23.5	21.8	19.5	...	...
East Asia														
China, People's Rep. of	10.3	10.4	11.0	11.7	12.8	13.5	14.9	15.7	16.0	16.5	17.3	18.3	19.9	20.4
Hong Kong, China	16.1	16.9	20.6	16.7	18.4	17.1	13.5	13.9	16.8	20.4	17.9	19.5	22.2	18.7
Korea, Rep. of	18.3	19.1	19.0	20.0	20.4	22.5	22.1	22.0	22.4	21.6	22.1	23.1	25.0	24.5
Mongolia	24.7	24.1	24.7	26.5	26.8	34.0	38.6	38.0	32.8	32.9	30.0	36.5	40.4	34.9
Taipei,China	13.3	12.2	12.0	12.9	11.3	18.3	12.8	13.3	13.1	12.4	15.1	13.3	13.0	...
South Asia														
Bangladesh	9.8	9.2	9.6	9.5	9.0	8.5	9.6	10.2	10.4	10.6	10.6	10.8	10.5	11.1
Bhutan	19.7	19.3	18.4	20.7	20.8	22.8	21.7	19.3	16.3	15.7	16.8	17.4	19.6	...
India	9.9	9.7	9.4	9.5	9.9	9.8	9.7	10.9	12.6	11.8	10.0	10.6	12.4	10.6
Maldives	25.8	25.0	27.7	27.8	29.7	30.0	30.2	31.5	33.4	33.7	39.5	45.1	48.4	44.6
Nepal	10.4	10.4	10.1	10.2	10.1	10.5	11.1	11.0	11.4	11.3	11.7	10.8	11.9	12.8
Sri Lanka	20.6	19.0	18.5	16.7	17.2	16.4	16.3	16.0	15.2	14.9	15.5	16.3	15.8	14.9
Southeast Asia														
Brunei Darussalam [b]	36.5	39.7	36.8	28.3	32.5	49.1	42.2	40.8	55.8	48.1	53.2	50.4	52.1	57.4
Cambodia	7.6	8.2	8.7	8.0	9.8	10.0	9.8	10.6	9.8	10.4	10.6	11.4	12.1	12.5
Indonesia	17.7	16.5	17.9	16.4	18.6	14.7	17.8	16.5	16.9	17.6	17.8	19.0	17.9	19.8
Lao PDR	11.1	12.6	10.4	8.7	9.0	13.1	13.5	13.2	11.0	11.2	11.7	11.6	13.2	13.9
Malaysia	22.9	23.0	23.3	20.0	19.5	17.4	22.6	21.8	22.1	21.0	20.3	21.5	21.8	21.6
Myanmar	5.6	6.9	7.8	7.3	4.9	4.2	...	...	...	...	...	...	...	...
Philippines	18.9	18.9	19.4	17.3	16.1	15.3	15.6	14.6	14.8	14.5	15.0	16.2	17.1	16.0
Singapore	35.9	38.0	37.8	31.2	31.4	30.3	27.8	23.6	21.5	20.8	22.0	22.0	26.7	...
Thailand	18.2	18.5	17.9	15.7	15.3	15.1	16.2	15.9	17.6	18.0	18.6	18.2	17.6	17.0
Viet Nam	21.9	21.7	20.0	19.6	19.0	20.1	21.2	22.3	25.3	27.4	28.0	28.9	27.2	27.7
The Pacific														
Cook Islands	39.8	35.3	33.6	31.6	29.8	30.6	32.2	30.4	28.1	27.6	29.1	28.5	28.6	30.4
Fiji Islands	25.5	24.5	26.4	34.6	26.2	25.4	23.8	25.8	24.2	24.9	24.5	25.6	26.4	...
Kiribati	79.5	70.7	119.3	120.7	95.8	95.4	89.3	80.5	73.3	89.1	69.1	74.6	90.7	...
Marshall Islands	29.6	33.1	26.6	23.3	25.6	22.6	21.5	23.0	23.1	25.5	25.7	24.9	24.1	23.3
Micronesia, Fed. States of	28.2	26.2	25.6	27.5	26.3	24.2	20.6	21.2	21.3	26.7	22.4	23.0	22.2	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	22.7	24.3	25.5	24.1	25.8	26.0	28.7	24.4	23.3	23.1
Papua New Guinea	24.0	25.4	26.7	24.1	22.0	25.7	23.7	21.4	22.3	26.0	26.8	31.9	33.7	28.2
Samoa	29.3	29.8	26.6	26.4	26.6	25.6	23.7	22.3	24.0	23.0	24.0	25.9	27.3	25.8
Solomon Islands	27.7	26.0	22.6	34.2	30.3	21.6	15.3	16.8	20.9	24.7	26.7	30.9	33.3	33.5
Timor-Leste [c]	...	...	...	...	...	...	7.4	11.0	16.4	22.8	91.1	157.8	261.3	...
Tonga	32.6	28.3	29.3	28.0	25.3	27.1	26.4	28.5	26.3	26.5	27.4	30.4	30.0	30.3
Tuvalu	...	146.7	129.2	99.5	137.8	243.2	123.8	151.6	53.2	52.9	52.6	47.4	48.7	49.7
Vanuatu	24.2	23.8	20.9	20.6	20.8	20.9	19.6	20.4	19.5	20.0	19.9	19.9	21.3	...
Developed Member Countries														
Australia	22.5	23.4	23.8	23.5	25.3	25.9	27.0	25.9	26.5	26.4	27.0	27.0	26.6	26.8
Japan	12.2	12.1	11.9	11.5	11.2	12.0	11.6	10.6	10.3	10.8	11.8	12.6	12.2	...
New Zealand	38.8	38.1	37.2	35.8	34.8	35.1	34.2	35.5	35.9	35.9	37.7	39.4	38.7	...

a Data refer to central government, except for Bangladesh, People's Republic of China, Georgia, Kiribati, Kyrgyz Republic, Federated States of Micronesia, Pakistan, and Tajikistan, where data refer to consolidated government or general government.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Source: Country sources.

Government Finance

Table 6.4 **Total government expenditure** [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	7.9	...	...	...	...	2.8	3.9	7.9	9.5	10.6	9.9	9.9	...	...
Armenia	24.0	19.2	16.5	20.0	21.9	20.1	19.4	18.6	18.8	17.0	18.0	17.4	19.4	21.5
Azerbaijan	20.1	17.6	18.6	15.4	17.3	16.2	15.2	15.4	17.3	17.4	16.8	19.8	21.3	27.9
Georgia	...	19.8	23.2	22.2	19.9	18.6	17.9	17.3	16.9	20.1	25.8	29.4	34.2	36.3
Kazakhstan	25.7	19.8	19.1	20.3	22.2	22.2	22.3	21.2	22.2	21.9	25.6	21.1	20.8	21.3
Kyrgyz Republic	27.8	22.3	22.4	22.0	19.7	18.0	17.7	20.7	20.6	20.4	20.4	22.4	25.3	24.3
Pakistan	23.0	24.4	22.3	23.7	22.0	18.9	17.5	18.6	18.9	16.6	16.8	18.4	20.9	22.4
Tajikistan	17.4	17.6	18.6	14.2	14.9	14.7	14.8	16.1	16.2	17.6	19.4	19.0	27.2	28.2
Turkmenistan	20.1	16.3	25.0	24.6	19.4	23.9	21.5	18.1	20.6	21.7	21.6	17.2	...	...
Uzbekistan	32.6	36.2	32.5	33.1	31.0	28.9	25.5	25.9	24.8	23.5	22.8	20.8	...	...
East Asia														
China, People's Rep. of	...	12.2	12.9	14.1	15.7	16.3	17.5	18.3	18.1	17.8	18.5	19.1	19.3	20.8
Hong Kong, China	16.4	14.9	14.2	18.5	17.6	17.7	18.4	18.7	20.0	18.7	16.9	15.5	14.5	18.9
Korea, Rep. of	15.8	16.3	16.6	18.8	19.1	18.1	19.4	18.8	21.7	20.8	21.4	22.0	20.8	22.8
Mongolia	23.3	24.1	26.7	31.4	29.8	36.0	38.2	38.9	31.6	29.9	24.8	31.2	36.2	38.7
Taipei,China	14.4	13.6	13.6	12.8	12.6	22.9	19.1	16.1	15.4	14.9	15.5	13.5	13.2	...
South Asia														
Bangladesh	14.4	13.9	13.3	12.9	13.6	14.5	14.8	14.9	14.5	14.8	15.0	14.7	14.1	15.5
Bhutan	38.3	37.6	35.1	30.3	41.3	41.4	46.6	37.0	33.7	30.3	35.1	33.0	29.4	...
India	14.1	13.8	14.2	14.6	15.3	15.5	15.9	16.8	17.1	15.8	14.1	14.1	15.1	16.6
Maldives	36.6	31.9	32.4	33.3	36.0	37.3	38.1	38.2	40.1	38.0	60.2	60.3	61.7	64.0
Nepal	16.6	17.4	16.9	17.3	16.1	16.3	18.1	17.4	15.1	14.7	15.1	14.5	16.1	17.1
Sri Lanka	29.6	27.6	25.7	24.3	23.5	25.0	25.9	23.8	22.5	22.6	23.8	24.2	23.2	22.1
Southeast Asia														
Brunei Darussalam [b]	66.0	51.0	52.6	59.4	55.6	40.6	38.4	45.3	50.1	36.8	32.1	28.9	30.3	28.6
Cambodia	14.8	14.4	12.4	13.4	13.6	14.8	16.2	17.7	15.9	13.9	12.8	13.7	14.3	13.9
Indonesia	14.7	15.4	17.4	18.1	21.1	15.8	20.3	18.0	18.7	18.6	18.4	20.0	19.1	19.9
Lao PDR	26.7	19.5	17.2	18.6	16.0	20.8	22.2	18.7	19.6	15.4	18.4	17.2	18.5	18.8
Malaysia	22.1	22.3	21.0	21.8	22.7	22.9	27.8	27.1	27.1	25.1	23.9	24.9	25.0	26.4
Myanmar	9.8	9.2	7.9	6.5	5.1	3.5	...	...	...	...	...	...	...	...
Philippines	18.2	18.6	19.3	19.2	19.7	19.3	19.7	19.8	19.3	18.2	17.7	17.3	17.1	16.8
Singapore	16.1	21.0	16.7	19.9	18.7	18.8	22.1	18.8	18.5	16.8	15.3	15.4	14.7	...
Thailand	15.4	16.0	19.8	22.4	24.7	17.3	17.9	24.1	17.6	18.4	18.5	18.5	18.9	17.4
Viet Nam	23.8	23.1	22.6	20.3	21.2	22.6	24.4	24.2	26.4	26.2	27.3	27.6	29.9	29.4
The Pacific														
Cook Islands	48.3	48.8	42.7	41.3	35.1	35.2	36.7	37.9	33.0	32.5	33.1	34.2	32.4	32.5
Fiji Islands	26.0	29.4	33.2	35.6	29.9	28.5	31.1	31.1	30.1	28.0	28.0	29.1	28.6	...
Kiribati	86.7	83.4	82.1	84.2	82.5	88.4	119.5	148.4	159.8	183.3	124.1	121.0	118.8	...
Marshall Islands	93.1	55.4	57.2	52.7	53.1	60.5	65.4	75.6	68.9	59.2	57.3	64.2	66.8	60.9
Micronesia, Fed. States of	82.4	76.2	70.1	77.9	79.1	72.2	70.0	64.4	72.0	75.6	63.9	64.1	63.7	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	68.5	69.5	67.6	55.1	63.5	70.6	64.1	67.0	68.3	67.9	58.8	64.4	63.3	54.7
Papua New Guinea	28.3	27.4	28.4	27.3	29.4	32.9	34.1	31.0	28.6	30.7	35.2	34.2	35.0	35.0
Samoa	39.6	42.1	34.7	32.4	36.0	31.2	32.1	32.9	30.2	29.0	32.6	29.5	31.7	34.0
Solomon Islands	32.3	30.2	26.2	33.8	30.2	31.6	26.4	44.1	38.1	29.4	34.6	38.4	36.4	37.9
Timor-Leste [c]	...	...	...	...	...	...	13.9	18.5	19.5	17.9	17.8	25.0	39.1	...
Tonga	33.5	29.4	35.9	33.0	27.1	28.5	26.8	30.4	27.6	27.1	26.6	34.5	30.8	29.9
Tuvalu	...	150.5	117.8	96.4	127.6	210.2	142.1	97.2	101.3	72.3	74.3	73.7	74.3	127.1
Vanuatu	29.3	27.3	23.7	28.4	23.6	29.0	25.2	24.9	22.5	21.5	19.6	20.6	22.9	...
Developed Member Countries														
Australia	25.5	25.5	24.9	23.5	24.5	24.1	26.1	26.3	25.6	25.6	25.6	25.2	24.9	24.9
Japan	16.7	16.2	15.4	22.2	18.6	18.4	17.5	17.3	17.0	16.0	18.0	15.7	14.8	...
New Zealand	35.7	35.0	35.5	35.4	34.7	32.9	32.2	31.6	31.7	31.5	32.3	33.1	33.4	...

a Data refer to central government, except for Bangladesh, People's Republic of China, Georgia, Kiribati, Kyrgyz Republic, Federated States of Micronesia, Pakistan, and Tajikistan, where data refer to consolidated government or general government.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.
c GDP estimates before 2002 include the value added of activities of the United Nations, while estimates beginning 2002 exclude its value added.

Source: Country sources.

Table 6.5 Government expenditure on education [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	2.3	1.9	2.1	2.2	2.8	2.5	2.1	2.1	2.5	2.7	2.7	3.0	2.7
Azerbaijan	3.5	3.7	3.6	3.4	4.2	3.9	3.5	3.2	3.3	3.4	3.0	2.6	2.5	2.6
Georgia	...	...	...	...	...	...	...	...	...	...	...	3.0	2.7	2.9
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	6.6	5.2	4.9	4.9	4.1	3.5	3.9	4.4	4.5	4.6	4.9	5.5	5.6	5.2
Pakistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tajikistan	2.2	2.1	2.5	2.2	2.1	2.3	2.4	2.6	2.4	2.7	3.5	3.4	3.4	4.1
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of [b]	2.0	...	...	...	...	...	...	3.3	3.3	3.2	3.3	3.5	3.5	3.9
Hong Kong, China	3.0	3.1	3.5	3.8	4.0	4.0	4.1	4.4	4.6	4.2	3.9	3.5	3.3	4.5
Korea, Rep. of	2.4	2.5	2.5	2.5	2.2	2.1	2.7	2.6	2.7	2.7	3.2	3.1	3.1	...
Mongolia	4.3	5.2	5.6	6.5	7.0	8.1	8.8	8.4	6.9	6.6	5.3	5.2	5.5	...
Taipei,China	1.4	1.4	1.3	1.3	1.4	2.3	1.8	1.9	1.9	1.8	1.7	1.7	1.7	...
South Asia														
Bangladesh	2.2	2.2	2.1	2.0	2.0	2.0	2.3	2.1	2.1	2.0	1.9	2.0	2.1	1.9
Bhutan	...	...	...	...	...	...	...	5.4	5.0	4.0	5.0	5.2	5.8	...
India	...	...	...	...	3.2	3.3	3.6	3.3	3.1	2.6	2.5	2.7	2.8	3.0
Maldives	4.8	4.7	5.3	6.8	6.5	7.4	6.7	7.8	8.2	7.6	8.9	9.0	9.7	9.5
Nepal	2.2	2.2	2.4	2.4	2.1	2.3	2.5	2.8	2.7	2.7	2.9	3.0	3.0	3.3
Sri Lanka	2.9	2.6	2.5	2.6	2.6	2.4	2.0	2.3	2.1	2.0	2.6	2.7	2.6	2.3
Southeast Asia														
Brunei Darussalam [c]	4.6	4.6	4.5	5.6	5.0	4.2	4.0	4.7	6.0	3.0	3.7	3.3	2.9	...
Cambodia	0.9	0.9	0.9	0.9	1.2	1.3	1.3	1.7	1.6	1.5	1.4	1.5	1.4	1.1
Indonesia	1.3	1.3	1.4	1.2	1.3	...	0.8	0.7	1.0	0.8	...	...	...	...
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	4.8	4.9	4.6	4.7	5.1	5.6	7.0	7.7	7.0	5.4	5.1	5.4	5.7	6.0
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	3.2	3.4	3.9	4.0	3.7	3.5	3.2	3.2	3.0	2.6	2.4	2.4	2.5	2.5
Singapore	3.0	3.1	3.1	3.6	3.7	4.0	4.3	4.4	4.1	3.6	3.3	3.1	3.1	...
Thailand	3.5	3.4	4.1	4.2	4.3	4.0	3.9	4.2	4.0	4.1	3.7	3.5	3.9	4.0
Viet Nam	...	...	...	...	...	...	...	...	...	...	...	...	...	...
The Pacific														
Cook Islands	5.8	4.6	3.7	4.1	5.3	3.7	4.5	3.7	4.7	4.7	5.2	5.3	5.2	5.0
Fiji Islands	4.0	3.8	4.0	3.7	3.5	4.2	4.3	4.5	4.4	4.1	3.8	3.5	4.4	...
Kiribati	11.7	11.5	10.1	10.3	10.7	11.1	13.4	13.2	14.3	15.0	14.4	15.4	13.8	12.9
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	4.7	3.8	5.3	5.9	6.3	5.1	3.4	2.6	...	...	...	...	...	...
Samoa	4.4	4.0	4.8	4.9	5.1	4.9	4.5	4.7	4.7	4.8	4.4	4.4	7.2	7.5
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	2.8	4.1	5.7	...	...	...	...	...
Tonga	4.8	4.5	5.5	5.2	4.8	5.7	...	...	4.5	4.5	4.5	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	5.2	3.8	4.3	4.9	5.4	5.5	5.7	6.5	6.1	5.3	4.9	4.9	6.1	...
Developed Member Countries														
Australia	...	...	...	...	1.7	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.7
Japan	3.7	3.8	3.8	3.8	3.9	3.9	4.0	4.0	4.0	3.8	3.8	3.8	3.8	...
New Zealand	4.7	4.7	5.0	5.2	5.1	5.1	5.0	5.0	5.1	5.1	...	...	...	...

a Data refer to central government, except for People's Republic of China, Georgia, Japan, Kyrgyz Republic, and Tajikistan, where data refer to consolidated government or general government.

b Includes health.

c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Country sources.

Government Finance

Table 6.6 **Government expenditure on health** [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	1.4	1.2	1.4	1.4	1.0	1.3	1.2	1.2	1.3	1.4	1.5	1.5	1.3
Azerbaijan	1.4	1.5	1.2	0.9	1.0	0.9	0.8	0.7	0.8	0.9	0.9	0.9	0.9	0.9
Georgia	...	0.6	0.6	0.5	0.3	0.3	0.5	0.5	0.1	0.8	1.2	1.6	1.5	1.6
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	3.9	3.1	3.2	2.8	2.3	2.0	1.9	2.0	1.9	2.0	2.3	2.7	2.6	2.4
Pakistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tajikistan	1.4	1.3	1.6	1.1	1.0	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.5
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of [b]	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	2.2	2.0	2.0	2.4	2.5	2.5	2.6	2.6	2.8	2.5	2.3	2.2	2.1	2.2
Korea, Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mongolia	2.9	3.5	3.4	3.7	3.9	4.5	4.8	4.7	3.5	3.4	2.9	2.7	3.0	...
Taipei,China	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	...
South Asia														
Bangladesh	1.0	1.0	1.0	0.7	1.0	1.0	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.8
Bhutan	...	...	...	...	...	...	...	4.3	2.9	2.6	2.6	2.6	3.3	...
India	...	...	...	...	0.7	0.7	0.8	0.7	0.6	0.6	0.6	0.6	0.7	0.7
Maldives	3.3	3.6	3.5	3.5	3.7	4.1	3.9	3.9	4.1	4.3	5.5	5.9	5.8	7.8
Nepal	0.6	0.6	0.8	1.0	0.8	0.8	0.8	0.9	0.7	0.7	0.8	0.9	1.0	1.2
Sri Lanka	1.7	1.5	1.4	1.4	1.4	1.6	1.3	1.5	1.5	1.6	1.8	2.0	1.9	1.7
Southeast Asia														
Brunei Darussalam [c]	2.3	2.3	2.3	2.9	2.5	2.1	2.0	2.0	2.5	1.3	1.7	1.5	1.4	...
Cambodia	0.3	0.5	0.4	0.4	0.6	0.9	0.8	1.0	0.9	0.9	0.9	0.9	1.0	0.8
Indonesia	0.4	0.4	0.4	0.4	0.5	...	0.3	0.2	0.4	0.3	...	...	...	...
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	1.2	1.4	1.3	1.4	1.5	1.5	1.8	1.7	2.1	2.0	1.7	1.7	1.8	1.8
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	0.4	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Singapore	1.2	1.2	1.1	1.4	1.3	1.0	1.2	1.1	1.5	1.0	0.9	0.9	0.9	...
Thailand	1.2	1.2	1.5	1.5	1.4	1.3	1.3	1.6	1.6	1.6	1.4	1.4	3.0	1.7
Viet Nam	...	...	...	...	...	...	...	...	...	...	...	...	...	...
The Pacific														
Cook Islands	4.8	4.3	3.6	3.8	3.2	3.5	4.8	3.7	3.9	3.6	4.4	3.9	4.0	4.1
Fiji Islands	2.1	2.0	2.2	2.1	1.9	2.3	2.4	2.5	2.5	2.3	2.3	2.1	2.2	...
Kiribati	9.0	8.8	9.0	6.7	8.4	7.7	8.6	8.5	9.4	10.2	9.5	9.2	9.6	8.2
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	2.0	1.4	1.8	1.9	1.8	1.6	1.7	1.5	...	...	...	...	...	...
Samoa	3.0	3.0	3.5	3.8	4.0	4.0	3.5	3.9	3.8	3.5	3.3	3.8	3.5	4.1
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	0.8	1.7	2.5	...	...	...	...	...
Tonga	3.2	3.3	3.8	4.4	4.2	6.1	...	...	2.8	3.3	8.6	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	2.3	1.7	2.2	2.6	2.6	2.7	2.7	2.9	2.7	2.1	2.0	2.0	2.7	...
Developed Member Countries														
Australia	...	...	...	...	3.6	4.0	3.7	3.8	3.7	3.8	4.0	3.9	3.8	3.9
Japan	5.3	5.4	5.3	5.5	5.8	6.3	6.6	6.7	6.9	7.0	7.1	7.1	7.2	...
New Zealand	4.8	4.9	5.1	5.3	5.5	5.4	5.4	5.4	5.4	5.5	...	...	...	...

a Data refer to central government, except for People's Republic of China, Georgia, Japan, Kyrgyz Republic, and Tajikistan, where data refer to consolidated government or general government.
b Included in education expenditure category.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Country sources.

Table 6.7 Government expenditure on housing and community amenities [a]
(percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Developing Member Countries														
Central and West Asia														
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	...	...	0.3	1.0	1.4	1.2	0.6	0.6	2.3	0.6	1.0	0.8	0.7	0.2
Azerbaijan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Georgia	...	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	–	3.3	2.9	2.8
Kazakhstan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyz Republic	1.4	1.3	0.9	1.1	1.0	1.0	1.1	1.5	1.4	1.1	1.0	1.2	1.2	1.2
Pakistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tajikistan	...	...	...	...	...	0.9	0.9	0.9	0.9	1.2	1.1	1.1	1.7	1.5
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	...	...	...	...	...	...	...	...	...	...	...	...	...	...
East Asia														
China, People's Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hong Kong, China	3.1	3.4	3.2	4.5	5.2	4.6	3.9	3.3	3.5	2.7	2.3	2.1	2.0	4.0
Korea, Rep. of	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	...	...
Mongolia	1.4	1.4	1.5	1.8	1.8	2.1	2.0	2.0	1.5	0.4	0.3	0.4	1.0	...
Taipei,China	0.4	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	1.2	0.4	0.3	...
South Asia														
Bangladesh	0.9	0.7	0.8	0.1	0.3	0.3	0.7	0.4	0.3	0.3	0.3	0.3	0.2	0.3
Bhutan	...	...	...	...	...	...	...	1.6	1.8	1.6	2.0	1.5	1.4	...
India	...	...	...	...	1.2	1.3	1.2	1.1	1.3	1.3	1.3	1.2	1.1	1.2
Maldives	2.0	1.7	2.6	4.2	3.5	3.0	3.7	5.9	5.0	4.0	11.6	13.6	15.7	13.8
Nepal	1.5	1.7	1.6	1.7	1.5	1.6	1.6	1.3	1.5	1.4	1.3	1.3	1.8	1.8
Sri Lanka	0.6	0.5	0.5	0.5	0.6	0.5	0.7	0.7	0.6	0.8	0.9	1.0	0.8	0.7
Southeast Asia														
Brunei Darussalam [b]	2.2	2.2	2.2	2.6	2.4	2.1	1.9	1.0	1.2	0.6	0.7	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indonesia	3.0	3.0	2.8	2.5	3.1	...	0.3	0.2	0.2	0.2	...	...	...	...
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.3	0.3	0.6	0.4
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Singapore	1.3	1.6	1.5	2.4	2.5	2.0	2.3	2.0	2.7	2.2	1.8	1.6	1.8	...
Thailand	0.7	0.9	1.1	0.9	1.0	0.8	1.0	1.0	0.4	0.1	0.4	0.5	0.1	0.3
Viet Nam	...	...	...	...	...	...	...	...	...	...	...	...	...	...
The Pacific														
Cook Islands	6.5	7.3	6.2	4.6	4.4	3.7	3.5	5.6	3.1	3.1	3.5	3.4	3.4	4.5
Fiji Islands	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.5	...
Kiribati	5.3	3.2	3.2	3.2	1.3	1.3	1.6	1.6	1.2	1.2	1.7	1.8	1.7	1.7
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	0.7	0.5	1.1	1.0	0.9	0.9	0.4	0.3	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	0.4	0.7	0.8	...	...	...	...	...
Tonga	–	–	–	–	–	–	...	...	1.2	1.7	2.4	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	1.4	0.7	0.9	0.3	0.3	0.3	0.4	0.3	0.3	0.1	0.2	0.2	0.2	...
Developed Member Countries														
Australia	...	...	...	...	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3
Japan	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	...
New Zealand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.2	...	...	...	...

a Data refer to central government, except for People's Republic of China, Georgia, Japan, Kyrgyz Republic, and Tajikistan, where data refer to consolidated government or general government.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Country sources.

Governance

Table 6.8 Doing business start-up indicators

	Cost of Business Start-Up Procedure (percent of GNI per capita)						Time Required to Start Up Business (days)					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Developing Member Countries												
Central and West Asia												
Afghanistan	...	...	75.2	67.4	84.6	59.5	...	...	9	9	9	9
Armenia	8.4	7.0	6.1	5.1	4.8	3.6	19	19	19	18	18	18
Azerbaijan	16.8	14.4	12.3	9.3	6.9	3.2	106	122	114	52	30	16
Georgia	22.9	13.7	13.7	10.9	9.5	4.0	25	25	21	16	11	3
Kazakhstan	11.1	10.5	8.6	7.0	7.6	5.2	26	26	25	21	21	21
Kyrgyz Republic	10.9	11.6	10.4	9.8	8.8	7.4	21	21	21	21	21	15
Pakistan	40.0	29.3	23.9	21.3	14.0	12.6	24	24	24	24	24	24
Tajikistan	...	...	...	75.1	39.6	27.6	...	...	...	67	49	49
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan	17.2	15.4	14.1	14.1	14.2	10.3	29	29	29	29	15	15
East Asia												
China, People's Rep. of	17.8	15.9	13.6	9.3	8.4	8.4	48	48	48	35	35	40
Hong Kong, China	2.4	3.4	3.4	3.3	3.1	2.0	11	11	11	11	11	11
Korea, Rep. of	18.4	15.7	15.7	18.2	17.1	16.9	17	17	17	17	17	17
Mongolia	4.9	8.1	9.6	5.1	6.6	4.0	20	13	13	13	13	13
Taipei,China	6.3	6.3	5.0	4.6	4.1	4.1	48	48	48	48	48	42
South Asia												
Bangladesh	63.9	62.9	56.1	52.1	46.2	25.7	50	50	50	50	74	73
Bhutan	...	20.7	19.9	16.6	10.4	8.5	...	62	62	62	48	46
India	53.4	49.5	62.0	78.4	74.6	70.1	89	89	71	35	33	30
Maldives	...	12.3	11.5	14.0	13.4	11.5	...	9	9	9	9	9
Nepal	78.0	74.1	69.9	78.5	73.9	60.2	31	31	31	31	31	31
Sri Lanka	12.3	10.7	10.4	9.2	8.5	7.1	58	50	50	50	39	38
Southeast Asia												
Brunei Darussalam [a]	...	...	...	...	9.0	9.2	...	...	...	...	116	116
Cambodia	534.8	480.1	276.1	236.4	190.3	151.7	94	94	86	86	86	85
Indonesia	136.7	130.7	101.7	86.7	80.0	77.9	168	151	151	97	105	76
Lao PDR	20.7	18.5	15.1	17.3	16.5	14.1	198	198	198	163	103	103
Malaysia	25.9	25.1	20.9	19.7	18.1	14.7	30	30	30	30	24	13
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	29.9	25.4	26.1	24.4	31.8	29.8	60	60	58	58	58	52
Singapore	1.0	1.0	0.9	0.8	0.8	0.7	8	8	6	6	5	4
Thailand	6.6	6.7	6.1	5.8	5.6	4.9	33	33	33	33	33	33
Viet Nam	31.9	30.6	27.6	24.3	20.0	18.8	63	56	50	50	50	50
The Pacific												
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	28.9	28.4	25.8	25.3	25.2	...	45	46	46	46	46
Kiribati	...	64.1	71.0	50.0	56.6	64.6	...	21	21	21	21	21
Marshall Islands	...	21.3	22.4	18.1	17.7	17.3	...	17	17	17	17	17
Micronesia, Fed. States of	...	134.1	133.6	135.9	137.0	137.5	...	16	16	16	16	16
Nauru	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	4.9	4.7	4.9	4.7	4.6	...	24	24	28	28	28
Papua New Guinea	31.4	30.7	30.2	28.2	26.4	23.6	56	56	56	56	56	56
Samoa	...	48.7	46.4	45.5	41.3	39.8	...	42	35	35	35	35
Solomon Islands	...	79.8	80.6	68.9	58.9	53.6	...	57	57	57	57	57
Timor-Leste	...	...	125.4	83.3	11.9	6.6	...	...	92	92	82	83
Tonga	...	13.6	11.7	10.3	10.8	9.6	...	32	32	32	32	25
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	64.3	65.6	61.3	54.9	54.8	...	39	39	39	39	39
Developed Member Countries												
Australia	2.0	2.1	1.9	1.8	0.8	0.8	2	2	2	2	2	2
Japan	10.7	10.6	10.7	7.5	7.5	7.5	31	31	31	23	23	23
New Zealand	0.2	0.2	0.2	0.2	0.1	0.4	12	12	12	12	12	1

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Doing Business Online (World Bank 2009).

Table 6.9 Corruption perceptions index [a]

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Rank in 2007 [b]	Rank in 2008 [b]
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	...	2.5	...	1.8	1.5	172	176
Armenia	...	2.5	2.5	...	...	3.0	3.1	2.9	2.9	3.0	2.9	99	109
Azerbaijan	...	1.7	1.5	2.0	2.0	1.8	1.9	2.2	2.4	2.1	1.9	150	158
Georgia	...	2.3	...	...	2.4	1.8	2.0	2.3	2.8	3.4	3.9	79	67
Kazakhstan	...	2.3	3.0	2.7	2.3	2.4	2.2	2.6	2.6	2.1	2.2	150	145
Kyrgyz Republic	...	2.2	...	...	...	2.1	2.2	2.3	2.2	2.1	1.8	150	166
Pakistan	2.7	2.2	...	2.3	2.6	2.5	2.1	2.1	2.2	2.4	2.5	138	134
Tajikistan	...	...	...	...	...	1.8	2.0	2.1	2.2	2.1	2.0	150	151
Turkmenistan	...	...	...	...	...	...	2.0	1.8	2.2	2.0	1.8	162	166
Uzbekistan	...	1.8	2.4	2.7	2.9	2.4	2.3	2.2	2.1	1.7	1.8	175	166
East Asia													
China, People's Rep. of	3.5	3.4	3.1	3.5	3.5	3.4	3.4	3.2	3.3	3.5	3.6	72	72
Hong Kong, China	7.8	7.7	7.7	7.9	8.2	8.0	8.0	8.3	8.3	8.3	8.1	14	12
Korea, Rep. of	4.2	3.8	4.0	4.2	4.5	4.3	4.5	5.0	5.1	5.1	5.6	43	40
Mongolia	...	4.3	...	...	...	...	3.0	3.0	2.8	3.0	3.0	99	102
Taipei,China	5.3	5.6	5.5	5.9	5.6	5.7	5.6	5.9	5.9	5.7	5.7	34	39
South Asia													
Bangladesh	...	...	...	0.4	1.2	1.3	1.5	1.7	2.0	2.0	2.1	162	147
Bhutan	...	...	...	...	...	...	...	...	6.0	5.0	5.2	46	45
India	2.9	2.9	2.8	2.7	2.7	2.8	2.8	2.9	3.3	3.5	3.4	72	85
Maldives	...	...	...	...	...	...	...	...	...	3.3	2.8	84	115
Nepal	...	...	...	...	...	...	2.8	2.5	2.5	2.5	2.7	131	121
Sri Lanka	...	...	...	...	3.7	3.4	3.5	3.2	3.1	3.2	3.2	94	92
Southeast Asia													
Brunei Darussalam [c]	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	2.3	2.1	2.0	1.8	162	166
Indonesia	2.0	1.7	1.7	1.9	1.9	1.9	2.0	2.2	2.4	2.3	2.6	143	126
Lao PDR	...	...	...	...	...	...	...	3.3	2.6	1.9	2.0	168	151
Malaysia	5.3	5.1	4.8	5.0	4.9	5.2	5.0	5.1	5.0	5.1	5.1	43	47
Myanmar	...	...	...	...	...	1.6	1.7	1.8	1.9	1.4	1.3	179	178
Philippines	3.3	3.6	2.8	2.9	2.6	2.5	2.6	2.5	2.5	2.5	2.3	131	141
Singapore	9.1	9.1	9.1	9.2	9.3	9.4	9.3	9.4	9.4	9.3	9.2	4	4
Thailand	3.0	3.2	3.2	3.2	3.2	3.3	3.6	3.8	3.6	3.3	3.5	84	80
Viet Nam	2.5	2.6	2.5	2.6	2.4	2.4	2.6	2.6	2.6	2.6	2.7	123	121
The Pacific													
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	4.0	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	3.3	3.1	84	96
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	2.1	2.6	2.3	2.4	2.0	2.0	162	151
Samoa	...	...	...	...	...	...	...	...	...	4.5	4.4	57	62
Solomon Islands	...	...	...	...	...	...	...	...	...	2.8	2.9	111	109
Timor-Leste	...	...	...	...	...	...	...	...	2.6	2.6	2.2	123	145
Tonga	...	...	...	...	...	...	...	...	...	1.7	2.4	175	138
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	3.1	2.9	98	109
Developed Member Countries													
Australia	8.7	8.7	8.3	8.5	8.6	8.8	8.8	8.8	8.7	8.6	8.7	11	9
Japan	5.8	6.0	6.4	7.1	7.1	7.0	6.9	7.3	7.6	7.5	8.0	17	18
New Zealand	9.4	9.4	9.4	9.4	9.5	9.5	9.6	9.6	9.6	9.4	9.3	1	1

a Score relates to perceptions of the degree of corruption as seen by business people and country analysts, and ranges from 10 (highly clean) to 0 (highly corrupt).

b Based on 180 countries.

c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: Transparency International (2009).

Energy and Environment

The People's Republic of China (PRC) now produces almost half the **total energy** in the region and production has been growing at an annual rate of over 4.6% in the last decade. Since 1995, most Asian economies have recorded increases in **energy productivity** as measured by GDP per unit of energy used. **Greenhouse gas emissions** continue to grow with emissions from the PRC growing much faster since 2000. Asia continues to lose its forests and sustainable use of its rich **forest** resources is still a distant prospect.

Introduction

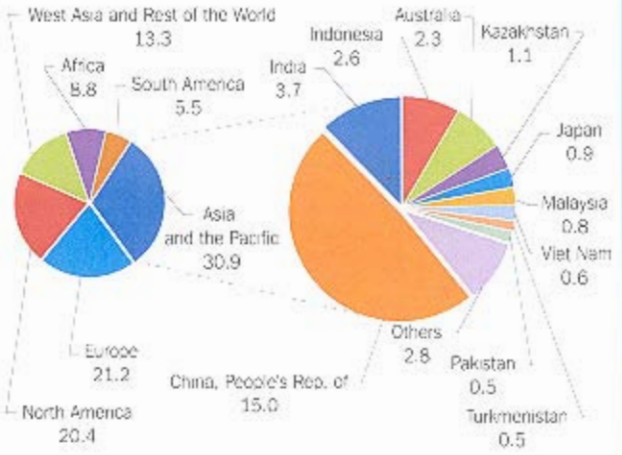
Energy here covers all forms of solid, liquid, and gas fuels; and electricity generated by nuclear, wind, hydro, and solar power. (Electricity generated by solid, liquid, and gas fuels is excluded to avoid double counting.) The different forms of power are converted to a common unit—kilotons (kt) of oil equivalent—so that they can be represented by a single figure for each economy.

The **environment** indicators shown here refer to land use, greenhouse gas emissions and water pollution, and forest resources. Asia is a major source of tropical hardwoods. In many of the region's economies, forest resources are being depleted through unsustainable logging, or forests are being cleared for agriculture and other land uses.

Key Trends

Energy: who produces it and how fast is it growing? Figure 7.1 shows energy production in the world and in the Asia and Pacific region, which comprises the regional members of ADB. "Energy production" refers to primary energy only. When coal is used to produce electricity, only the coal is counted as energy production; the electricity is secondary energy and including the electricity as well as the coal would be double-counting. In 2006, the Asia and Pacific region produced just over 30% of the world's energy compared with about 20% each for Europe and North America. The PRC was producing nearly half of the total energy in the Asia and Pacific region. Australia, India, and Indonesia are the other very large energy producers in the region. Coal is the main type of energy produced in Asia.

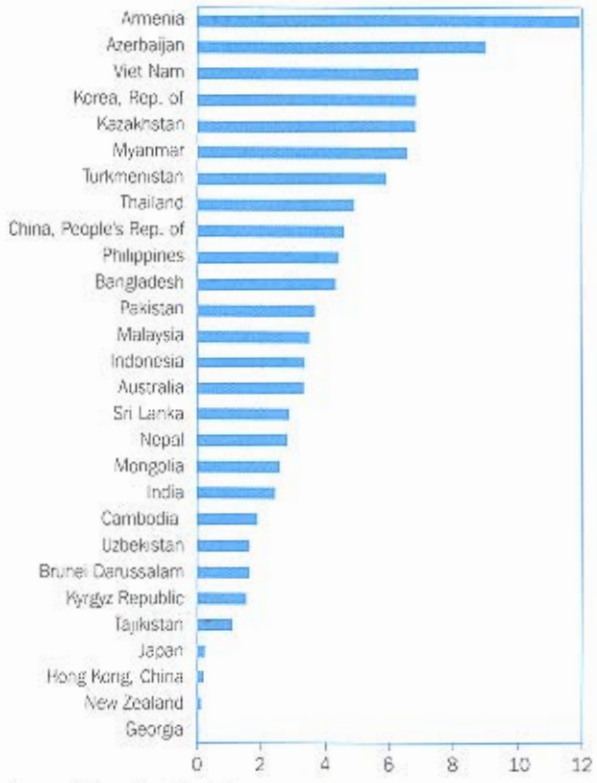
Figure 7.1 **Percentage Breakdown of Energy Production by Region, 2006**



Sources: Derived from Table 7.2 and World Development Indicators Online (World Bank 2009).

Average annual rates of growth in energy production over the period 1995–2006 are shown in Figure 7.2. Six countries have recorded average annual growth rates in excess of 6%: Armenia, Azerbaijan, Kazakhstan, Republic of Korea, Myanmar, and Viet Nam. Note, however, that energy produced in Armenia, Azerbaijan, and Kazakhstan (oil and gas) is mostly consumed in the Russian Federation and other European countries; it does not go to meet the energy needs of Asia. Average annual growth rates for the two largest energy producers—PRC and India—were 4.6% and 2.4%, respectively.

Figure 7.2 **Average Annual Growth in Energy Production, 1995–2006 (percent)**



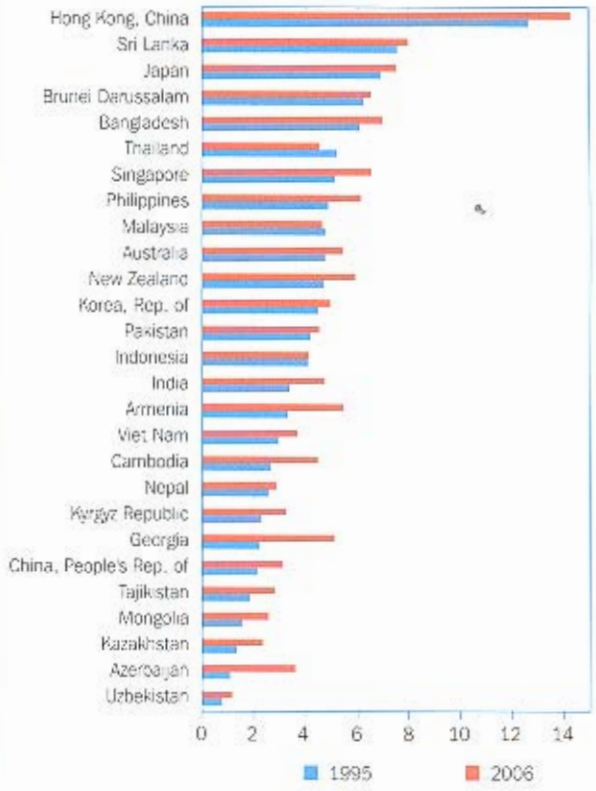
Source: Derived from Table 7.2.

Most economies have increased their energy productivity. GDP per unit of energy, or "energy productivity", (Figure 7.3) is calculated by first converting each country's GDP to a common currency using purchasing power parities. This is then divided by all types of energy, each type being converted to standard units or "oil equivalents" by the relevant conversion factors. In Figure 7.3, the longer the bar, the greater the country's energy efficiency.

GDP per energy unit differs between economies both because economies use energy more or less efficiently and because of differences in their industrial structures. Agriculture and services generate higher GDP per energy unit than manufacturing. If two economies have identical industrial structures, differences in GDP per energy unit will reflect differences in the efficiency of energy use. Similarly, if a country produces more GDP per energy unit over time, this implies better energy efficiency only if the industrial structure has not changed.

Figure 7.3 shows that most economies increased their energy productivity in 2006 compared to those in 1995. Increases were large for some of the former Soviet Union countries shown in Figure 7.3. Traditionally, these countries had access to cheap hydrocarbon fuels from within the former Soviet Union but they are now facing much higher prices and this is forcing them to adopt more fuel-efficient technologies.

Figure 7.3 **GDP per Unit of Energy, 1995 and 2006 (constant 2005 PPP $ per kg of oil equivalent)**

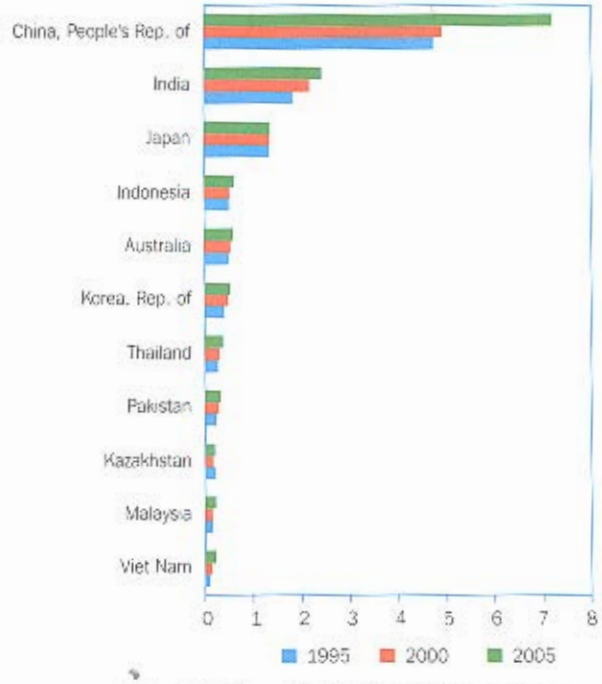


Source: Table 7.1.

Greenhouse gas emissions continue to grow, with emissions from the PRC growing much faster since 2000. Emissions of greenhouse gases are causing the surface temperature of our planet to increase faster than it has ever done before. The three main greenhouse gases, in order of importance, are carbon dioxide (CO_2), methane, and nitrous oxide. In Figure 7.4, emissions of methane and nitrous oxide have been converted to CO_2 equivalents so all three gases can be expressed in a standard unit—metric tons of CO_2 equivalent. In addition, the figure excludes CO_2 emissions from land use, land-use change, and forestry.

Figure 7.4 shows that in 2005, PRC's emissions were nearly three times as large as the next biggest emitter—India—and five times larger than emissions by third-place Japan. Figure 7.4 also shows that while many countries have stabilized or at least slowed the rate of increase of their emissions, PRC emissions grew by far more from 2000 to 2005 than from 1995 to 2000. Part of the problem for PRC is that by becoming the "world's factory", many polluting activities are being transferred from North America and Europe to the PRC. Some part of the increases in emissions from the PRC can therefore be seen as the counterpart to reduced emissions in other parts of the world.

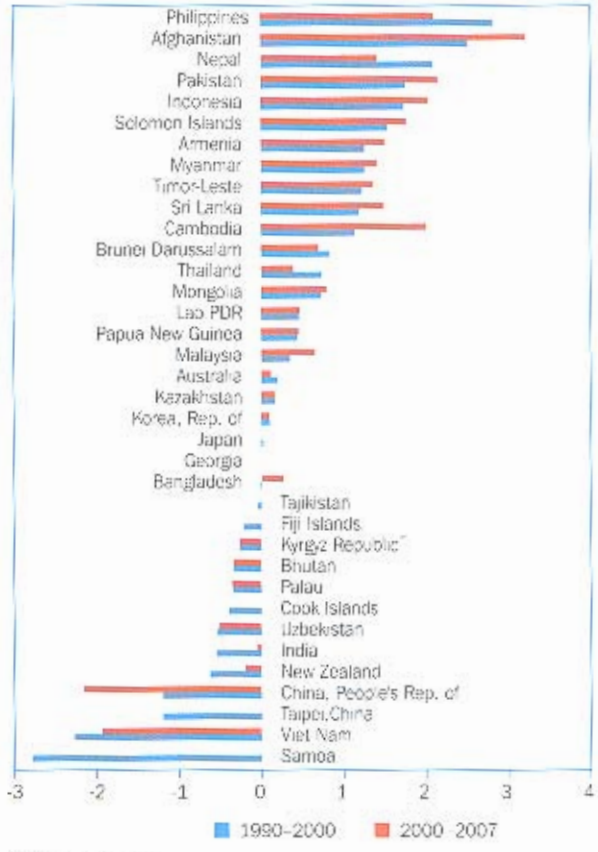
Figure 7.4 **Emissions of Carbon Dioxide, Methane and Nitrous Oxide, 1995, 2000, and 2005**
(billion metric tons of CO_2 equivalent)



Sources: Derived from Table 7.5 and Millennium Indicators Database Online (UNSD 2009).

Sustainable use of forest resources is still a distant prospect. Figure 7.5 shows rates of deforestation for two periods, 1990–2000, and 2000–2007. Bars to the right of the axis show deforestation and bars to the left show replanting or regeneration of forests. The PRC and Viet Nam have made important gains in both periods but in many economies, deforestation is proceeding at between 1% and 3% per year. Deforestation rates have slowed in Australia, Brunei Darussalam, Japan, Kazakhstan, Republic of Korea, Nepal, Philippines, and Thailand, but have increased in other economies, which include among others, Afghanistan and Pakistan and three large producers of tropical hardwoods—Cambodia, Indonesia, and Myanmar.

Figure 7.5 **Average Deforestation Rate, 1990–2000 and 2000–2007**
(percent)



Source: Table 7.5.

Data Issues and Comparability

Most of the energy data are compiled by the International Energy Agency using standard procedures and conversion factors for all countries.

Data on methane and nitrous oxide emissions are computed by the International Energy Agency, while data on carbon dioxide emissions are estimated by the Carbon Dioxide Information Analysis Center.

The Food and Agriculture Organization monitors land use and forestry data using country reports and satellite images.

Table 7.1 **GDP per unit of energy use**
(constant 2005 PPP US Dollars per kilogram of oil equivalent)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	1.3	3.3	3.3	3.2	3.4	3.6	3.4	3.8	4.6	5.0	5.2	4.9	5.5
Azerbaijan	1.3	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1	2.2	2.3	2.7	3.6
Georgia	2.4	2.2	2.4	3.0	3.4	3.8	3.8	4.5	4.8	5.0	5.1	4.9	5.2
Kazakhstan	1.6	1.4	1.6	1.8	1.8	2.0	1.9	2.2	2.3	2.2	2.3	2.3	2.4
Kyrgyz Republic	1.5	2.3	2.1	2.5	2.4	2.9	3.0	3.5	3.1	3.1	3.2	3.2	3.3
Pakistan	4.2	4.2	4.2	4.1	4.2	4.1	4.2	4.2	4.2	4.3	4.3	4.5	4.6
Tajikistan	2.9	1.9	1.5	1.7	1.7	1.7	2.2	2.2	2.5	2.6	2.8	2.8	2.8
Turkmenistan	...	...	...	...	...	...	...	...	...	...	...	1.4	...
Uzbekistan	0.9	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.9	1.0	1.1	1.2
East Asia													
China, People's Rep. of	1.4	2.1	2.3	2.5	2.6	2.8	3.0	3.3	3.3	3.2	3.0	3.1	3.2
Hong Kong, China	12.7	12.6	13.1	13.3	10.6	10.1	12.5	11.9	12.1	12.5	12.9	13.4	14.3
Korea, Rep. of	4.9	4.5	4.4	4.2	4.3	4.3	4.3	4.4	4.5	4.6	4.6	4.8	5.0
Mongolia	1.4	1.6	1.9	2.0	2.1	2.1	2.0	2.1	2.1	2.3	2.5	2.5	2.6
Taipei,China	...	...	...	...	...	...	...	...	...	...	...	...	...
South Asia													
Bangladesh	6.1	6.1	6.3	6.4	6.4	6.7	6.7	6.5	6.6	6.6	6.8	6.8	7.0
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...
India	3.2	3.4	3.5	3.5	3.7	3.7	3.8	3.9	4.0	4.2	4.3	4.5	4.7
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	2.3	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.8	2.8	2.8	2.9
Sri Lanka	6.3	7.5	6.9	7.1	7.3	7.2	7.1	7.1	7.4	7.2	6.9	7.7	8.0
Southeast Asia													
Brunei Darussalam [a]	7.1	6.2	6.4	6.0	6.1	6.2	6.3	6.9	7.3	6.5	6.5	6.7	6.5
Cambodia	...	2.7	2.7	2.8	2.8	3.0	3.2	3.3	3.4	3.6	3.8	4.2	4.5
Indonesia	3.6	4.1	4.3	4.2	4.0	3.6	3.7	3.7	3.8	3.9	3.9	4.0	4.2
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	5.2	4.8	5.1	4.7	4.6	5.0	4.7	4.4	4.6	4.6	5.1	4.6	4.7
Myanmar	1.3	1.6	1.7	1.7	1.8	2.0	2.1	2.4	2.6	2.8	2.8	2.9	...
Philippines	5.7	4.9	4.9	4.6	4.7	4.7	4.7	4.9	5.0	5.3	5.4	5.7	6.1
Singapore	5.4	5.1	5.3	5.0	5.6	6.1	6.8	6.4	6.3	7.1	6.7	6.0	6.5
Thailand	5.1	5.2	5.0	4.8	4.6	4.6	4.6	4.5	4.5	4.4	4.4	4.4	4.5
Viet Nam	2.5	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.3	3.5	3.3	3.5	3.7
The Pacific													
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries													
Australia	4.6	4.7	4.6	4.7	4.8	4.9	5.0	5.2	5.2	5.4	5.6	5.4	5.4
Japan	7.2	6.9	6.9	7.0	6.9	6.8	6.9	7.0	7.0	7.2	7.2	7.3	7.5
New Zealand	4.6	4.7	4.6	4.6	4.7	4.7	4.7	4.8	5.2	5.5	5.7	5.9	5.9

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: World Development Indicators Online (World Bank 2009).

Energy

Table 7.2 **Energy production**
(kilotons of oil equivalent)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	137	245	742	539	547	646	632	602	738	692	746	861	846
Azerbaijan	21338	14725	14387	14096	16335	19035	18962	19581	19752	19826	20053	27300	38127
Georgia	1844	1195	1610	1440	1377	1326	1325	1265	1328	1376	1287	1272	1196
Kazakhstan	90455	63470	63327	65113	64378	65580	79969	85636	92621	103715	117259	121514	130974
Kyrgyz Republic	2502	1259	1319	1261	1114	1301	1443	1353	1204	1403	1475	1447	1488
Pakistan	34360	41272	42208	42417	43547	45320	47130	49204	50296	55492	58993	61262	61340
Tajikistan	2026	1330	1347	1247	1270	1384	1256	1276	1343	1449	1462	1520	1500
Turkmenistan	74865	32836	32856	19800	18115	26331	45968	50390	52861	58551	58179	61137	61611
Uzbekistan	38643	48655	49087	51302	54398	55027	54945	55506	56237	56180	56875	56528	58167
East Asia													
China, People's Rep. of	886292	1066575	1097654	1098282	1089374	1069756	1074002	1105676	1185181	1333214	1511871	1643873	1749290
Hong Kong, China	43	47	48	48	48	48	48	48	48	48	48	48	48
Korea, Rep. of	22623	21148	22489	23729	27076	30639	32597	33243	34842	37941	38267	42935	43727
Mongolia	2749	2256	1873	1811	1857	1838	1916	1903	2052	2104	2527	2752	2979
Taipei,China	...	...	...	...	...	...	...	...	...	...	...	...	...
South Asia													
Bangladesh	10758	12777	12959	13097	13698	14436	15156	16178	16739	17549	18390	19311	20331
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...
India	291081	334701	341176	351590	350324	357441	364334	372312	381382	394337	407406	420292	435640
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	5501	6142	6277	6407	6549	6719	7138	7338	7618	7795	7969	8158	8346
Sri Lanka	4191	4022	4204	4346	4319	4548	4530	4484	4255	4886	5213	5073	5498
Southeast Asia													
Brunei Darussalam [a]	15642	18241	17670	17548	16963	18583	19684	19852	20265	21197	20749	21060	21791
Cambodia	...	2901	2959	3018	3078	3140	3203	3264	3325	3384	3441	3501	3562
Indonesia	169957	213965	224854	230201	223561	242738	235552	241681	246273	256484	263234	276663	307702
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	50311	67010	73133	77170	78153	76495	80392	81286	84770	88409	88458	97031	97937
Myanmar	10654	10999	10910	11172	12160	13670	15405	15843	16459	18365	20967	21733	22135
Philippines	13701	15349	16128	16742	17816	19678	20919	20108	21941	22503	23391	24195	24696
Singapore	–	–	–	–	–	–	–	–	–	–	–	–	–
Thailand	26547	33212	36506	39965	39559	41001	43850	43067	45595	48569	50442	54322	56228
Viet Nam	24711	34529	37723	40548	43944	45594	48106	50062	53165	54383	65234	69537	71940
The Pacific													
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries													
Australia	157538	186908	189796	201061	216534	213607	233615	249186	254116	253544	258477	268192	267794
Japan	75234	98585	101738	106213	109135	104544	105809	104752	96870	83998	94986	99890	101066
New Zealand	12008	12994	13982	14760	13846	14513	15009	14880	14533	13138	12916	12572	13053

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: World Development Indicators Online (World Bank 2009).

Table 7.3 **Energy imports, net**
(percent of energy use)

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Developing Member Countries													
Central and West Asia													
Afghanistan	...	...	...	...	...	...	...	...	...	...	...	...	...
Armenia	98.3	85.3	58.5	71.2	71.3	64.9	69.4	70.7	61.6	65.3	64.8	66.2	67.3
Azerbaijan	18.2	-11.8	-20.3	-23.3	-37.7	-69.4	-64.1	-68.6	-68.5	-60.8	-54.4	-96.8	-170.9
Georgia	85.0	67.9	57.9	57.1	56.0	53.7	54.0	51.0	48.3	49.6	54.3	60.2	64.2
Kazakhstan	-22.8	-21.5	-39.4	-64.7	-63.2	-82.4	-89.5	-109.0	-109.3	-112.0	-127.7	-114.3	-113.2
Kyrgyz Republic	67.0	48.6	53.3	52.2	60.4	46.9	40.9	39.3	52.4	48.5	47.1	48.1	47.1
Pakistan	20.9	24.0	25.7	27.0	26.6	27.7	26.3	24.6	24.0	19.8	20.6	19.6	22.6
Tajikistan	63.6	59.3	61.1	59.1	60.2	58.0	55.9	58.7	54.7	53.7	55.3	55.6	58.7
Turkmenistan	-281.4	-136.3	-169.5	-61.8	-49.9	-84.1	-216.9	-233.2	-243.9	-241.0	-271.6	-270.1	-256.8
Uzbekistan	16.7	-14.3	-11.3	-14.4	-9.1	-7.5	-9.1	-9.5	-6.4	-10.5	-15.1	-20.3	-20.0
East Asia													
China, People's Rep. of	-2.7	-1.8	-1.0	-0.7	0.1	2.3	2.9	-0.1	0.9	2.1	4.6	4.4	6.9
Hong Kong, China	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
Korea, Rep. of	75.8	85.6	86.0	86.4	83.1	82.6	82.8	82.7	82.8	81.7	82.0	79.8	79.8
Mongolia	19.6	17.2	18.9	19.9	18.3	19.1	19.6	20.2	19.2	14.4	–	-5.2	-6.7
Taipei,China	...	...	...	...	...	...	...	...	...	...	...	...	...
South Asia													
Bangladesh	16.1	20.1	19.5	22.1	22.0	18.9	19.0	20.8	20.3	20.2	19.3	20.2	18.8
Bhutan	...	...	...	...	...	...	...	...	...	...	...	...	...
India	9.0	13.6	14.8	15.5	17.6	20.7	20.8	20.2	20.4	19.7	21.6	21.9	23.0
Maldives	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	5.3	9.0	9.3	10.4	10.7	13.2	12.6	12.8	10.5	10.9	10.4	11.3	11.3
Sri Lanka	24.0	32.4	37.4	37.8	39.0	39.8	43.9	43.7	46.5	43.1	45.0	44.2	41.5
Southeast Asia													
Brunei Darussalam [a]	-768.5	-665.1	-635.6	-604.5	-587.6	-643.9	-680.2	-744.0	-777.7	-696.6	-675.1	-703.2	-676.6
Cambodia	...	14.3	15.3	17.4	19.6	19.5	19.9	22.3	23.2	24.4	26.2	27.1	28.6
Indonesia	-65.3	-62.0	-64.2	-60.6	-68.4	-64.0	-55.5	-52.5	-52.4	-56.1	-53.0	-57.2	-71.8
Lao PDR	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaysia	-115.7	-69.6	-79.7	-63.3	-73.1	-73.5	-56.8	-50.4	-54.1	-52.1	-59.0	-47.2	-43.3
Myanmar	0.3	6.9	7.9	7.7	2.1	-10.2	-22.6	-29.6	-29.1	-34.0	-50.9	-52.1	-55.0
Philippines	47.6	54.8	55.2	58.2	54.1	51.5	50.7	51.7	48.1	46.5	46.9	44.6	42.5
Singapore	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thailand	39.5	48.9	48.8	45.6	42.5	43.6	41.6	45.3	45.6	46.2	48.4	46.0	45.6
Viet Nam	-1.6	-14.7	-17.0	-19.0	-22.6	-27.1	-29.4	-27.6	-25.5	-23.3	-30.0	-35.6	-37.6
The Pacific													
Cook Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Fiji Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Timor-Leste	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	...	...	...	...	...	...	...	...	...
Developed Member Countries													
Australia	-79.7	-97.8	-87.8	-94.3	-103.6	-96.7	-111.3	-129.8	-127.6	-124.7	-128.6	-122.1	-118.7
Japan	83.1	80.3	80.1	79.5	78.5	79.7	79.9	79.8	81.3	83.7	82.1	81.1	80.8
New Zealand	12.7	17.9	16.1	13.9	17.8	18.0	17.0	18.3	18.2	24.0	25.6	27.3	25.6

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Source: World Development Indicators Online (World Bank 2009).

Environment

Table 7.4 **Agriculture land use**
(percent of land area)

	Agricultural Land			Arable Land			Permanent Cropland		
	1990	1995	2007	1990	1995	2007	1990	1995	2007
Developing Member Countries									
Central and West Asia									
Afghanistan	58.3	58.5	59.3	12.1	12.3	13.1	0.2	0.2	0.2
Armenia	41.5 (1992)	44.2	57.3	15.0 (1992)	15.5	14.4	2.1 (1992)	2.1	1.9
Azerbaijan	53.4 (1992)	53.9	57.6	20.5 (1992)	20.7	22.4	3.7 (1992)	3.7	2.7
Georgia	46.5 (1992)	43.9	36.2	11.4 (1992)	11.1	6.7	4.8 (1992)	4.4	1.6
Kazakhstan	82.0 (1992)	79.3	77.0	13.0 (1992)	11.8	8.4	0.1 (1992)	0.1	0.0
Kyrgyz Republic	52.6 (1992)	54.4	55.9	6.9 (1992)	6.6	6.7	0.4 (1992)	0.4	0.4
Pakistan	33.6	34.4	35.4	26.6	27.2	27.9	0.6	0.7	1.0
Tajikistan	32.1 (1992)	32.7	32.7	6.1 (1992)	6.0	5.1	0.9 (1992)	0.8	0.7
Turkmenistan	68.6 (1992)	68.9	69.4	2.9 (1992)	3.5	3.9	0.1 (1992)	0.1	0.1
Uzbekistan	65.2 (1992)	65.0	62.6	10.5 (1992)	10.5	10.1	0.9 (1992)	0.9	0.8
East Asia									
China, People's Rep. of	57.0	57.3	59.3	13.3	13.3	15.1	0.8	1.1	1.3
Hong Kong, China	...	...	...	...	...	...	...	...	...
Korea, Rep. of	22.1	20.7	19.0	19.8	18.1	16.5	1.6	2.0	1.9
Mongolia	80.9	76.3	74.7	0.9	0.9	0.5	0.0	0.0	0.0
Taipei,China	...	...	...	...	...	...	...	...	...
South Asia									
Bangladesh	77.1	67.2	69.5	70.2	59.9	61.2	2.3	2.7	3.7
Bhutan	9.7	13.9	14.6	2.8	3.4	3.3	0.5	0.6	0.7
India	60.9	60.8	60.5	54.8	54.4	53.4	2.2	2.7	3.6
Maldives	30.0	30.0	43.3	13.3	13.3	13.3	13.3	13.3	26.7
Nepal	29.0	29.1	29.4	16.0	16.3	16.4	0.5	0.5	0.8
Sri Lanka	36.2	36.0	36.5	13.9	13.7	15.0	15.5	15.5	14.7
Southeast Asia									
Brunei Darussalam [a]	2.1	1.9	2.2	0.4	0.4	0.6	0.8	0.8	0.9
Cambodia	25.2	25.9	30.9	20.9	21.0	21.5	0.6	0.7	0.9
Indonesia	24.9	23.3	26.8	11.2	9.6	12.1	6.5	7.2	8.6
Lao PDR	7.2	7.4	9.2	3.5	3.6	5.1	0.3	0.3	0.4
Malaysia	22.0	24.0	24.0	5.2	5.5	5.5	16.0	17.6	17.6
Myanmar	16.0	16.0	18.3	14.6	14.6	16.2	0.8	0.9	1.7
Philippines	37.4	36.9	38.6	18.4	17.7	17.1	14.8	14.8	16.4
Singapore	3.0	1.8	1.1	1.5	1.5	0.9	1.5	0.3	0.3
Thailand	41.9	41.5	38.7	34.2	33.0	29.8	6.1	7.0	7.3
Viet Nam	20.7	21.7	32.5	16.4	16.6	20.5	3.2	4.1	9.9
The Pacific									
Cook Islands	25.0	20.8	16.7	8.3	8.3	12.5	16.7	12.5	4.2
Fiji Islands	22.4	24.1	23.4	8.8	9.9	9.3	4.4	4.7	4.5
Kiribati	48.1	45.7	45.7	2.5	2.5	2.5	45.7	43.2	43.2
Marshall Islands	...	72.2	77.8	...	5.6	11.1	...	44.4	44.4
Micronesia, Fed. States of	...	35.0	33.6	...	3.6	3.6	...	27.1	25.7
Nauru	...	...	...	...	...	...	...	...	...
Palau	...	13.0	13.0	...	2.2	2.2	...	4.3	4.3
Papua New Guinea	1.9	2.1	2.3	0.4	0.4	0.6	1.2	1.3	1.3
Samoa	34.6	32.5	30.4	12.7	10.6	8.8	21.2	21.2	20.5
Solomon Islands	2.4	2.6	3.0	0.4	0.4	0.6	1.9	2.0	2.1
Timor-Leste	21.4	22.9	26.1	7.4	8.7	11.4	3.9	4.0	4.6
Tonga	44.4	45.8	43.1	22.2	22.2	20.8	16.7	18.1	16.7
Tuvalu	66.7	66.7	66.7	...	...	...	66.7	66.7	66.7
Vanuatu	11.5	11.9	12.1	1.6	1.6	1.6	7.0	7.0	7.0
Developed Member Countries									
Australia	60.5	60.3	55.4	6.2	5.2	5.8	0.0	0.0	0.0
Japan	15.6	14.9	12.8	13.1	12.7	11.9	1.3	1.1	0.9
New Zealand	60.4	55.9	45.9	9.9	5.9	3.2	0.2	0.2	0.2

a Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: FAOSTAT Database Access website (www.faostat.fao.org); for Taipei,China: Statistical Yearbook 2007 (Directorate-General of Budget, Accounting and Statistics).

Table 7.5 **Deforestation and pollution**

	Deforestation Rate [a] (average percent change)		Nitrous Oxide Emissions (thousand metric tons CO_2 equivalent)			Methane Emissions (thousand metric tons CO_2 equivalent)		
	1990–2000	2000–2007	1995	2000	2005	1995	2000	2005
Developing Member Countries								
Central and West Asia								
Afghanistan	2.5	3.2	..	...	...	...	...	...
Armenia	1.3 (1992–2000)	1.5	540	500	450	1740	2080	2300
Azerbaijan	– (1992–2000)	–	3100	3530	4040	9900	10620	11550
Georgia	-0.0 (1992–2000)	-0.0	1820	2250	3390	3050	4090	4330
Kazakhstan	0.2 (1992–2000)	0.2	18340	10040	5530	42130	25620	28270
Kyrgyz Republic	-0.3 (1992–2000)	-0.3	3080	3170	3260	4130	3240	3520
Pakistan	1.8	2.2	67930	73630	80040	92460	104740	110300
Tajikistan	-0.0 (1992–2000)	–	2300	1910	1580	3750	3130	3270
Turkmenistan	– (1992–2000)	–	4070	3630	3200	19250	21940	23060
Uzbekistan	-0.5 (1992–2000)	-0.5	10440	12380	14660	45240	48870	51480
East Asia								
China, People's Rep. of	-1.2	-2.1	544230	556620	566680	958940	973730	995780
Hong Kong, China	...	...	230	230	200	1300	1030	1090
Korea, Rep. of	0.1	0.1	13100	16170	22020	27290	29880	31280
Mongolia	0.7	0.8	12520	16880	22850	8220	9260	4840
Taipei,China	-1.2	–	...	...	...	...	...	...
South Asia								
Bangladesh	-0.0	0.3	29340	33540	37100	84590	91930	92530
Bhutan	-0.3	-0.3	...	...	...	...	...	...
India	-0.6	-0.0	256180	278700	300680	655470	722370	712330
Maldives	–	–	...	...	...	...	...	...
Nepal	2.1	1.4	6300	6510	7100	34140	36070	36040
Sri Lanka	1.2	1.5	2670	2830	3130	10650	10200	10280
Southeast Asia								
Brunei Darussalam [b]	0.8	0.7	70	360	370	2010	2070	2060
Cambodia	1.1	2.0	4350	3490	3820	12800	13350	14890
Indonesia	1.7	2.0	66640	69130	69910	214710	223140	224330
Lao PDR	0.5	0.5	...	...	...	...	...	...
Malaysia	0.4	0.7	12410	9350	9920	24360	25320	25510
Myanmar	1.3	1.4	15850	22050	25900	49540	59270	60840
Philippines	2.8	2.1	18520	16890	18940	44490	44630	44860
Singapore	–	–	1140	5880	7970	1120	1260	1260
Thailand	0.7	0.4	23650	26030	27990	73090	77070	78840
Viet Nam	-2.3	-1.9	20500	27110	37470	59130	71560	75080
The Pacific								
Cook Islands	-0.4	–	...	...	...	...	...	...
Fiji Islands	-0.2	–	...	...	...	...	...	...
Kiribati	–	–	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...
Micronesia, Fed. States of	– (1995–2000)	–	...	...	...	...	...	...
Nauru	–	–	...	...	...	...	...	...
Palau	-0.4 (1995–2000)	-0.4	...	...	...	...	...	...
Papua New Guinea	0.5	0.5	...	...	...	...	...	...
Samoa	-2.8	–	...	...	...	...	...	...
Solomon Islands	1.5	1.8	...	...	...	...	...	...
Timor-Leste	1.2	1.4	...	...	...	...	...	...
Tonga	–	–	...	...	...	...	...	...
Tuvalu	–	–	...	...	...	...	...	...
Vanuatu	–	–	...	...	...	...	...	...
Developed Member Countries								
Australia	0.2	0.1	95070	105100	114500	101470	116030	116840
Japan	0.0	0.0	31710	26240	23590	60650	59490	53480
New Zealand	-0.6	-0.2	31400	29630	27960	26280	26710	27490

continued.

Environment

Table 7.5 **Deforestation and pollution**
(continued)

	Consumption of Ozone-Depleting CFCs (ODP metric tons)			Organic Water Pollutant (BOD) Emissions (kilograms per day per worker)		
	1990	2000	2007	1990	2000	Latest year
Developing Member Countries						
Central and West Asia						
Afghanistan	380 (1995)	380 (1997)	55	...	0.178 (2001)	0.206 (2002)
Armenia	– (1991)	25	25	...	...	...
Azerbaijan	481 (1989)	88	–	0.153 (1995)	0.153	0.178 (2005)
Georgia	766 (1989)	22	3	...	...	...
Kazakhstan	1214	524	–	0.398 (1998)	0.420	0.414 (2003)
Kyrgyz Republic	118 (1991)	54	4	0.136 (1992)	0.189	0.193 (2005)
Pakistan	751	1945	170	...	...	...
Tajikistan	91 (1991)	28	–	0.167	0.223	0.227 (2003)
Turkmenistan	141	21	6	...	...	...
Uzbekistan	585 (1993)	42		...	...	...
East Asia						
China, People's Rep. of	41829	39124	5832	...	...	...
Hong Kong, China	...	...	...	...	...	...
Korea, Rep. of	19605 (1992)	7395	1210	0.124	0.120	0.116 (2005)
Mongolia	7 (1989)	11	1	...	...	...
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	195	805	155	0.146 (1995)	0.144 (1998)	...
Bhutan	– (1991)	–	–	...	...	...
India	–	5614	998	...	...	...
Maldives	4	5	–	...	...	...
Nepal	20 (1991)	94	–	...	0.142 (1996)	0.157 (2002)
Sri Lanka	210	220	62	...	...	...
Southeast Asia						
Brunei Darussalam [b]	59 (1992)	47	10	...	...	...
Cambodia	94 (1995)	94	12	0.211 (1993)	0.160 (1995)	...
Indonesia	5249 (1992)	5411	203	0.183 (1998)	0.179	0.183 (2003)
Lao PDR	4 (1992)	45	6	...	0.438 (1999)	...
Malaysia	3384	1980	234	...	0.118	0.123 (2004)
Myanmar	16 (1992)	26	–	...	...	...
Philippines	2981	2905	143	0.260 (1996)	0.249 (2001)	0.241 (2003)
Singapore	3167	22	–	...	...	...
Thailand	6660	3568	322	0.157 (1998)	0.155	...
Viet Nam	303 (1991)	220	38	0.158 (1998)	0.169	0.152 (2005)
The Pacific						
Cook Islands	– (1991)	–	–	...	...	...
Fiji Islands	38	–	–	...	...	...
Kiribati	– (1991)	–	–	...	...	...
Marshall Islands	1	1	–	...	...	...
Micronesia, Fed. States of	–	1	1	...	...	...
Nauru	1 (1995)	0	–	...	...	...
Palau	2 (1995)	1	0	...	...	...
Papua New Guinea	28 (1991)	48	5	...	...	...
Samoa	4 (1991)	1	–	...	...	...
Solomon Islands	2	0	–	...	...	...
Timor-Leste	...	...	...	...	...	...
Tonga	2 (1995)	1	–	0.131 (1991)	0.295	0.339 (2004)
Tuvalu	0 (1993)	–	–	...	...	...
Vanuatu	– (1989)	–	0	...	...	...
Developed Member Countries						
Australia	7416	7	-55	...	...	...
Japan	97723	-24	-5	0.141 (1994)	0.147	0.150 (2004)
New Zealand	558	-3	–	0.243	0.222	0.217 (2006)

BOD = biochemical oxygen demand, CFC = chlorofluorocarbon, ODP = ozone-depleting potential.

a A negative value indicates that deforestation rate is decreasing (i.e., reforestation).
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member country.

Sources: World Development Indicators Online (World Bank 2009); United Nations MDG Indicators website (www.mdgs.un.org); FAOSTAT Database Access website (www.faostat.fao.org); for Taipei,China: *Statistical Yearbook 2007* (Directorate-General of Budget, Accounting and Statistics).

PART IV

Definitions



This part contains the definitions of the indicators for the Millennium Development Goals (MDGs) and regional tables. The definitions are taken mostly from the Asian Development Bank's *Development Indicators Reference Manual* and websites and publications of international and private organizations such as Food and Agriculture Organization (FAO); International Labour Organization (ILO); International Monetary Fund (IMF); The Joint United Nations Programme on HIV/AIDS (UNAIDS); Organisation for Economic Co-operation and Development (OECD); Transparency International; United Nations Children's Fund (UNICEF); United Nations Educational, Scientific and Cultural Organization (UNESCO); United Nations Statistics Division (UNSD); World Bank; and World Health Organization (WHO). The indicators for the MDGs are arranged according to their respective goals and targets before they are defined, while the indicators for the regional tables are grouped according to their themes and subtopics before they are defined. In many instances, the indicators themselves, rather than their growth rates or ratios to another indicator, are defined.

Millennium Development Goals

Goals and Targets (from the Millennium Declaration)		Indicators for Monitoring Progress	Definition
Goal 1: Eradicate extreme poverty and hunger			
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1	Proportion of population below $1 (PPP) per day	Proportion of the population living on less than $1.25 a day at 2005 international prices.
	1.2	Poverty gap ratio	Mean shortfall from the poverty line (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.
	1.3	Share of poorest quintile in national consumption	Consumption or income that accrues to the poorest fifth (quintile) of the population.
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4	Growth rate of GDP per person employed	Growth rate of output per unit of labor input.
	1.5	Employment-to-population ratio	Proportion of a country's working-age population that is employed.
	1.6	Proportion of employed people living below $1 (PPP) per day	Share of individuals who are employed, but nonetheless live in a household whose members are estimated to be living below $1.25 a day at 2005 international prices.
	1.7	Proportion of own-account and contributing family workers in total employment	Own-account workers are those workers who, working on their own account or with one or more partners, hold the type of jobs defined as self-employment jobs (i.e., remuneration is directly dependent upon the profits derived from the goods and services produced), and have not engaged on a continuous basis any employees to work for them during the reference period. Contributing family workers, also known as unpaid family workers, are those workers who are self-employed, or who work as own-account workers in a market-oriented establishment operated by a related person living in the same household.
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8	Prevalence of underweight children under-five years of age	Percentage of children aged 0–59 months who fall below minus 2 standard deviations from the median weight for age of the international reference population.
	1.9	Proportion of population below minimum level of dietary energy consumption	Percentage of the population that is undernourished or food-deprived, whose food intake falls below the minimum level of dietary energy requirements (food insecurity line).
Goal 2: Achieve universal primary education			
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1	Net enrollment ratio in primary education	Number of children of official primary school age (according to ISCED97) who are enrolled in primary education as a percentage of the total children of the official primary school age population. Total net primary enrollment rate also includes children of primary school age enrolled in secondary education.
	2.2	Proportion of pupils starting grade 1 who reach last grade of primary	Percentage of a cohort of pupils enrolled in grade 1 of the primary level of education in a given school year who are expected to reach the last grade of primary school, regardless of repetition.
	2.3	Literacy rate of 15–24-year-olds, women and men	Percentage of the population aged 15–24 years who can both read and write with understanding a short simple statement on everyday life.

continued.

Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress		Definition
Goal 3: Promote gender equality and empower women			
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1	Ratios of girls to boys in primary, secondary and tertiary education	Ratio of girls to boys (gender parity index) in primary, secondary and tertiary education is the ratio of the number of female students enrolled at primary, secondary and tertiary levels of education to the number of male students in each level. To standardize the effects of the population structure of the appropriate age groups, the gender parity index (GPI) of the gross enrollment ratio (GER) for each level of education is used.
	3.2	Share of women in wage employment in the non-agricultural sector	Number of women in non-agricultural paid employment divided by the total number of persons in paid employment in the non-agricultural sector. It is expressed as a percentage of total wage employment in that same sector.
	3.3	Proportion of seats held by women in national parliament	Number of seats held by women members in single or lower chambers of national parliaments, expressed as a percentage of all occupied seats.
Goal 4: Reduce child mortality			
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1	Under-five mortality rate	Probability (expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of five if subject to current age-specific mortality rates.
	4.2	Infant mortality rate	Probability (expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of one if subject to current age specific mortality rates.
	4.3	Proportion of 1 year-old children immunized against measles	Percentage of children under one year of age who have received at least one dose of a measles vaccine.
Goal 5: Improve maternal health			
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1	Maternal mortality ratio	Annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, for a specified year (expressed per 100,000 live births)
	5.2	Proportion of births attended by skilled health personnel	Percentage of deliveries attended by personnel trained in providing life saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour and post-partum period; to conduct deliveries on their own; and to care for newborns. Traditional birth attendants, even if they receive a short training course, are not included.
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3	Contraceptive prevalence rate	Percentage currently using, or whose sexual partner is using, a method of contraception among women of reproductive age (usually aged 15–49) who are married or in union.
	5.4	Adolescent birth rate	Measures the annual number of births to women 15–19 years of age per 1,000 women in that age group. It represents the risk of childbearing among adolescent women 15–19 years of age. Also referred to as the age-specific fertility rate for women aged 15–19 years.
	5.5	Antenatal care coverage (at least one visit and at least four visits)	For at least one visit, refers to the percentage of women aged 15–49 years with a live birth in a given time period that received antenatal care provided by skilled health personnel (doctors, nurses, or midwives) at least once during pregnancy, as a percentage of women age 15–49 years with a live birth in a given time period. For at least four visits, refers to the percentage of women aged 15–49 with a live birth in a given time period that received antenatal care four or more times with ANY provider (whether skilled or unskilled), as a percentage of women age 15–49 years with a live birth in a given time period.
	5.6	Unmet need for family planning	Women with unmet need are those who are fecund and sexually active women not using any method of contraception, and report not wanting any more children or wanting to delay the next child. It is expressed as a percentage based on women who are married or in a consensual union.

continued.

Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress		Definition
Goal 6: Combat HIV/AIDS, malaria, and other diseases			
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1	HIV prevalence among population aged 15–24 years	Estimated number of persons aged 15–24 years living with HIV divided by the population (aged 15–24 years). HIV prevalence among population aged 15–49 years is the percentage of individuals aged 15–49 years living with HIV.
	6.2	Condom use at last high-risk sex	Percentage of young men and women aged 15–24 reporting the use of a condom during sexual intercourse with a non-cohabiting, non-marital sexual partner in the last 12 months. The denominator is the number of respondents aged 15–24 reporting having had sex with a non-cohabitating, non-marital sexual partner in the last 12 months.
	6.3	Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS	Percentage of young persons aged 15–24 years who correctly identify the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission and who know that a healthy looking person can transmit HIV.
	6.4	Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years	Ratio of the current school attendance rate of children aged 10–14 both of whose biological parents have died to the current school attendance rate of children aged 10–14 both of whose parents are still alive and who currently live with at least one biological parent.
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5	Proportion of population with advanced HIV infection with access to antiretroviral drugs	Percentage of adults and children with advanced HIV infection currently receiving antiretroviral therapy according to nationally approved treatment protocols among the estimated number of people with advanced HIV infection.
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6	Incidence and death rates associated with malaria	Incidence refers to the number of reported new cases of malaria in a given time period, expressed per 100,000 people; death rate refers to the number of deaths caused by malaria per 100,000 people.
	6.7	Proportion of children under 5 sleeping under insecticide-treated bednets	Percentage of children aged 0–59 months who slept under an insecticide treated mosquito net the night prior to the survey.
	6.8	Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs	Percentage of children aged 0–59 months with fever in the 2 weeks prior to the survey who received any anti-malarial medicine within 24 hours of the onset of symptoms.
	6.9	Incidence, prevalence, and death rates associated with tuberculosis (TB)	Incidence is the estimated number of new tuberculosis (TB) cases arising in 1 year per 100,000 population. All forms of TB are included, as are cases in people with HIV. Prevalence rate is the number of cases of TB (all forms) in a population at a given point in time (sometimes referred to as "point prevalence"). It reflects the number of cases per 100,000 population. Estimates include cases of TB in people with HIV. Death rate is the estimated number of deaths due to TB in a given time period. It is expressed as the number of deaths per 100,000 population per year. Deaths from all forms of TB are included. Deaths from TB in people with HIV are included.
	6.10	Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)	"Case detection", as used here, means that TB is diagnosed in a patient and is reported within the national surveillance system, and then to WHO. The case detection rate is the percentage of estimated new infectious tuberculosis cases detected under the internationally recommended tuberculosis control strategy DOTS. Success rate is the proportion of new smear-positive TB cases registered under DOTS in a given year that successfully completed treatment, whether with bacteriologic evidence of success ("cured") or without ("treatment completed"). At the end of treatment, each patient is assigned one of the following six mutually exclusive treatment outcomes: cured; completed; died; failed; defaulted; and transferred out with outcome unknown. The proportions of cases assigned to these outcomes, plus any additional cases registered for treatment but not assigned to an outcome, add up to 100% of cases registered.

continued.

Goals and Targets (from the Millennium Declaration)		Indicators for Monitoring Progress	Definition
Goal 7: Ensure environmental sustainability			
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.1	Proportion of land area covered by forest	Area of forest as a share of total land area, where land area is the total country area excluding the area of inland water bodies (major rivers, lakes and water reservoirs). Forest is land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10%; or trees able to reach these thresholds in situ and does not include land that is predominantly under agricultural or urban land use.
	7.2	CO_2 emissions, total, per capita and per $1 GDP (PPP)	Carbon dioxide emissions are emissions from the burning of fossil fuels and the manufacture of cement and include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring. Carbon emissions per capita are measured as the total amount of carbon dioxide emitted by the country divided by the population of the country. CO_2 emissions per $1 GDP (PPP) are total CO_2 emissions divided by the total value of GDP expressed in PPP.
	7.3	Consumption of ozone-depleting substances	Sum of the national annual consumption in weighted tons of the individual substances in the group of ozone-depleting substances multiplied by their ozone-depleting potential. Ozone-depleting substance is any substance containing chlorine or bromine, which destroys the stratospheric layer that absorbs most of the biologically damaging ultraviolet radiation.
	7.4	Proportion of fish stocks within safe biological limits	Percentage of fish stocks exploited within their level of maximum biological productivity.
	7.5	Proportion of total water resources used	Proportion of total renewable water resources withdrawn is the total volume of groundwater and surface water withdrawn from their sources for human use (in the agricultural, domestic and industrial sectors), expressed as a percentage of the total volume of water available annually through the hydrological cycle (total actual renewable water resources). Water resources and water withdrawal are terms understood as freshwater resources and freshwater withdrawal.
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.6	Proportion of terrestrial and marine areas protected	Protected area is an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.
	7.7	Proportion of species threatened with extinction	Total number of threatened mammal (excluding whales and porpoises), bird and higher native, vascular plant species as a percentage of the total number of known species of the same categories.
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8	Proportion of population using an improved drinking water source	Percentage of the population using improved drinking water sources (including household water connection, public standpipe, borehole, protected dug well, protected spring, rainwater collection, and bottled).
	7.9	Proportion of population using an improved sanitation facility	Percentage of the population with access to facilities that hygienically separate human excreta from human contact. Improved facilities include flush/pour flush toilets or latrines connected to a sewer, -septic tank, or -pit, ventilated improved pit latrines, pit latrines with a slab or platform of any material which covers the pit entirely, except for the drop hole and composting toilets/latrines.
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10	Proportion of urban population living in slums	Proportion of urban population living in slum households which is defined as a group of individuals living under the same roof lacking one or more of the conditions below: • Access to improved water • Access to improved sanitation • Sufficient-living area • Durability of housing • Security of tenure However, since information on secure tenure is not available for most of the countries, only the first four indicators are used to define slum households, and then to estimate the proportion of urban population living in slums.

continued.

Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress	Definition
Goal 8: Develop a global partnership for development		
Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development and poverty reduction—both nationally and internationally	*Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.* Official development assistance (ODA)	
	8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income	Net ODA comprises grants or loans to developing countries and territories on the OECD/DAC list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms. Donors' gross national income (GNI) at market prices is the sum of gross primary incomes receivable by resident institutional units and sectors. GNI at market prices was called gross national product (GNP) in the 1953 System of National Accounts (SNA). In contrast to GDP, GNI is a concept of income (primary income) rather than value added.
Target 8.B: Address the special needs of the least developed countries Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction	8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)	ODA comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms. Basic education comprises primary education, basic life skills for youth and adults and early childhood education. Primary health care includes basic health care, basic health infrastructure, basic nutrition, infectious disease control, health education, and health personnel development.
	8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied	ODA comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms. Untied bilateral ODA is assistance from country to country for which the associated goods and services may be fully and freely procured in substantially all countries.
	8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes	ODA comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms. Recipient countries' GNI at market prices is the sum of gross primary incomes receivable by resident institutional units and sectors. GNI at market prices was called GNP in the 1953 SNA. In contrast to GDP, GNI is a concept of income (primary income) rather than value added.
Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)	8.5 ODA received in small island developing States as a proportion of their gross national incomes	ODA comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms. Recipient countries' GNI at market prices is the sum of gross primary incomes receivable by resident institutional units and sectors. GNI at market prices was called GNP in the 1953 SNA. In contrast to GDP, GNI is a concept of income (primary income) rather than value added.
	Market Access	
	8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and from the least developed countries, admitted free of duty	Proportion of duty free imports (excluding arms) into developed countries from developing and LDCs.
	8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries	Average tariffs imposed by developed countries on subsets of selected items (agricultural products, textile and clothing exports) that are deemed to be of interest to developing countries.

continued.

Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress	Definition
Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product	Agriculture support is the annual monetary value of all gross transfers from taxpayers and consumers, both domestic and foreign (in the form of subsidies arising from policy measures that support agriculture), net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products. Total support estimate for agricultural products represents the overall taxpayer and consumer costs of agricultural policies. When expressed as a percentage of GDP, the total support estimate is an indicator of the cost to the economy as a whole.
	8.9 Proportion of ODA provided to help build trade capacity	ODA comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25%). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by DAC.
	Debt Sustainability	
	8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)	Countries reach HIPC decision point if they have a track record of macroeconomic stability, prepared an Interim Poverty Reduction Strategy through a participatory process, and have cleared or reached an agreement on a process to clear the outstanding arrears to multilateral creditors. The amount of debt relief necessary to bring countries' debt indicators to HIPC thresholds is calculated, and countries begin receiving debt relief. Countries reach HIPC completion point if they maintain macroeconomic stability under a Poverty Reduction and Growth Facility-supported program, carry out key structural and social reforms agreed on at the decision point, and implement satisfactorily the Poverty Reduction Strategy for one year. Debt relief is then provided irrevocably by the country's creditors.
	8.11 Debt relief committed under HIPC and MDRI Initiatives	Debt relief is committed under the HIPC Initiative when a country reaches its decision point. It is calculated as the amount needed to bring the net present value (NPV) of the country's debt level to the thresholds established by the HIPC Initiative (150 percent of exports or in certain cases 250 percent of fiscal revenues).
	8.12 Debt service as a percentage of exports of goods and services	Debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services. The series differs from the standard debt to exports ratios. It covers only long-term public and publicly guaranteed debt and repayments (repurchases and charges) to the IMF. IMF repurchases are total repayments of outstanding drawings from the general resources account during the year specified, excluding repayments due in the reserve tranche. Exports of goods, services and income are the sum of goods (merchandise) exports, exports of (nonfactor) services and income (factor) receipts and does not include workers' remittances.
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis	Percentage of population that has access to a minimum of 20 most essential drugs.
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Telephone lines per 100 population	A fixed telephone line connects the subscriber's terminal equipment to the public switched network and has a dedicated port in the telephone exchange equipment. This term is synonymous with the term main station or Direct Exchange Line (DEL) that is commonly used in telecommunication documents. It may not be the same as an access line or a subscriber. The number of ISDN channels should be included. Fixed wireless subscribers should also be included. If they are not included, this is specified in a note.
	8.15 Cellular subscribers per 100 population	A mobile cellular telephone subscription refers to the subscription to a public mobile cellular telephone service which provides access to the Public Switched Telephone Network (PSTN) using cellular technology. It includes postpaid and prepaid subscriptions and analogue and digital cellular systems. This should also include subscriptions to IMT-2000 (Third Generation, 3G) networks.
	8.16 Internet users per 100 population	The Internet is a linked global network of computers in which users at one computer, if they have permission, can get information from other computers in the network.

Regional Tables

Indicator	Definition
PEOPLE	
Population	
Mid-Year Population	The mid-year de facto population estimates. De facto population includes all persons physically present in the country during the census day, including foreign military and diplomatic personnel and their accompanying household members, and transient foreign visitors in the country or in harbors.
Growth Rates in Population	Number of people added to (or subtracted from) a population in a year because of natural increase and net migration expressed as a percentage of the population at the beginning of the year.
Net International Migration Rate	Number of immigrants minus the number of emigrants over a period, divided by the person-years lived by the population of the receiving country over that period. It is expressed as net number of migrants per 1,000 population.
Urban Population	Population living in urban areas, as defined in accordance with the national definition or as used in the most recent population census. Because of national differences in the characteristics that distinguish urban from rural areas, the distinction between urban and rural populations is not amenable to a single definition that would be applicable to all countries. National definitions are most commonly based on size of locality. Population that is not urban is considered rural.
Age Dependency Ratio	Ratio of the nonworking age population to the working-age population. Since countries define working age differently, a straightforward application of the definition will lead to noncomparable data. ADB therefore uses the following UN definition that can be computed directly from an age distribution: $\frac{\text{Population aged (0–14) + (65 and over) years}}{\text{Population aged (15–64) years}} \times 100$
Labor Force and Employment	
Labor Force Participation Rate	Percentage of the labor force to the working-age population. The labor force is the sum of those in employment and persons who are without paid employment but who are seeking it. The labor force participation rate is a measure of the extent an economy's working-age population is economically active. It provides an indication of the relative size of the supply of labor that is available for the production of goods and services in the economy.
Unemployment Rate	Percentage of the labor force that is unemployed, i.e., persons who are without work but who are actively seeking it. This is probably the best-known labor market measure. Together with the employment rate, it provides the broadest indicator of the status of the country's labor market.
Unemployment Rate of 15–24-Year-Olds	Number of unemployed people aged 15–24 years divided by the labor force of the same age group.
Employment in Agriculture	Employment in agriculture that corresponds to division 1 (International Standard of Industrial Classification [ISIC] revision 2) or tabulation categories A and B (ISIC revision 3) and includes hunting, forestry, and fishing.
Employment in Industry	Employment in industry which corresponds to divisions 2–5 (ISIC revision 2) or tabulation categories C and F (ISIC revision 3) and includes mining and quarrying (including oil production); manufacturing; construction; and public utilities (electricity, gas, and water).
Employment in Services	Employment in services that corresponds to divisions 6–9 (ISIC revision 2) or tabulation categories G-P (ISIC revision 3) and includes wholesale and retail trade and hotels and restaurants; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.
Poverty Indicators	
Proportion of Population below $2 (PPP) a day	Percentage of the population living on less than $2 a day at 2005 international prices.
Income Ratio of Highest 20% to Lowest 20%	Income share that accrues to the richest 20% of the population divided by the income share of the lowest 20% of the population.
Gini Coefficient	Measures the degree to which an economy's income distribution diverges from perfect equal distribution. A value of zero (0) implies perfect equality while a value of one (1) implies perfect inequality.
Human Development Index	Composite index of longevity (as measured by life expectancy at birth), knowledge (as measured by adult literacy rate and combined enrollment ratio), and decent standard of living (as measured by the adjusted per capita income in PPP US$).
Social Indicators	
Life Expectancy at Birth	Number of years that a newborn is expected to live if prevailing patterns of mortality at the time of its birth are to stay the same throughout its life.
Crude Birth Rate	Ratio of the total number of live births in a given year to the mid-year total population, expressed per 1,000 people.
Crude Death Rate	Ratio of the number of deaths occurring within 1 year to the mid-year total population, expressed per 1,000 people.
Total Fertility Rate	Average number of children who would be born alive to a woman during her lifetime, if she were to bear children at each age in accordance with the prevailing age-specific fertility rates.
Primary Education Completion Rate	Percentage of students completing the last year of primary school. It is calculated as the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

continued.

Indicator	Definition
Adult Literacy Rate	Estimated number of literate people aged 15 years and above expressed as a percentage of the total population aged 15 years and above. A person is considered literate if he/she can read and write with understanding a simple statement in any language.
Primary Pupil-Teacher Ratio	Average number of pupils (students) per teacher at the primary level of education in a given school year. This indicator is used to measure the level of human resources input in terms of number of teachers in relation to the size of the primary pupil population.
Secondary Pupil-Teacher Ratio	Average number of pupils (students) per teacher at the secondary level of education in a given school year. This indicator is used to measure the level of human resources input in terms of number of teachers in relation to the size of the secondary pupil population.
Physicians	Graduates of any faculty or school of medicine who are working in the country in any medical field (practice, teaching, or research) expressed in terms of 1,000 people.
Hospital Beds	Include in-patient beds for both acute and chronic care available in public, private, general, and specialized hospitals and rehabilitation centers expressed in terms of 1,000 people.
Number of Adults Living with HIV	Include all adults, defined as men and women aged 15 and over years old, with HIV infection, whether or not they have developed symptoms of AIDS.
ECONOMY AND OUTPUT	
National Accounts	
Gross Domestic Product	Unduplicated market value of the total production activity of all resident producer units within the economic territory of a country during a given period. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Transfer payments are excluded from the calculation of GDP. GDP can be computed using the production, expenditure, and income approaches. Production-based GDP is the sum of the gross value added by all resident producers in the economy plus any taxes and minus any subsidies not included in the value of the products. Gross value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs. Income-based GDP is the sum of the compensation of employees, mixed income, operating surplus, consumption of fixed capital, and taxes less subsidies on production and imports. Expenditure-based GDP is the sum of private (or household) consumption expenditure, general government consumption expenditure, gross fixed capital formation (private and public investments), changes in inventories, and exports minus imports of goods and services. GDP can be measured at current prices (i.e., the prices of the current reporting period) and constant prices, which are obtained by expressing values in terms of a base period.
GDP at PPP	Measures obtained by using PPP to convert the GDP into a common currency, and by valuing them at a uniform price level. They are the spatial equivalent of a time series of GDP for a single country expressed at constant prices. At the level of GDP, they are used to compare the economic size of countries.
GDP per Capita at PPP	GDP at PPP divided by the mid-year population.
GNI per Capita, Atlas Method	GNI, converted to US dollars using the World Bank Atlas method divided by the mid-year population. GNI is GDP plus net receipts of primary income (compensation of employees and property income) from abroad. The Atlas method of conversion smoothes fluctuations in prices and exchange rates. This applies a conversion factor that averages the exchange rate for a given year and the 2 preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, United Kingdom, and United States). From 2001 onward, these countries include the Euro Zone, Japan, United Kingdom, and United States.
Agriculture Value Added	Net output of agriculture after adding up all outputs and subtracting intermediate inputs. The industrial origin of value added is determined by ISIC revision 3. Agriculture corresponds to ISIC divisions 1–5 and includes hunting, forestry and fishing.
Industry Value Added	Net output of industry after adding up all outputs and subtracting intermediate inputs. The industrial origin of value added is determined by ISIC revision 3. Industry corresponds to ISIC divisions 10–45 and covers mining, manufacturing, construction, electricity, water and gas.
Services Value Added	Net output of services after adding up all outputs and subtracting intermediate inputs. The industrial origin of value added is determined by ISIC revision 3. Services corresponds to ISIC divisions 50–99 and includes wholesale and retail trade and hotels and restaurants; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.
Private Consumption Expenditure	Market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased or received as income in kind by households. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings. It also includes payments and fees to governments to obtain permits and licenses. The expenditure of nonprofit institutions serving households is also recorded as the consumption of households.
Government Consumption Expenditure	Includes all current outlays on purchases of goods and services (including wages and salaries). It also includes most expenditure on national defense and security, but excludes government military expenditures that are part of public investment.

continued.

Indicator	Definition
Gross Domestic Capital Formation	Total value of gross fixed capital formation, changes in inventories, and acquisitions less disposals of valuables. Gross fixed capital formation is the value of acquisitions less disposals of tangible goods such as buildings and intangible goods such as computer software that are intended for use in production during several accounting periods. Changes in inventories are changes in stocks of produced goods and goods for intermediate consumption, and the net increase in the value of work in progress. Valuables are goods such as precious metals and works of art that are acquired in the expectation that they will retain or increase their value over time.
Exports of Goods and Services	Consist of sales, barter, or gifts or grants, of goods and services from residents to nonresidents; the treatment of exports in the System of National Accounts (SNA) is generally identical with that in the balance of payments accounts as described in the Balance of Payments Manual.
Imports of Goods and Services	Consist of purchases, barter, or receipts of gifts or grants, of goods and services by residents from nonresidents; the treatment of imports in the SNA is generally identical with that in the balance of payments accounts as described in the Balance of Payments Manual.
Gross Domestic Saving	Difference between GDP and total consumption, where total consumption is the sum of private consumption expenditure and government consumption expenditure.
Production	
Agriculture Production Index	Relative level of the aggregate volume of agricultural production for each year in comparison with the base period. It is based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed and feed.
Manufacturing Production Index	An index covering production in manufacturing. The exact coverage, the weighting system and the methods of calculation vary from country to country but the divergences are less important than, for example, in the case of price and wage indexes.
MONEY, FINANCE, AND PRICES	
Prices	
Consumer Price Index (CPI)	An index that measures changes in the cost of a typical basket of goods and services purchased by a chosen group of consumers over time. Typically, the basket of goods and services differs among countries, and the CPI may pertain to a target group in the main city or principal cities only. The price data of the different goods and services included in the CPI are normally weighted in proportion to the relative importance of each item to total consumption expenditure. The weights are based on expenditure data collected by means of a household expenditure survey typically carried out at 5-year intervals. Most countries use a Laspeyres' type index; some compile a retail price index which, except for its usually broader coverage of goods and services at the retail stage of distribution, is often meant to be used interchangeably with the CPI.
Food Consumer Price Index	An index that measures changes in the cost of food products purchased by a chosen group of consumers over time.
Wholesale Price Index	A measure that reflects changes in the prices paid for goods at various stages of distribution up to the point of retail. It can include prices of raw materials for intermediate and final consumption, prices of intermediate or unfinished goods, and prices of finished goods. The goods are usually valued at purchasers' prices.
Producer Price Index	A measure of the change in the prices of goods and services either as they leave their place of production or as they enter the production process. A measure of the change in the prices received by domestic producers for their outputs or of the change in the prices paid by domestic producers for their intermediate inputs.
GDP Deflator	A measure of the annual rate of price change in the economy as a whole for the period shown obtained by dividing GDP at current prices by GDP at constant prices.
Money and Finance	
Money Supply (M2)	A measure of the money supply in an economy, with broad coverage. Broad money usually includes national currency and deposits held by residents in depository institutions; these deposits may be either transferable, such as demand deposits, or nontransferable, such as term deposits; deposits denominated in foreign currency and held by residents may also be included in broad money.
Interest Rate on Savings Deposits	Rate paid by commercial and similar banks for savings deposits.
Interest Rate on Time Deposits	Rate paid by commercial and similar banks for time deposits.
Lending Interest Rate	Bank rate that usually meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according to credit worthiness of borrowers and objectives of financing.
Yield on Short-Term Treasury Bills	Rate at which short-term securities are issued or traded in the market.
Domestic Credit Provided by Banking Sector	Includes all credits to various sectors on a gross basis, except credit to the central government which is net. The banking sector includes monetary authorities, deposit money banks, and other banking institutions for which data are available.
Ratio of Bank Nonperforming Loans to Total Gross Loans	Value of nonperforming loans divided by the total value of the loan portfolio (including nonperforming loans before the deduction of loan loss provisions). The amount recorded as nonperforming should be the gross value of the loan as recorded in the balance sheet, not just the amount that is overdue.

continued.

Indicator	Definition
Stock Market Price Index	Index that measures changes in the prices of stocks traded in the stock exchange. The price changes of the stocks are usually weighted by their market capitalization.
Stock Market Capitalization	The share price times the number of shares outstanding (also known as market value).
Exchange Rates	
Official Exchange Rate	The exchange rate determined by national authorities or the rate determined in the legally sanctioned exchange market. It is calculated as an annual average based on the monthly averages (local currency units relative to the US dollar).
Purchasing Power Parity Conversion Factor	Number of units of country B's currency that are needed in country B to purchase the same quantity of an individual good or service, which one unit of country A's currency can purchase in country A.
Price Level Index (PLI)	Ratio of the relevant PPP to the exchange rate. It is expressed as an index on a base of 100. A PLI greater than 100 means that, when the national average prices are converted at exchange rates, the resulting prices tend to be higher on average than prices in the base country (or countries) of the region (and vice versa). At the level of GDP, PLIs provide a measure of the differences in the general price levels of countries. PLIs are also referred to as "comparative price levels".
GLOBALIZATION	
Balance of Payments	
Trade in Goods Balance	Difference between exports and imports of goods.
Trade in Services Balance	Difference between exports and imports of services.
Current Account Balance	Sum of net exports of goods, services, net income, and net current transfers.
Workers' Remittances and Compensation of Employees, Receipts	Consist of: (a) Current transfers from migrant workers who are residents of the host country to recipients in their country of origin. To count as resident, the workers must have been living in the host country for more than a year. (b) Compensation of employees of migrants who have lived in the host country for less than a year. (c) Migrants' transfers defined as the net worth of migrants who are expected to remain in the host country for more than one year that is transferred from one country to another at the time of migration.
Foreign Direct Investment	Refers to net inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments.
External Trade	
Merchandise Exports/Imports	Covers all movable goods, with a few specified exceptions, the ownership of which changes between a resident and a foreigner. For merchandise exports, it represents the value of the goods and related distributive services at the customs frontier of the exporting economy, i.e., the free-on-board value. Merchandise imports, on the other hand, are reported in cost, insurance, and freight values.
Trade in Goods	Sum of merchandise exports and merchandise imports.
International Reserves	
International Reserves	Total holdings by monetary authorities (central banks, currency boards, exchange stabilization funds, and treasuries to the extent that they perform similar functions) of gold, Special Drawing Rights, reserve positions in the IMF, and foreign exchange. For purposes of comparability, the regional table on international reserves valties gold holdings at London market prices, unless otherwise specified. Special Drawing Rights are unconditional international reserve assets created by the IMF whereas reserve positions are unconditional assets arising from countries' reserve assets subscriptions to the IMF, from the Fund's use of members' currencies, and from Fund borrowings. Foreign exchange is defined as monetary authorities' claims on foreigners in the form of bank deposits, treasury bills, short- and long-term government securities, and other claims usable in the event of a balance of payments deficit, including nonmarketable claims arising from intercentral bank and intergovernmental arrangements, without regard to whether the claim is denominated in the currency of the debtor or the creditor.
Ratio of International Reserves to Imports	International reserves outstanding at the end of the year as percentage of imports of goods from the balance of payments during the year, where imports of goods are expressed in terms of monthly average.
Capital Flows	
Official Flows	Net flows of long-term public and publicly guaranteed debt from official creditors and grants, including technical cooperation grants.
Net Private Flows	Sum of net foreign direct investment, portfolio equity flows, net flows of long-term public and publicly guaranteed debt from private creditors, and net flows of total private non-guaranteed debt.
Aggregate Net Resource Flows	Sum of net official and private capital flows. Net flow is disbursements less principal repayments.
External Indebtedness	
Total External Debt	Total stock of external liabilities of a country owed to nonresidents, regardless of maturity and mode of payment. It is the sum of public and publicly guaranteed long-term debt, private nonguaranteed long-term debt, use of IMF credit, and estimated short-term debt.

continued.

Indicator	Definition
External Debt as Percent of Exports of Goods and Services	Total external debt as a percentage of exports of goods and services (including workers' remittances).
Total Debt Service Paid	Principal and interest payments in the year specified on total long-term debt (public and publicly guaranteed, and private nonguaranteed); use of IMF credit; and interest on short-term debt.
Total Debt Service Paid as Percent of Exports of Goods and Services and Income	Total debt service as a percentage of exports of goods and services (including workers' remittances).
INFRASTRUCTURE	
Transport	
Roads, Total Network	Covers motorways, highways, main or national roads, secondary or regional roads, and all other roads in a country measured in kilometers.
Road Density	Total road network (measured in kilometers) of a country divided by its land area (expressed in thousand square kilometers)
Paved Roads	Roads surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones.
Access to an All-season Road	Measure the number of rural people who live within 2 kilometers (typically equivalent to a 20-minute walk) of an all-season road as a proportion of the total rural population. An "all-season road" is a road that is motorable all year by the prevailing means of rural transport (often a pick-up or truck that does not have four-wheel-drive). Predictable interruptions of short duration during inclement weather (e.g., heavy rainfall) are accepted, particularly on low volume roads.
Rail Lines	Length of railway route available for train service, measured in kilometers, irrespective of the number of parallel tracks.
Rail Network	Length of rail lines divided by the land area (in square kilometers).
Communications and Electrification	
Household electrification rate	Percentage of households with an electricity connection.
Personal Computers	Self-contained computers designed for use by a single individual, including laptops and notebooks and excluding terminals connected to mainframe and minicomputers intended primarily for shared use and devices such as smart phones and personal digital assistants.
Fixed Broadband Internet Subscribers	Number of broadband subscribers with a digital subscriber line, cable modem, or other high-speed technology.
Information and Communications Technology Expenditures	Include computer hardware (computers, storage devices, printers, and other peripherals); computer software (operating systems, programming tools, utilities, applications, and internal software development); computer services (information technology consulting, computer and network systems integration, Web hosting, data processing services, and other services); and communications services (voice and data communications services) and wired and wireless communications equipment.
GOVERNMENT AND GOVERNANCE	
Government Finance	
Fiscal Balance	Difference between total revenue (including grants) and total expenditure (including net lending). This provides a picture of the overall financial position of the government. When the difference is positive, then the fiscal position is in surplus; otherwise, it is in deficit.
Tax Revenue	Compulsory transfers to the government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.
Total Government Revenue	Includes current and capital revenues. Current revenue is the revenue accruing from taxes, as well as all current nontax revenues except transfers received from foreign governments and international institutions. Major items of nontax revenue include receipts from government enterprises, rents and royalties, fees and fines, forfeits, private donations, and repayments of loans properly defined as components of net lending. Capital revenue constitutes the proceeds from the sale of non-financial capital assets.
Total Government Expenditure	Sum of current and capital expenditures. Current expenditure comprises purchases of goods and services by the central government, transfers to noncentral government units and to households, subsidies to producers, and interest on public debt. Capital expenditure, on the other hand, covers outlays for the acquisition or construction of capital assets and for the purchase of intangible assets, as well as capital transfers to domestic and foreign recipients. Loans and advances for capital purposes are also included.
Government Expenditure on Education	Consists of expenditure by government to provide education services at all levels.
Government Expenditure on Health	Consists of expenditure by government to provide medical products, appliances, and equipment; outpatient services; hospital services; public health services; among others.

continued.

Indicator	Definition
Governance	
Cost of Business Start-Up Procedure	Cost to register a business normalized by presenting it as a percentage of Gross National Income (GNI) per capita.
Time Required to Start Up a Business	Number of calendar days needed to complete the procedures to legally operate a business. If a procedure can be speeded up at additional cost, the fastest procedure, independent of cost, is chosen.
Corruption Perceptions Index	The Corruption Perceptions Index of Transparency International ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. Corruption is defined as the abuse of public office for private gain. The index is a composite index drawing on corruption-related data from expert and business surveys carried out by a variety of independent and reputable institutions. The index reflects views from around the world, including those of experts who are living in the countries evaluated. Score relates to perceptions of the degree of corruption as seen by business people and country analysts, and ranges between 10 (highly clean) and 0 (highly corrupt).
ENERGY AND ENVIRONMENT	
Energy	
GDP per Unit of Energy Use	The ratio of gross domestic product (GDP) per kilogram of oil equivalent of energy use with GDP converted to 2005 constant international dollars using purchasing power parity (PPP) rates. An international dollar has the same purchasing power over GDP as a U.S. dollar has in the United States. Energy use refers to the use of primary energy before transformation to other end-use fuel, which is equal to indigenous production plus imports and stock changes minus exports, and fuel supplied to ships and aircraft engaged in international transport.
Energy Production	Forms of primary energy—petroleum (crude oil, natural gas liquids, and oil from nonconventional sources); natural gas; solid fuels (coal, lignite, and other derived fuels); and combustible renewables and waste—and primary electricity, all converted into oil equivalents. Primary electricity is electricity generated by nuclear, hydro, wind, and solar power.
Energy Imports, Net	Estimated as energy use less production, both measured in oil equivalents.
Environment	
Agricultural Land	Land area that is arable, under permanent crops, and under permanent meadows and pastures.
Arable Land	Land under temporary agricultural crops (multiplecropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than 5 years). The abandoned land resulting from shifting cultivation is not included. Data for "Arable land" are not meant to indicate the amount of land that is potentially cultivable.
Permanent Cropland	Land cultivated with long term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops.
Deforestation Rate	Permanent conversion of natural forest area into other uses, including agriculture, ranching, settlements, and infrastructure. Deforested areas do not include areas logged but intended for regeneration or areas degraded by fuel-wood gathering, acid precipitation, or forest fires. A negative rate indicates reforestation.
Nitrous Oxide Emissions	Emissions from agricultural biomass burning, industrial activities and livestock management.
Methane Emissions	Emissions from human activities such as agriculture and from industrial methane production.
Consumption of Ozone-Depleting Chlorofluorocarbons	Sum of the consumption of the weighted tons of the individual substances in the group (metric tons of the individual substance (defined in the Montreal Protocol on Substances that Deplete the Ozone Layer) multiplied by its ozone-depleting potential.
Organic Water Pollutant Biochemical Oxygen Demand (BOD) Emissions	Measured as biochemical oxygen demand (BOD), or the amount of oxygen that bacteria in water will consume in breaking down waste, a standard water treatment test for the presence of organic pollutants. Emissions per worker are total emissions divided by the number of industrial workers.