

PREFACE

In 2001, the world economy suffered its largest setback in a decade. Almost every country was affected, vividly illustrating—in this instance, negatively—the increasingly powerful links among the world’s economies. The setback was aggravated by the terrorist attacks of 11 September 2001, which are also likely to have longer-term consequences, not only for international peace and security but also for global development. In the first part of 2002, the world economy struggled to recover, but global economic and political uncertainty remained palpable and potent.

Despite these difficulties, the past year also witnessed important progress in refining the international consensus on development, and in identifying concrete actions that need to be taken to fulfil the aspirations embodied in the United Nations Millennium Declaration. At the Fourth Ministerial Conference of the World Trade Organization (Doha, Qatar, November 2001), the International Conference on Financing for Development (Monterrey, Mexico, March 2002) and the World Summit on Sustainable Development (Johannesburg, South Africa, August–September 2002), Governments made far-reaching commitments that must now be matched by equally broad and concerted action.

*Part one of the **World Economic and Social Survey 2002** examines these developments and contains forecasts of short-term trends in global and regional growth, trade and finance. Part two offers a broad discussion of the increasing frequency and range of interaction between the public and private sectors, and concludes that the expanding role of the private sector in development alters, but does not necessarily reduce, the role of the State. Governments continue to have the primary*

responsibility for establishing regulatory frameworks, effective public institutions, tax arrangements and other measures that will mobilize the resources and efforts of the private sector. How this is done will vary from country to country, and from sector to sector. But there can be little doubt about the need for the private sector to be actively engaged in the job of making markets and trade work for all people.

Global interdependence has reached levels unprecedented in history. A recession, financial crisis, environmental catastrophe, outbreak of disease or conflict in one part of the world can all too easily affect other parts of the world with little warning, giving them little or no chance to protect themselves. The challenge ahead is for all actors—Governments, business, civil society and all others in a position to make a difference—to forge the partnerships and alliances needed for progress. This publication is intended to contribute to that effort. I recommend the information and analysis in it to the widest possible audience.



KŌFI Ā. ANNAN
Secretary-General

FOREWORD

In the second half of 2002, the world economy stands at a delicate juncture. After a year of the weakest performance in a decade, global economic recovery is under way. However, neither the strength, nor the breadth, nor the durability of the recovery is assured. Part one of the *World Economic and Social Survey 2002* investigates the causes of the pervasive slowdown in 2001, as well as the driving forces for and the threats to the recovery.

One feature in the global downturn of 2001 was its synchronicity across countries, which was notable among the major developed economies but also affected a large number of developing economies. Economic growth in the United States of America, Japan and several Western European countries slowed significantly last year, with a few of these economies experiencing a brief recession. Most developing countries suffered a more extensive setback as a result of the contraction in international trade, the decline in the international prices of primary commodities and the reduction in foreign capital inflows. Only a small number of economies, including China, India and some economies in transition, managed to roughly sustain the previous year's pace of expansion.

The *Survey* attributes the synchronicity both to the enhanced trade, capital and technology linkages of the past decade and to an array of common shocks to the world's economies. The most important of these were the protracted consolidation in the global information and communication technologies (ICT) sector, following the bursting of the financial and investment bubbles, and the terrorist attacks of 11 September 2001. In addition to these short-term factors, the *Survey* also links the downturn to some global structural problems, particularly the growing dependence of the global economy on growth in the United States and the slow growth in the other major economies.

The *Survey* projects a gradual recovery of the world economy into 2003, with less synchronicity among the economies in the upturn. One factor accounting for the differentiated phasing of the recovery is the variation in individual countries' policy responses to the downturn. Developed economies have adopted varying degrees and types of policy stimulus, with those of the United States being the strongest, but many developing economies have been constrained in their ability to adopt such measures by the need to adhere to prescribed macroeconomic targets.

Part one of the *Survey* points to a number of caveats regarding the outlook for the global economy. The highlighted risks for short-run

world economic growth include the persistent large trade imbalances among major economies, the fragile financial and banking system in many countries, the deficiencies in corporate governance and accounting practices in some countries, and the continuing debt crisis in Argentina and, to a lesser degree, in some other economies, as well as the uncertainties in non-economic domains—such as the possibility of further conflict in the Middle East and more terrorist attacks.

Part two of the *Survey* examines selected aspects of the changing nature of the interaction between the public and private sectors in producing some of the goods and services that societies as a whole may desire as part of their overall development. In all countries, the State has a number of essential tasks, such as providing external defence, maintaining domestic law and order, ensuring the rights of future generations (for example, with respect to the environment), pursuing agreed redistributive goals (notably addressing poverty) and addressing market failures. Previously, there was a widespread belief that the State itself should produce or provide directly a number of goods and services that contributed to these or other goals. However, it is increasingly recognized that the involvement of the private sector, in many different ways, in such production and distribution can result in these goods and services being provided more efficiently and effectively than if the public sector operates alone.

For most private goods and services, the direct involvement of the State in production is no longer deemed necessary or effective; to the contrary, it is likely to be counterproductive because, by muting the operation of market forces in a competitive environment, it often reduces operating efficiency and slows the development of new products and processes. Consequently, as shown in chapter IV, many industries and firms in the consumer and producer goods and services sectors have been privatized throughout the world, particularly in the former centrally planned economies. However, this has not necessarily implied the total disengagement of the State because, in other ways, the role of the State has become more important. Almost all private sector entities are subject to different laws and regulations, some of general applicability and others of sector or industry specificity. All countries have laws regulating the financial operations of companies, both public and private, within their boundaries. As part of the effort to address broader development goals, there are usually laws and regulations to protect and promote, for example, general aspects of public health and

safety, human rights, consumer interests and other matters of public concern. In some areas, there are international standards, for example, the International Labour Organization codes with respect to employment conditions.

These general arrangements are usually complemented by a wide range of similar industry-specific laws and regulations dealing with health, safety and other matters of public concern. In addition, some sectors or industries may undertake self-regulation, serving both their own and the public interest. All such measures benefit greatly if, when they are being framed, there are consultations among the public and private sectors, consumer groups and experts. By complying with these various laws and regulations, private firms contribute to the attainment of goals established by the society in which they operate. Firms are also increasingly undertaking voluntarily (with neither State nor self-regulation) activities that are in the broader public interest—such as environmental conservation and various forms of training. The companies concerned often recognize that they themselves can benefit, directly and indirectly, from such actions.

Despite the retreat of the State from immediate responsibility for many activities, there remain several areas where direct government involvement is still usually deemed beneficial, although increasingly in the framework of some form of cooperation with the private sector. Chapters V and VI examine public-private issues in, respectively, agricultural research and the supply of electricity. Both are essential to development and are areas in which the private sector can play a central role. Yet in both cases there is an essential complementary role for the State.

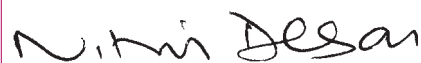
In agricultural research, the private sector's focus on prospective financial returns may mean that the State has to assume responsibility for some socially necessary research that might otherwise not be undertaken. Importantly, however, international cooperation, particularly at the regional level, can play a role in public research, both by building the critical mass often necessary for such research and by reducing the financial burden on individual Governments.

In contrast, the State is no longer seen as necessarily having to have sole responsibility for the generation, transmission and distribution of electricity but rather may achieve its objectives by establishing an appropriate set of incentives and regulations within which the private sector can fulfil these responsibilities. Regulatory mechanisms have,

then, become particularly important in utilities such as electricity because of the need to ensure that private operators do not abuse any potential natural monopoly power. At the same time, it is necessary to introduce competition wherever possible in order to enhance consumer choice and to maintain competitive prices. In order to ensure that all potential consumers, including poor people and those living in remote areas, have a reliable supply of power at acceptable prices, there is a need for a careful balance in the incentives and disincentives inherent in the regulatory and competitive mechanisms that are established.

Chapters VII and VIII examine the changes in two critical sectors, health and education, that have always been viewed as a particular responsibility of the State. Despite the predominant role of the public sector, particularly in basic health and education, both sectors have always seen participation by the private, often not-for-profit, sector and this participation has been growing in recent years. In education, private sector involvement is still comparatively small, but it occurs even in low-income countries and in provision to the lower-income segments of the population of individual countries. In the health sector, private participation has been considerable, often helping to meet the growing demand that the public sector alone could not satisfy. Such contributions need to be fostered, but this does not absolve the State from its continuing responsibilities for ensuring that private sector providers meet the necessary standards and that the health and education needs of the population at large, in terms of both coverage and type of care or education, are fulfilled. This requires new mechanisms, often including new institutions, as well as enhanced regulatory arrangements.

Part two shows that interactions between the public and private sectors are evolving in a myriad of ways and can contribute to achieving societal goals effectively if supporting institutions, including adequate regulatory mechanisms, are in place. I trust that part two will provide readers with some additional insights into these changes so that policies and actions can be devised to further enhance the contribution of public-private interaction to development.



Nitin Desai
Under-Secretary-General
for Economic and Social Affairs

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The following symbols have been used in the tables throughout the report:

- .. **Two dots** indicate that data are not available or are not separately reported.
- **A dash** indicates that the amount is nil or negligible.
- **A hyphen (-)** indicates that the item is not applicable.
- **A minus sign (-)** indicates deficit or decrease, except as indicated.
- . **A full stop (.)** is used to indicate decimals.
- / **A slash (/)** between years indicates a crop year or financial year, for example, 1990/91.
- **Use of a hyphen (-)** between years, for example, 1990-1991, signifies the full period involved, including the beginning and end years.

Reference to “tons” indicates metric tons and to “dollars” (\$) United States dollars, unless otherwise stated.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

In most cases, the growth rate forecasts for 2001 are rounded to the nearest quarter of a percentage point.

Details and percentages in tables do not necessarily add to totals, because of rounding.

The following abbreviations have been used:

ADF	African Development Fund
AGOA	African Growth and Opportunity Act (United States)
AIDS	acquired immunodeficiency syndrome
AMC	asset management corporation
APEC	Asia-Pacific Economic Cooperation
AU	African Union
BOT	build-operate-transfer
bpd	barrels per day
bps	basis points
CAC	collective action clause

CAMBIA	Center for the Application of Molecular Biology to International Agriculture (Australia)
CATFs	competitive agricultural technology funds
CCFF	Compensatory and Contingency Financing Facility (IMF)
CFA	Communauté financière africaine
CFE	Compensatory Financing Facility (IMF)
CGIAR	Consultative Group on International Agricultural Research
CIMMYT	International Maize and Wheat Improvement Centre
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement
CIS	Commonwealth of Independent States
COMTRADE	United Nations External Trade Statistics Database
CPI	consumer price index
DAC	Development Assistance Committee (of OECD)
DALY	disability-adjusted life year
DDO	deferred drawdown option (World Bank)
EAP	Enhanced Access Policy (IMF)
EBRD	European Bank for Reconstruction and Development
ECA	Economic Commission for Africa
ECB	European Central Bank
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ECOWAS	Economic Community of West African States
EFF	Extended Fund Facility (IMF)
ESAF	Enhanced Structural Adjustment Facility (IMF)
ESCAP	Economic and Social Commission for Asia and the Pacific
ESP	electricity service provider
EU	European Union
EURIBOR	Euro Interbank Offered Rate
Eurostat	Statistical Office of the European Communities
FAO	Food and Agriculture Organization of the United Nations
FATF	Financial Action Task Force on Money Laundering
FDI	foreign direct investment
FERC	Federal Energy Regulatory Commission (United States of America)
f.o.b.	free on board
GAAP	Generally Accepted Accounting Principles
GDP	gross domestic product
GER	gross enrolment ratio

GM	genetic modification	OECD	Organisation for Economic Cooperation and Development
GMO	genetically modified organism	OPEC	Organization of the Petroleum Exporting Countries
GNI	gross national income	pb	per barrel
GNP	gross national product	PC	personal computer
GSP	Generalized System of Preferences	ppp	purchasing power parity
GWP	gross world product	PRGF	Poverty Reduction and Growth Facility (IMF)
HICP	Harmonized Index of Consumer Prices	Project LINK	international collaborative research group for econometric modelling, coordinated jointly by the Development Policy Analysis Division of the United Nations Secretariat, and the University of Toronto
HIPC	heavily indebted poor countries	PRSP	Poverty Reduction Strategy Paper (IMF and World Bank)
HIV	human immunodeficiency virus	R&D	research and development
IADB	Inter-American Development Bank	REC	regional electricity company (Great Britain)
IAS	international accounting standards	SAARC	South Asian Association for Regional Cooperation
IASB	International Accounting Standards Board	SAF	Structural Adjustment Facility (IMF)
IBRD	International Bank for Reconstruction and Development	S&D	special and differential (treatment)
ICP	International Comparison Programme	SDRM	sovereign debt restructuring mechanism
ICT	information and communication technologies	SDRs	special drawing rights (IMF)
IDA	International Development Association	SFF	Supplementary Financing Facility (IMF)
IDRC	International Development Research Centre (Canada)	SITC	Standard International Trade Classification
IEA	International Energy Agency	SNA	System of National Accounts
IFI	international financial institution	SOE	State-owned enterprise
IMF	International Monetary Fund	SRF	Supplemental Reserve Facility (IMF)
IMFC	International Monetary and Financial Committee (IMF)	STF	Systemic Transformation Facility (IMF)
INTRASTAT	system of data collection for intra-EU trade	TRIPs	trade-related intellectual property rights
IOSCO	International Organization of Securities Commissions	UMTS	Universal Mobile Telecommunications System
IPO	initial public offering	UNCTAD	United Nations Conference on Trade and Development
IPP	independent power project	UN/DESA	Department of Economic and Social Affairs of the United Nations Secretariat
IPRs	intellectual property rights	UNDP	United Nations Development Programme
IRRI	International Rice Research Institute	UNESCO	United Nations Educational, Scientific and Cultural Organization
MCC	Microelectronics and Computer Technology Corporation (United States)	UNICEF	United Nations Children's Fund
MERCOSUR	Southern Cone Common Market	UNU	United Nations University
MFN	most-favoured nation	VAT	value-added tax
MWh	megawatt hour	VTE	vocational and technical education
NARI	national agricultural research institution	WAMZ	West African Monetary Zone
NATO	North Atlantic Treaty Organization	WARDA	West Africa Rice Development Association
NBER	National Bureau of Economic Research (Cambridge, Massachusetts)	WHO	World Health Organization
NEPAD	New Partnership for Africa's Development	WIDER	World Institute for Development Economics Research
NIE	newly industrialized economy		
NPL	non-performing loan		
NPV	net present value		
NTB	non-tariff barrier		
ODA	official development assistance		

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The term "country" as used in the text of this report also refers, as appropriate, to territories or areas.

For analytical purposes, the following country groupings and sub-groupings have been used:^a

Developed economies (developed market economies):

Europe, excluding the European transition economies
Canada and the United States of America
Japan, Australia and New Zealand.

Major developed economies (the Group of Seven):

Canada, France, Germany, Italy, Japan, United Kingdom of Great Britain and Northern Ireland, United States of America.

European Union:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom of Great Britain and Northern Ireland.

Economies in transition:

Central and Eastern European transition economies (CEETEs, sometimes contracted to "Eastern Europe"):

Albania, Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia and successor States of the Socialist Federal Republic of Yugoslavia, namely, Bosnia and Herzegovina, Croatia, Slovenia, the former Yugoslav Republic of Macedonia, Yugoslavia.

Baltic States

Estonia, Latvia and Lithuania.

Commonwealth of Independent States (CIS)

Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

Developing economies:

Africa

Asia and the Pacific (excluding Japan, Australia, New Zealand and the member States of CIS in Asia)

Latin America and the Caribbean.

Sub-groupings of Asia and the Pacific:

Western Asia plus Islamic Republic of Iran (commonly contracted to "Western Asia"):

Bahrain, Cyprus, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen.

Eastern and Southern Asia:

All other developing economies in Asia and the Pacific (including China, unless listed separately). This group has in some cases been subdivided into:

China

South Asia: Bangladesh, India, Nepal, Pakistan, Sri Lanka
East Asia: all other developing economies in Asia and the Pacific.

Sub-grouping of Africa:

Sub-Saharan Africa, excluding Nigeria and South Africa (commonly contracted to "sub-Saharan Africa"):

All of Africa except Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, Nigeria, South Africa, Tunisia.

For particular analyses, developing countries have been subdivided into the following groups:

Net-creditor countries:

Brunei Darussalam, Kuwait, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, Singapore, Taiwan Province of China, United Arab Emirates.

Net-debtor countries:

All other developing countries.

Fuel-exporting countries:

Algeria, Angola, Bahrain, Bolivia, Brunei Darussalam, Cameroon, Colombia, Congo, Ecuador, Egypt, Gabon, Indonesia, Iran (Islamic Republic of), Iraq, Kuwait, Libyan Arab Jamahiriya, Mexico, Nigeria, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Trinidad and Tobago, United Arab Emirates, Venezuela, Viet Nam.

Fuel-importing countries:

All other developing countries.

Least developed countries:

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo (formerly Zaire), Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zambia.

The designation of country groups in the text and the tables is intended solely for statistical or analytical convenience and does not necessarily express a judgement about the stage reached by a particular country or area in the development process.

^a Names and composition of geographical areas follow those of "Standard country or area codes for statistical use" (ST/ESA/STAT/SER.M/49/Rev.3), with one exception, namely, Western Asia, which in the *Survey* includes the Islamic Republic of Iran (owing to the large role of the petroleum sector in its economy) and excludes the transition economies of the region. Also, "Eastern Europe", as used in this *Survey*, is a contraction of "Central and Eastern Europe"; thus the composition of the region designated by the term differs from that of the strictly geographical grouping.

PART ONE

STATE
OF THE
WORLD
ECONOMY

I THE WORLD ECONOMY IN 2002

In 2001, the world economy suffered its largest setback in a decade, with gross world product (GWP) increasing by only 1.3 per cent after growth of 4 per cent in 2000. Almost all countries grew less rapidly than in 2000 and the number of developing countries experiencing a decline in output per capita returned to the levels prevailing in the aftermath of the Asian crisis.

The slowdown began in the United States of America with the bursting of two “bubbles” related to the information and communication technologies (ICT) sector—one in the real economy and the other in the equity market. The slowdown was quickly transmitted around the world through a decline in international trade—the first in almost two decades. The terrorist attacks of 11 September 2001 briefly exacerbated the situation but recovery in the United States began before the end of 2001.

The world economy is forecast to grow by less than 2 per cent in 2002, with the momentum of the rebound pushing global growth to above 3 per cent in 2003. Whereas the slowdown was rapid and quickly embraced many countries, the recovery is expected to be both slow and less synchronized among economies. Only a modest recovery is expected in the developed countries in 2002, while the economies in transition are forecast to experience a further deceleration. Among the developing countries, China and India were able to largely maintain their growth in 2001 and are expected to continue to do so in 2002 and 2003, but the majority are not expected to return until late in 2003 to the average rate of growth they had achieved in the years prior to the Asian crisis.

Despite the inhospitable short-term economic conditions for developing countries and economies in transition, important new foundations laid in 2001 and early 2002 offer the prospect of enhanced international development cooperation over the medium term. In addition to addressing the short-term risks to the global economic recovery, policy makers worldwide should initiate actions to ensure that the Doha Development Agenda and the Monterrey Consensus of the International Conference on Financing for Development¹ are fully implemented.

FRAGILITIES AND RESILIENCE IN THE WORLD ECONOMY

The pervasive global slowdown in 2001 pointed to fragilities in the world economy, while the brevity of the downturn highlights some of its resilience. Some of the factors that contributed to the slowdown have abated or reversed their

¹ *Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002* (United Nations publication, Sales No. E.02.II.A.7), chap. I, resolution 1, annex.

Table I.1.
GROWTH OF WORLD OUTPUT AND TRADE, 1993-2003

Annual percentage change											
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b	2003 ^b
World output^c	1.4	3.0	2.7	3.2	3.5	2.2	2.9	4.0	1.3	1¼	3¼
<i>of which:</i>											
Developed economies	0.9	2.9	2.3	2.7	3.0	2.5	2.8	3.4	1.0	1¼	2¼
Economies in transition	-6.7	-7.2	-0.6	-0.1	2.2	-0.7	3.0	6.3	4.4	3½	4¼
Developing economies	5.2	5.6	5.0	5.7	5.4	1.6	3.5	5.8	2.0	3¼	5
World trade	4.6	10.5	8.6	5.5	9.2	3.3	5.2	12.3	-0.9	2¼	6
Memorandum items:											
World											
Number of countries with rising per capita output	66	103	111	121	120	101	101	120	105	..	..
Number of countries in sample	145	145	145	145	145	145	145	145	145	..	..
Developing economies											
Number of countries with rising per capita output	52	68	74	80	76	59	57	70	58	..	..
Number of countries in sample	95	95	95	95	95	95	95	95	95	..	..
World output growth with PPP-based weights ^d	1.7	3.6	3.4	3.9	4.1	2.6	3.4	4.6	2.2	2¼	3½

Source: Department of Economic and Social Affairs of the United Nations Secretariat (UN/DESA).

Note: Two dots (..) indicate that data are not available.

^a Partly estimated.

^b Forecast, based in part on Project LINK, an international collaborative research group for econometric modelling, coordinated jointly by the Development Policy Analysis Division of the United Nations Secretariat, and the University of Toronto.

^c Calculated as a weighted average of individual country growth rates of gross domestic product (GDP), where weights are based on GDP in 1995 prices and exchange rates.

^d Employing an alternative scheme for weighting national growth rates of GDP, based on purchasing power parity (PPP) conversions of national currency GDP into international dollars.

course, leading to the recovery in 2002 and 2003, while others will continue to have a dampening effect. Their combined impact is unlikely to produce a recovery that is comparable to the slowdown in magnitude, speed or spread.

Synchronicity in the world economy and dependency on the economy of the United States of America

Two salient features of recent years have been the increased synchronicity among the world's economies and the greater dependency of global economic growth on the economic strength of the United States of America. Given its large size, the economy of the United States has played an important role in global economic developments since the Second World War, but the dependency of world economic growth on the business cycles of the United States, and on those of the United States alone, increased in the late 1990s. This can be largely explained by the increasing share of the United States in world trade.

During the period 1996-2000, the growth of United States imports exceeded the growth of world trade by about 3½ percentage points annually. As a result, the share of world exports destined for the United States increased from 14.8 per cent in 1995 to 18.6 per cent in 2000. The share of exports from developing economies to the United States increased from 22 per cent in 1990 to almost 28 per cent in 2000. Other factors, such as linkages through capital flows, the major role of United States markets in international finance, the technological lead of many United States firms, and the increased global correlation in business sentiments, have also enhanced the role of the United States in the world economy.

Following the 1997-1998 Asian financial crises, strong import demand from the United States was almost the sole force pulling many crisis-affected developing and transition economies from their recessions. Particularly since that time, the United States has been the “single engine” for global economic growth. This became more apparent during 2000-2001 when the engine stalled. The shift from growth of over 13 per cent in United States imports in 2000 to a decline of 3 per cent in 2001 was a major factor in the global slowdown.

In previous global economic cycles, a slowdown in the United States would usually be accompanied by economic strength in Europe or Japan or both. In recent years, however, none of the other major economies has replaced the United States or shared its role of supporting global growth.

The increased synchronicity in the 2001 global economic downturn among many countries, particularly major developed economies, was mainly attributable to a series of common shocks, including an increase in oil prices, the consequences of earlier monetary tightening, the bursting of the information and communication technologies (ICT) bubble both in equity markets and in capital spending, and the September terrorist attacks. The increased global economic integration of the 1990s also contributed to the synchronicity: the increase in the volume of trade and financial flows in relation to output amplified the effects of the common shocks; regional integration and the growth of transnational corporations have fostered intra-firm trade and global production networks, directly enhancing ties at the firm level; and the use of ICT has also facilitated the development of increased interconnections between firms in different countries.

The experience of the world economy in the past few years has highlighted the instability associated with increased global synchronicity and the growing dependency on the economy of the United States. Since the economic growth and stability of the United States have significant implications for many other economies, economic policy makers in the United States are confronted with international as well as domestic responsibilities. At the same time, it is in the self-interest of other developed countries to adopt policies that are growth-oriented and that will also enable their economies to make a greater contribution to global economic expansion. In addition, international policy consistency and coordination, common global economic monitoring, and information-sharing become more imperative than ever. A transition from a “single-engine” world economy to multipolar and more balanced global economic growth is a challenge for policy makers worldwide and is crucial not only to sustaining the current recovery but also to ensuring robust growth in the long run.

Steadying effect of consumer demand

In many countries, consumer spending, the largest component of aggregate demand, remained relatively strong in 2001, largely buoyed by growth in incomes in the preceding period but also sustained by policy stimuli in some cases. This was particularly the case in the United States where low interest rates enabled automobile manufacturers to offer special incentives to consumers. This strengthened demand in a major industry that usually behaves in a strong procyclical manner. Although consumer confidence was severely jolted by the terrorist attacks, it recovered a large part of this loss relatively quickly. In Japan, however, consumer spending has remained consistently weak, depressed by the deflationary spiral in the economy: consumers are reluctant to spend if they believe prices will be lower in future.

Encouragingly, domestic demand also showed strength in many developing countries and particularly in economies in transition. This reflected the generally improved economic conditions in these countries, including the high growth of the previous year.

Consumer demand is unlikely to provide the same support to the recovery in the near term. The lagged effects of reduced overall growth and higher unemployment will muffle consumer spending around the world. In the developed countries, a negative wealth effect from lower equity prices will compound the problem and this will be aggravated even further in countries where there is a tightening of macroeconomic policy.

Setbacks in the ICT sector, equity markets and investment

In a sharp contrast with the resilient household sector, the corporate sector was a major dragging force in many economies in 2001 and its weakness continues to pose uncertainties for the strength and sustainability of the global recovery in 2002.

The weakness in the business sector in 2000 and 2001 embodied a persistent decline in corporate profits, a precipitate fall in equity prices, a protracted cut in capital spending, and a sharp drop in industrial production. All these developments originated in the ICT sector, starting in the United States but then spreading rapidly to the rest of the world, and were triggered by the bursting of a financial and investment “bubble” that had developed in this sector in the late 1990s.

These factors have proved to be highly correlated in their development and had not improved significantly by mid-2002, suggesting the lack of an important element of dynamism in the global recovery, at least for that year. For example, despite improved general economic indicators, indices in most world equity markets in the first half of 2002 continued their decline of the previous two years. Although these markets had recouped a large part of the declines caused by the September terrorist attacks, concern about accounting practices, the intrinsic value of some stocks, corporate governance and the prospects for corporate profits led to another wave of selling in many stock markets in the second quarter of 2002, particularly in developed countries. The depressed state of equity markets suggests a lacklustre outlook for the growth of both consumer spending and business investment spending—the former because of wealth effects and the latter because of the roles of the equity market both as a

benchmark for the opportunity cost of investment and as a direct source of financing.

Meanwhile, corporate profits remained weak in the first half of 2002 and capital spending continued to be cautious. The modest rebound in the demand for semiconductors and other ICT products in the first half of 2002 may signal a turnaround in part of the sector, but this does not imply a full recovery of the whole sector. A return to the high levels of ICT-related spending of the late 1990s is unlikely in the short term, because it requires not only a recovery of profits but also another major wave of ICT innovation, which has not yet appeared on the horizon.

Although another boom in the ICT sector seems unlikely to serve as the driving force for recovery in the near future, the application of ICT in other sectors probably contributed to the short duration of the downturn in the developed economies. This view is supported by preliminary data that suggest that the higher rate of productivity growth that developed in the United States in the second half of the 1990s persisted during the slowdown. Increasing the quantity and timeliness of information enabled business managers to act more promptly as market conditions changed, reducing the need for larger, more disruptive adjustments at a later date. Although inventory adjustment was an important element of the latest slowdown, the use of ICT probably reduced the magnitude and duration of this component of the cycle. Additionally, the use of innovative financing techniques has resulted in a greater dispersion of business risk, reducing the transmission of difficulties in the real sector to the financial sector and their further damaging knock-on effects. These effects are likely to be durable, proving as beneficial in the upturn as in the downturn. Over the longer term, the advantages of the application of ICT will not only continue to contribute to higher productivity growth in the developed countries but also become more widely spread, thereby contributing to global growth and development.

The vicissitudes of international trade

Throughout the 1990s, world trade grew faster than world output and was an important factor supporting economic growth, particularly in a number of developing countries in East Asia. In 2001, this stimulus was lost as world trade slowed. The deceleration was aggravated by the disruptions caused by the terrorist attacks of 11 September, including their deleterious impact on confidence, an escalation in insurance and security costs, and major cutbacks in tourism, air travel and other traded services. After growth of over 12 per cent in 2000, the volume of world merchandise exports declined by about 1 per cent in 2001—the first fall in almost two decades (see table 1.1).

The deepening and widening of global economic integration since the early 1990s, particularly through trade, have benefited most countries, including many developing countries and economies in transition. However, this increased international economic interaction has raised, to varying degrees, these countries' dependence on the buoyancy of the international economic environment. For example, economic growth in some developing countries, notably those in East Asia, has become increasingly dependent on their exports of manufactured goods to the major developed economies. In 2001, this increased dependence on international trade not only magnified the conven-

tional multiplier effects of the decline in export earnings within individual economies but also amplified its spread to other trading partners, causing the slowdown in major developed market economies to be rapidly propagated throughout the world. The developing countries were particularly adversely affected, with a 2.7 per cent decline in their volume of trade.

In addition to a lack of growth in the volume of exports, many of their prices declined because of reduced demand. The slowdown had its conventional adverse cyclical effect on the prices of primary commodities, reinforcing the downward trend in prices that has long characterized these markets but that had assumed new momentum from the mid-1990s. The downward drift in primary commodity prices throughout 2001, particularly in the aftermath of the 11 September attacks, had particularly negative effects on many of the world's poorest countries. There were also falls in the prices of some manufactured goods, particularly in the ICT sector, in 2001, to the detriment of a number of the more advanced developing countries. Overall, the developing countries experienced a decline of over 6 per cent in export revenues in 2001.

The escalation of oil prices in 1999 and 2000 was one of the factors contributing to the economic slowdown in 2001, but the subsequent easing of prices removed this as a potential restraint on the recovery. Oil prices continued to ease in early 2002 and, after a brief and limited surge prompted by the escalation of violence in the Middle East, had fallen back to about \$23 per barrel, some 30 per cent below the peak in 2000. Based on the underlying supply and demand situation, oil prices are not expected to change significantly, so that their effect on the recovery should be neutral.

The volume of world trade is expected to increase in conjunction with economic activity in the major developed countries, but its growth for 2002 is forecast to be only 2¼ per cent, with most of the acceleration taking place in the second half of the year. Tourism and trade in other services have also begun to rebound from the setback caused by the attacks of 11 September but remain anaemic. The international prices of most non-oil primary commodities rebounded somewhat in the spring of 2002 and the near-term outlook is for a modest increase in the prices of most of these commodities, as global demand continues to firm. Much of the upswing in prices will be cyclical, however, rather than secular, and the prices of most primary commodities are unlikely to regain the ground lost over the past few years. Overall, therefore, there is expected to be some improvement in international trade in 2002 but it is not expected to regain its momentum of the 1990s until the end of 2003.

Hesitant financial flows to developing countries

Because of heightened uncertainties and the reduced prospects of profitable opportunities in a slowing world economy, private capital flows to developing countries declined in 2001. Foreign direct investment (FDI), which had been largely immune to earlier setbacks remained the principal external source of finance for developing countries and economies in transition. Given the overall economic outlook, total private capital flows to these countries are not likely to recover until the second half of 2002 and then only marginally, with some further strengthening in 2003.

Following upward pressure on the “spreads” of bond yields for most developing and transition economies in the wake of the terrorist attacks of 11 September, the cost of private external financing for the overwhelming majority of these countries resumed its decline and was lower in early 2002 than a year earlier. On the other hand, Argentina saw its cost of external financing soar prior to its default. The lack of contagion across financial markets offers a notable point of contrast between the global economic slowdown of 2001 and the fallout from the Asian and Russian financial crises of 1997-1998. The increasing ability and willingness of financial agents to differentiate among borrowers and instruments are an encouraging aspect of otherwise limited prospects for a resurgence of private capital flows to developing countries in the near term.

Official financial flows to developing countries increased in 2001. This was mainly a result of large disbursements by the International Monetary Fund (IMF) to Argentina, Brazil and Turkey. Looking ahead, the downward trend in official development assistance (ODA) flows to developing countries seems likely to be reversed as a number of developed countries have announced increases in their commitments. In addition, a number of low-income developing countries are beginning to benefit from debt-servicing relief under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative. However, there is increasingly widespread recognition that the debt relief currently being provided remains inadequate for achieving a sustainable debt situation in some of these countries.

The role of counter-cyclical policies

Benign inflation allowed interest rates in most developed economies to be lowered substantially during 2001, with real interest rates reaching nearly zero in some countries. Central banks were particularly prompt in making further reductions in interest rates in response to the heightened uncertainties and the anticipated further global economic deterioration resulting from the 11 September attacks. The Federal Reserve Board of the United States cut its short-term interest rate on 11 occasions in 2001, reducing it to its lowest level in 40 years. The European Central Bank (ECB) was less aggressive because of fears that lower interest rates would compound the difficulty of reducing core inflation in the euro area to the target rate of 2 per cent. The Bank of Japan was even more constrained: because they were already zero, nominal short-term interest rates could not be reduced, causing unconventional means of increasing liquidity to be used instead.

The monetary policy response to the recovery is more differentiated, both in its magnitude and in its application over time. A few central banks (such as those of Australia, Canada, New Zealand and Sweden) raised policy interest rates in early 2002, but monetary policy on the whole is expected to remain mildly stimulatory during the year, with only a gradual tightening expected in the second half of 2002 as the recovery gains momentum. Overall, this widespread favourable monetary policy environment should continue to stimulate the nascent economic recovery, although the persistent upward drift in core inflation in a number of Western European economies may prompt some central banks to consider tightening policy.

Developed countries also adopted a variety of fiscal stimuli in 2001, with some reducing taxes and others raising expenditures. The stimulus was strongest in the United States, where the combination of tax cuts, increases in spending on military and homeland security, and a rise in other expenditures boosted GDP by more than 1 percentage point in the fourth quarter of 2001. In Western Europe, fiscal stimuli were constrained by fears that more expansionary policy would lead to budget deficits that were inconsistent with commitments under the Maastricht Treaty on European Union. Nevertheless, some discretionary spending was maintained despite earlier commitments to offset tax cuts with spending reductions. More importantly, automatic stabilizers were allowed to run their full course in the European Union (EU) and their beneficial impact proved to be larger than foreseen. In Japan, fiscal policy became restrictive in 2001 owing to concern about increasing the already high level of public debt.

The policy stimuli adopted by many developed countries in 2001 played an important role in reducing the depth and duration of the global economic slowdown and launching the recovery. Maintaining a cautiously stimulative policy environment is equally important for sustaining and strengthening the recovery. In respect of considering tightening monetary policy, the risks posed by higher, but still moderate, inflation will have to be weighed against the risk of damaging the recovery, particularly since there is less room for stimulative fiscal measures in 2002 and beyond. All the major developed economies witnessed a deterioration in their fiscal balances during 2001 and this will limit their ability to apply further fiscal stimuli. The United States fiscal position has moved from surplus to deficit and some economies in the EU have been at or near the deficit threshold of 3 per cent of GDP imposed by the Stability and Growth Pact. Other EU countries have breached the trajectory for reaching budget balance by 2004, as required by the EU policy-concertation framework, and the position of EU is that “discretionary (fiscal) policy should be confined to critical country specific shocks”.² Absent an unforeseen improvement in inflation or fiscal deficits, the guiding principle for monetary policy in ECB and the commitments under the Stability and Growth Pact severely constrain the additional room for policy stimulus in most of Western Europe.

In developing countries and economies in transition, government actions to counter the slowdown were far less homogeneous, as a plethora of factors constrain the scope for policy manoeuvre. In several of these countries, monetary policy has been targeted at either the exchange rate or inflation, leaving little or no room for counter-cyclical actions. Similarly, fiscal stimuli were inhibited in a large number of these countries because budget deficits were already large, either on account of diminishing revenues from lower commodity prices (as in many African countries) or because of the public debt accumulated in an effort to counter the setbacks of the 1997-1998 financial crises (for example, in Asia and Latin America). A commitment to fiscal consolidation, either in response to pressures from global capital markets or as required under the terms of policy-framework agreements with the international financial institutions (IFIs), has precluded stimulatory measures in many cases. Unlike the developed countries, very few of these economies have been able to enact monetary easing and fiscal stimuli simultaneously. Of those few, some could adopt either a stimulatory fiscal policy combined with tight monetary policy or a monetary easing accompanied by fiscal austerity.

² *European Economy: Public Finances in EMU*, 2002, No. 3 (2002), pp. 93ff.

Most of these few countries with room for policy manoeuvre were in East Asia. In such cases, monetary policy was relaxed and such additional expansionary measures as tax cuts, increases in public investment expenditures, and pay raises for civil servants were introduced in some countries. These measures are expected to continue to support domestic demand in these countries in 2002.

Policy interest rates in most other developing countries and economies in transition continue to be substantially higher than those in the major developed countries, even after allowance is made for inflation differentials. Inflation itself is far lower than historical norms in most of these countries and, in many cases, does not pose an immediate threat to macroeconomic stability. While the room for fiscal expansion remains limited, some of these countries should be in a position to provide an impetus to domestic economic activity by lowering interest rates in 2002.

Financial fragilities in the global economy

The chain of causality between business cycles in the real economy and vicissitudes in financial markets is difficult to specify, but the two are closely linked: an economy-wide financial crisis—such as a bank run, a default on external debt, a currency crisis or some combination of these—inevitably leads to a contraction in output and income, while shocks to real aggregate demand or supply almost always aggravate tensions in the financial sector, possibly triggering a financial crisis if there is some fragility. With increasing economic and financial interdependence, this phenomenon has become internationalized and potentially global in scope.

In 1997-1998, the financial crises in a number of developing and transition economies led to a substantial decline in world economic growth. The more severe and pervasive global downturn in 2000-2001 was largely attributable to problems in both the real and the financial sectors: a decline in business investment and a supply-side shock in the oil market were accompanied by the collapse of financial bubbles in equity markets. Numerous individuals and small enterprises subsequently suffered financial losses or went bankrupt, but this did not pose a systemic threat to the financial sector. A small number of large firms and a limited number of countries also faced acute financial difficulties but these were largely contained. Overall, the international financial system and most domestic financial systems weathered the slowdown and the associated financial shocks without a major crisis. This limited transmission and feedback to the financial sector, within both the developed and the developing countries and internationally, and was one of the factors that prevented a further worsening of the slowdown.

In early 2002, some observers regarded the limited international contagion effects of the Argentine debt crisis as a sign of improved strength in the international financial system. However, one reason why the Argentine default did not have large repercussions elsewhere was that it had long been anticipated. Second, the volume of outstanding bank loans and other short-term financial flows to developing countries has fallen every year since the Asian crisis; this has reduced the scope for financial contagion.

Nevertheless, the absence of an adequate system of crisis prevention and crisis resolution—as evidenced by the Argentine case—should be a source of con-

cern, about the soundness of the world's financial system. With the heavy dependence of many countries on external capital, the threat of further international debt crises remains. Furthermore, even in the absence of a crisis, the present international financial system places constraints on national development efforts. As indicated above, when confronted with an economic slowdown caused by external shocks (such as reduced export revenues and lower capital inflows), developing countries are constrained in their response, owing, for example, to the need to keep public sector debt within the limits considered sustainable by the international financial community.

With regard to domestic financial systems, banking reforms and financial restructuring in the economies affected by financial crises in the past few years are far from complete. It is also increasingly apparent that domestic financial fragility and unsound corporate governance are not confined to the developing countries and economies in transition. Issues surrounding the bankruptcy of Enron, formerly one of the largest companies in the United States, have triggered a crisis in confidence in the United States regarding a gamut of broader issues, including accounting practices, management ethics, conflicts of interest in financial analysis, and corporate governance. This crisis has exacerbated the already depressed equity markets in the United States and in some other countries, to the detriment of the real economy.

The second largest economy in the world, Japan, also continues to face a plethora of domestic financial problems. Its mounting public debt is already far higher than its GDP and this has deterred policy makers from introducing additional fiscal stimuli to address the recession. A more serious threat, however, lies in the high level of non-performing loans in the corporate and banking sectors. A vicious cycle of debt-deflation is being intensified in the economy as the weaknesses in both the financial sector and the real sector feed into each other. On the one hand, continued deflation increases the real burden of outstanding debt and depresses consumer demand, leading to an increase in bad loans, while, on the other hand, additional bad loans aggravate credit conditions for businesses and reduce asset prices, begetting further deflation. A further deterioration in the financial situation in the banking and corporate sectors remains a possibility. This would pose a systemic risk for the global financial system as a whole; the impact on world economic growth, particularly the growth of many developing economies in the region, would be substantial.

SYNCHRONOUS SLOWDOWN BUT SEQUENTIAL RECOVERY

In 2001, there were simultaneous periods of falling output in EU, Japan, the United States and several developing countries. This was the first such occurrence since the mid-1970s, when it had followed the universal oil shock of late 1973. For the developed countries, the slowdown in 2001 was sharp but brief and shallower than most previous decelerations. Growth of GDP for this group fell from over 3 per cent in 2000 to 1 per cent—slightly higher than during their previous slowdown in 1991. Within the group, only Japan and Malta registered negative growth for the year. Of the economies in transition, only the former Yugoslav Republic of Macedonia fell into this category, largely because of the civil disturbances during a good part of 2001, and growth for the group as a whole remained above 4 per cent.

The impact of the global economic downturn on developing countries was more substantial and widespread. The year-to-year deceleration in their growth—from 5.8 per cent in 2000 to 2.0 per cent in 2001—was as large as what had occurred in the year following the Asian financial crisis, but a larger number of countries were affected. Relatively few developing countries experienced substantial contractions and these were mostly on account of country-specific difficulties, as in Argentina ($-4\frac{1}{2}$ per cent), Iraq (-6 per cent), Turkey (-8 per cent) and Zimbabwe ($-7\frac{1}{2}$ per cent). However, more than a dozen other developing countries experienced a fall in their GDP for the year.

Of the 95 developing countries regularly monitored by the United Nations Secretariat, 37 experienced a decline in per capita output in 2001 (compared with 25 in 2000), and only 17, half the number of 2000, recorded an increase of more than 3 per cent³ (see table I.2). In terms of the number of poor people, more than half are in China and India and should have benefited from those countries' growth of over 7 per cent and 5 per cent, respectively, in 2001. If these two countries are excluded, more than one quarter of the 2.5 billion people living in the rest of the developing world were in countries where GDP per capita fell in 2001 and only one seventh lived in countries where the increase in GDP per capita exceeded 3 per cent. The number of least developed countries recording negative per capita growth fell in 2001, but only eight least developed countries, one less than in 2000, achieved growth in their per capita GDP of more than 3 per cent. These data suggest that, for most countries and people in the developing world, there was no progress in reducing poverty in 2001.

The data also point to the improving but mixed situation in sub-Saharan Africa. In 2001, there was a fall in the number of countries where output per capita declined and an increase in cases with a rise of over 3 per cent. The number of countries in each category was the same and each accounted for about one third of the population of the region. Broadly speaking, this indicates that, in 2001, the population of sub-Saharan Africa was divided roughly equally among those who lived in countries where per capita GDP was falling, those in countries where the increase was too small to make a meaningful difference to living standards, and those in countries where, if the year's progress was sustained over the medium term, some inroad could be made into alleviating poverty. This characterization highlights the challenge of meeting, within sub-Saharan Africa, the millennium development goals, notably that of reducing poverty by half by 2015.

For the past several years, the overwhelming majority of the developing countries and economies in transition have been successful in improving their macroeconomic policies and in implementing longer-term economic reforms. The setback to growth in these countries in 2001 originated externally and its magnitude was amplified by their increased participation in world trade. At the same time, the external environment limited the ability of most developing countries and economies in transition to react to the slowdown. This lack of room for policy manoeuvre will contribute to the slowness of the recovery in many developing countries and economies in transition and hence in the world economy at large.

³ This is an informal yardstick used by the United Nations Secretariat as the minimum necessary over the longer term to reduce poverty in a country.

Table I.2.
DEVELOPING COUNTRIES: FREQUENCY OF HIGH AND LOW GROWTH OF PER CAPITA OUTPUT, 1999-2002

	Number of countries monitored	Decline in GDP per capita				Growth of GDP per capita exceeding 3 per cent			
		1999	2000	2001 ^a	2002 ^b	1999	2000	2001 ^a	2002 ^b
Developing countries	95	Number of countries							
		38	25	37	30	26	34	17	12
<i>of which:</i>									
Latin America	24	12	6	13	9	6	7	1	0
Africa	38	14	15	9	8	9	7	10	7
Eastern and Southern Asia	18	2	1	7	3	9	13	4	5
Western Asia	15	10	3	8	10	2	7	2	0
Memorandum items:									
Least developed countries	41	17	17	12	11	12	9	8	6
Sub-Saharan Africa	31	12	14	9	6	6	5	9	7
Developing countries	95	Percentage of population							
		21.2	6.5	13.2	9.0	64.6	72.8	55.4	54.3
<i>of which:</i>									
Latin America	24	69.1	11.8	49.4	20.6	25.2	59.7	2.5	0.0
Africa	38	38.4	28.6	18.7	23.9	28.8	7.6	24.7	15.0
Eastern and Southern Asia	18	6.7	0.2	2.5	0.9	83.4	90.6	75.5	76.8
Western Asia	15	58.1	9.1	59.8	42.4	9.9	71.3	0.5	0.0
Memorandum items:									
Least developed countries	41	24.5	24.9	18.2	21.6	51.0	39.0	28.7	23.2
Sub-Saharan Africa	31	29.6	38.0	28.1	20.9	29.6	9.3	34.3	24.7

Source: UN/DESA, including population estimates and projections from *World Population Prospects: The 2000 Revision vol. I, Comprehensive Tables* and corrigendum (United Nations publication, Sales No. E.01.XIII.8 and Corr. 1).

^a Partly estimated.

^b Forecast.

Diversity in the recovery of developed market economies

Although the global economic downturn became synchronous, it was led by the **United States**. Its growth averaged only 1.2 per cent in 2001 and, while it did not meet the commonly used criterion for a recession,³ the economy can be considered to have suffered a “growth recession”, meaning a period of growth well below its potential. The slowdown was brief, but uncertainties regarding the strength, depth and durability of the recovery remain. Economic growth in the first quarter of 2002 was above 5 per cent, with brisk inventory replenishment, continued buoyancy in household demand and further gains in productivity. While the inventory replenishment that started in the fourth quarter of 2001 is anticipated to continue in the short term, a sustained economic recovery over a longer period remains contingent on a more durable increase in demand, buttressed by an improvement in corporate profits to boost capital

³ Many economists define a recession as two consecutive quarters of negative growth, although the Business Cycle Dating Committee (BCDC) of the National Bureau of Economic Research defines it as “a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail trade” (see *NBER Reporter*, fall 2001, p. 1). BCDC announced that, by that measure, a recession in the United States had commenced in March 2001, but the Committee has not yet officially dated the termination of this recession.

spending and increases in employment to support consumer demand. On the basis of prevailing policies and sentiment in the corporate sector and among households, the outlook is for growth of only 2½ per cent in 2002. There is likely to be some strengthening in the latter part of the year and into 2003, when growth for the year is forecast at 3½ per cent.

The deceleration in most economies of **Western Europe** from growth of about 3 per cent in 2000 to some 1.6 per cent in 2001 was less severe than in the United States and the recovery is also expected to be more tepid. The three largest economies in the euro area—France, Germany and Italy—registered a decline in GDP in the fourth quarter of 2001 and their anticipated growth rates for 2002—1½ per cent for France, 1 per cent for Germany and 1¼ per cent for Italy—underline the economic weakness in the euro zone. Macroeconomic policy in key countries is moderately stimulatory and there is expected to be an acceleration in economic activity during the second half of 2002 and into 2003. For the region as a whole, GDP is expected to grow by 1½ per cent in 2002, followed by 2¾ per cent in 2003.

Japan's economy shrank by 0.5 per cent in 2001 and a further decline of 1 per cent is expected in 2002, followed by growth of 1¾ per cent in 2003. After a drop in GDP of 4.9 per cent in the fourth quarter of 2001, the economy continued to slide in the early part of 2002, although some leading indicators point to a possible bottoming-out in the second quarter. While a rebound in exports could provide a cyclical lift and alleviate some of Japan's structural difficulties, the fragility of the financial sector, the large volume of non-performing loans, the high level of government debt, and rising unemployment will continue to inhibit an expansion in domestic demand.

Owing to its geographical proximity to, and its high economic dependence on, the United States economy, **Canada** is trailing that country's business cycle closely and its economic recovery is firming. **Australia and New Zealand** both largely avoided the global economic slowdown, as strengthened domestic demand offset some of the negative fallout of the external shocks. Growth in Australia is expected to accelerate slightly in 2002, but some moderation is expected in New Zealand.

Modest and stable growth in economies in transition

Growth in Poland, the largest economy in **Central and Eastern Europe**, fell from 4.0 per cent in 2000 to 1.1 per cent in 2001, but growth in the rest of the region averaged 3.9 per cent. Domestic demand was an important source of growth in many of these economies, propelled by policy stimuli and the cumulative effects of the structural reforms undertaken for over a decade. Many also achieved double-digit growth in their exports, reflecting a gain in their international competitiveness through both an improvement in the quality of their products and relatively low prices, in combination with a diversification of export markets. The anticipated economic recovery in Western Europe will provide support for these countries in the second half of 2002 and beyond. On the whole, however, circumstances in 2002 will be similar to those in 2001. Without Poland, for which the forecast is 1¼ per cent, growth of 3½ per cent is expected for the Central and Eastern European region in 2002.

The outlook for the economies of the **Commonwealth of Independent States (CIS)** remains positive. GDP for the group is expected to expand by 4¼

per cent in 2002, following 5.7 per cent growth in 2001. The higher prices of oil contributed to the improved economic growth in the Russian Federation in the past two years but, as in many other CIS countries, the determination to enact even controversial reforms played a role as well. The cumulative benefits of persisting with economic transformation, in spite of uneven progress and some temporary setbacks, are now being reaped in most of these countries. The robust economic performance of the Russian Federation in 2001 was pivotal for other CIS economies since exports to that country remain important for their growth. At the same time, firmer domestic demand in many of these countries is providing additional support for growth in the future.

The three **Baltic** economies sustained their economic expansion in 2001, avoiding being affected too negatively by the slowdown in their main trading partner. Weaker demand from Western Europe, with which they are increasingly linked economically, was partially offset by stronger trade ties with the CIS and Central and Eastern European economies. More importantly, firming domestic demand, including stronger investment, is increasingly underpinning the overall performance of these economies. Nevertheless, GDP growth of the group is expected to decelerate from 6.3 per cent in 2001 to 4 per cent in 2002, largely because of the absence of a significant improvement in the Western European economies until mid-2002. The expected deceleration in other economies in transition, notably the Russian Federation, will also constrain growth in the Baltic economies in the short term.

Gradual recovery from widespread setbacks to developing countries

Primarily because of the deteriorating international environment, in both trade and finance, GDP growth for developing countries as a group plummeted to only 2.0 per cent in 2001 from the 5.8 per cent achieved in 2000. These countries will benefit only gradually from the economic recovery under way in the United States and expected later in 2002 for Western Europe. The outlook is for 3¼ per cent growth in GDP for 2002, followed by 5 per cent in 2003.

Africa is forecast to grow by 2¾ per cent in 2002, slightly less than in 2001. Domestic sectors, which played a crucial role in offsetting some of the adverse external effects in 2001, should strengthen further. At the same time, many African economies that were unfavourably affected by the global slowdown in 2001 are expected to experience some improvement in the external economic environment in 2002. The modest recovery in the international prices of non-oil commodities should alleviate the predicament of the many African commodity-exporting countries. However, the anticipated rebound in the world economy is not expected to be sufficient to raise growth in Africa substantially in 2002.

A spectre of acute food shortages in a number of southern African countries emerged in early 2002 as a result of adverse weather conditions in some cases and political unrest in others. A food problem of such magnitude as seems likely to develop has not been experienced for several years and the international community has to ensure that this factor and its preoccupation with other issues do not delay its action to address this pressing humanitarian need.

After a downturn to 1.3 per cent growth in GDP in 2001, developing countries in **East Asia** (excluding China) are forecast to grow by 4½ per cent in

2002 and to strengthen further to 5¼ per cent growth in 2003. In 2001, the protracted and deep consolidation in worldwide ICT demand caused an outright contraction in some economies and near stagnation in others. The concentration of production and exports on ICT-related products, and the large trade shares with Japan and the United States, caused these economies to suffer the most among developing countries from the global economic downturn. Signs of a revival of prices for semiconductors and personal computer (PC)-related products emerged in early 2002, possibly signalling a turnaround in the global ICT market that is so crucial for the revival of many East Asian economies.

China grew by 7.3 per cent in 2001 as a rise in domestic demand, supported by expansionary policies, offset some of the weaknesses in the external sector. Continued policy stimuli, the momentum generated by the country's recent accession to the World Trade Organization, the preparations for the Olympic Games in 2008 and the economic development of the western parts of the country are expected to enable China to continue to achieve growth of about 7 per cent in 2002 and 2003.

Although the global economic slowdown left its mark on the countries in **South Asia**, GDP growth for the region dropped only from 5.0 per cent in 2000 to 4.6 per cent in 2001, and is expected to rebound to 5½ per cent in 2002. The slowdown in exports resulted in lacklustre growth in industrial production in several of these economies, but domestic demand remained strong. The heightened uncertainties in the aftermath of the September terrorist attacks and the subsequent turmoil in Afghanistan adversely affected economic activity in neighbouring countries through a drop in tourism, impediments to transportation, the cancellation of export orders, and large numbers of refugees. In early 2002, these difficulties were largely displaced by the consequences of increased military tension between India and Pakistan. Nevertheless, there were indications of an improvement in both external conditions and domestic sectors in many economies of the subregion.

The economic outlook for **Western Asia** has also been adversely affected by geopolitical and military factors. Following average growth of 6.3 per cent in 2000, output fell by 1.2 per cent in 2001, although some recovery—to 1¾ per cent—is forecast for 2002. Many oil-exporting countries should benefit from more stable oil prices, but the outlook for oil-importing countries in the region, other than Israel and Turkey, is for meagre economic growth in 2002. Reduced workers' remittances, especially from oil-exporting countries, further declines in tourism revenues, largely because of the Israeli-Palestinian conflict, and contracting regional trade flows are constraining growth.

Aggregate GDP for the economies of **Latin America and the Caribbean** registered virtually no growth in 2001, largely because of the external shocks to which many of these countries are particularly vulnerable. Most economies in Central America experienced a slowdown in exports and tourism revenues, whereas those in South America suffered from weak commodity prices and limited external financing. Political instability also impeded growth in a few countries. In 2002, the region is expected to grow by only ¼ per cent; excluding Argentina would raise this regional average to 2 per cent but even this is only slightly above the rate of population growth. As the adverse external conditions wane, the outlook for the region will brighten, but performance in a few countries may continue to deteriorate in the short run.

SHORT-TERM RISKS AND UNCERTAINTIES

The direct economic effects of the terrorist attacks of 11 September appear to have been less than widely feared, partially because of the prompt policy response. However, the attacks highlighted the sensitivity of the global economy and world development to conflict and political tensions in individual countries and regions. These interactions have since been underlined by the reignition of conflict in the Middle East and the increased military tension between India and Pakistan. The heightened state of conflict in the world in mid-2002 adds to the already high degree of uncertainty in the forecast of short-term economic prospects, as well as damages long-term development.

In addition to the effects on the region, the implications of the violence in the Middle East for the world economy are potentially profound, primarily because of the possible implications for the price of oil. When the conflict escalated in early April 2002, Iraq suspended oil exports for a month, with the possibility of a further extension if the conflict was not resolved. Oil prices climbed by more than 15 per cent in a week, but then eased back after major Arab oil-producing countries stated that they would not resort to an oil embargo. Iraq has since resumed shipments and the Russian Federation has announced that it will abandon, as of end-June 2002, its commitment to restricting oil exports. These actions should help ensure that international oil prices stay within the range anticipated for 2002 and 2003 (see box I.1), but higher oil prices cannot be completely ruled out. A sustained increase in the price of oil would lower GWP significantly; if the price was to stay at a high level for several months, another major slowdown in the major industrialized countries would be likely.

As indicated above, the high dependence of the global economy on the economic recovery of the United States itself poses risks. The relatively shallow downturn in the United States economy did not eliminate all the domestic imbalances accumulated over the previous business cycle. For example, equity prices, even though they are below their all-time highs, still substantially exceed historical benchmarks and remain volatile. Household saving rates have been very low for some time and private sector debt, of both businesses and consumers, still stands at historical highs. There is also a possibility of a bubble in real-estate markets, partially because of some movement of household assets out of the equity market. These domestic factors pose downside risks for the economic recovery in the United States, and thus for the global economic upturn.

Internationally, the exchange rate of the United States dollar had fallen modestly by the end of May 2002 and the country's external deficits, although somewhat diminished, remained large. The strong dollar and the United States recovery benefit the rest of the world but the latter implies a further widening of the deficits and if they persist, both will require an even larger correction, with even larger adverse effects, in the future. In the meantime, the risks of a sudden fall in the value of the dollar and of an abrupt adjustment in the trade imbalances among major economies remain.

In early 2002, the United States adopted some restrictive trade measures. A further rise in protectionism in the United States or elsewhere is a possibility. This would aggravate the damage to already weakened world trade, reducing its role in stimulating the recovery.

The economic situations in some other individual countries also pose risks to the world economy as a whole, but risks of lesser magnitude. As elaborated earlier, failure to remedy the financial problems in Japan could give rise to a major financial crisis in that country. Inasmuch as Japan is the world's second largest economy, this would have profound effects on the world economy, and particularly on the dynamism of the South-East Asia region—which otherwise is expected to play a key role in the recovery.

The debt crisis and the political turmoil in Argentina, with their potential for spillover into heightened economic and political instability in other countries of the region, also pose challenges for the world economy, but particularly for policy makers. Failure to resolve this crisis speedily and effectively is not only having further profound negative effects on the people of Argentina but is also damaging confidence in the ability of the world at large to manage the globalized economy for the benefit of all. At the present time, both this ability and universal confidence in it are sorely needed.

IMPLEMENTING THE NEW INTERNATIONAL DEVELOPMENT AGENDA

Notwithstanding the short-term economic challenges faced by policy makers in 2001 and early 2002, important progress in addressing longer-term policy issues in development was made during this period. Successful implementation of the agreements reached during the year would contribute to reducing some of the fragilities in the global economic system and alleviating some of the adverse effects of economic slowdowns such as that experienced in 2001.

Making trade development-friendly

At the Fourth Ministerial Conference of the World Trade Organization, held in Doha, Qatar, in November 2001, Governments agreed to a new programme of global trade negotiations which will give particular attention to the difficulties still confronting developing countries after the Uruguay Round of multilateral trade negotiations. This action was above all a recognition of the critical role of trade in development, with particular attention being given to the negative consequences of present arrangements, such as protectionism and subsidies in the developed countries, for the development possibilities of the developing countries.

The World Trade Organization has prepared a timetable for the negotiations that are necessary to translate into action the commitments made at Doha. It has also drawn up a comprehensive programme of technical assistance to assist developing countries, and particularly the least developed countries, to participate effectively in, and benefit from, trade negotiations. The successful completion of the Doha Development Agenda will require a high degree of political determination, particularly a willingness on the part of the developed countries to undertake the types of adjustment measures that developing countries have long been called upon to make in liberalizing their trade regimes.

The United States Africa Growth and Opportunities Act and the EU Everything but Arms initiative were important examples of recognition in 2001 of the importance of expanded trading opportunities for development in the

poorest countries. In 2002, however, the introduction of a revised scheme of agricultural subsidies by the United States signalled the continuation of a system that has negative consequences for many developing countries and that constitutes an important area for discussion under the Doha agenda. Previously, the imposition of safeguards on steel by the United States and the threats of retaliatory action by trading partners, although affecting relatively few developing countries, had already cast a pall over the international trading environment and over the prospects for a successful completion of the Doha programme. The slow economic growth in 2001 and 2002 raises the domestic pressure for increased protectionism in all countries. Not only should this be resisted but all countries should be looking for ways to reduce existing distortions to trade in accordance with the Doha Development Agenda. Although this applies particularly to the developed countries, the developing countries should also reduce trade barriers among themselves.

Strengthening partnerships for development

The International Conference on Financing for Development held in Monterrey, Mexico, in March 2002 marked a further advance in the international community's approach to development. The resulting Monterrey Consensus embodies a new spirit of partnership and mutual obligations between developed and developing countries in the macroeconomic and financial areas. It reaffirms the full acceptance by developing countries of their responsibility for their own development and emphasizes their need to pursue development-friendly domestic policies and institutional arrangements and to take measures that will maximize the financial resources for development purposes mobilized from domestic sources. It calls for actions by the developed countries, in response, in the areas of private financial flows, aid, trade, debt and global governance. Particular emphasis is given to the need for coherence in developed countries' policies regarding aid, trade and debt.

There is a mutual recognition that, within developing countries, both donors and recipients have to take additional measures to ensure that official resources are put to the most effective use in the quest for accelerated development and reduced poverty. As part of this effort to improve development effectiveness, it is agreed that there needs to be a shift towards greater developing-country "ownership". Effective ownership by recipient countries requires human and institutional capacities, good governance at all levels, and sound policies. Particular efforts will be needed by both developed and developing countries to effect the shift from donor conditionality to recipient ownership of development programmes.

At the regional level, the formulation of the New Programme for Africa's Development (NEPAD) is an important advance in the concept and practice of country ownership of development programmes. Its implementation will require not only a major effort on the part of all African leaders and their citizens but also a willingness on the part of the international community both to provide resources and to break with its conventional ways of addressing the challenges of development in Africa.

Reviving concessional financial flows

During 2000, Luxembourg became the fifth country to achieve the target for ODA of 0.7 per cent of donor gross national product (GNP), joining Denmark, Netherlands, Norway and Sweden, the four long-standing members of this group. In March 2002, EU and the United States announced future increases in ODA and various other countries, including individual member States of EU, have set benchmarks that will also result in future increases in ODA. However, it has been estimated that a doubling of ODA (equivalent to another \$50 billion approximately) is required in order to meet the millennium development goals. While the announced increases in ODA are encouraging, continued efforts will be required in order to raise ODA by the amount required in an equitable manner.

Along with increases in the volume of ODA, further efforts are required to ensure that such assistance is put to the most effective use. Donors can contribute importantly to this by improving their own operations and by complying with the Recommendation on Untying Aid to the Least Developed Countries adopted by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) in 2001. The former includes strengthening coordination and reducing duplication among their activities within developing countries, further harmonizing operational procedures to reduce their burden on recipient countries and moving from project assistance to programme support.

Addressing external debt

Their external debt situation continues to pose a threat to many developing countries. Of the 42 heavily indebted poor countries (HIPCs), no progress has been made towards arranging debt relief in 16 cases, mainly either because of ongoing conflict within the country or because the recent cessation of conflict means they are not in a position to undertake the necessary preparations. Special measures may be required to ensure that more countries, especially those emerging from conflict situations, qualify for relief under the HIPC Initiative as soon as possible. By late March 2002, 26 countries had reached the “decision point” in the enhanced HIPC Initiative,⁵ but only 5 moved on to the “completion point”. Additional measures need to be taken to enable eligible countries to reach the completion point as expeditiously as possible. In addition, it is becoming apparent that, in several cases, the amount of relief that is required to reduce debt to a sustainable level is higher than anticipated, often because lower commodity prices have reduced export earnings and growth. It is necessary to provide additional flexibility in the programme to ensure that it succeeds in reducing a country’s debt to a level that remains sustainable even when it is adversely affected by events beyond its control. Finally, the extent of debt relief is already being threatened by the low level of funding of the HIPC Trust Fund and by the fact that not all creditors are providing relief. Additional efforts are required to mobilize the resources necessary to implement the Initiative fully.

The crisis in Argentina forcefully underlines the inadequacies to date of international arrangements both to avoid international financial crises and to address them when they occur. Although many factors contributed to the crisis

⁵ See “Heavily Indebted Poor Countries (HIPC) Initiative: status of implementation” (Development Committee document DC2002-0009), report prepared by the staff of IMF and the World Bank, Washington, D.C., 14 April 2002.

in Argentina, it had been widely anticipated. Nevertheless, it was not averted and, several months after it erupted, there was no agreement on the actions that had to be taken. Not only has a domestic policy response not been formulated, but there are no agreed or orderly arrangements for a country such as Argentina to reach agreement with its private sector creditors on how to address its unserviceable external debt obligations. The resulting lack of external finance has contributed to the deep recession in Argentina and to the profound social costs being incurred by its people. These effects will inevitably percolate through to the other economies and peoples of the region to some extent.

Possible arrangements to deal with debt crises involving a multitude of private sector lenders, such as that in Argentina, are now under discussion. Agreement on this matter will come too late for Argentina where the urgent need is to reach agreement on arrangements to provide the financial resources that the country needs in order to address its economic crisis. At the same time, the magnitude of the Argentine crisis underscores the need for international agreement on arrangements to deal with such private sector debt crises.

Maintaining the momentum

The Doha and Monterrey conferences have provided a unifying backdrop to many discussions on development issues at the international level and have laid the foundations for the creation of an improved global partnership for development between developed and developing countries. Both set out agendas for the development of this partnership, referred to respectively as the Doha Development Agenda and “Staying engaged” (sect. III of the Monterrey Consensus). The challenge to the international community, national Governments, the private sector, civil society and all others concerned is to ensure that the new momentum that has characterized the development debate during the first years of the twenty-first century is maintained and translated into action. The successes achieved at these two conferences in 2001 and 2002 are but first steps and will evaporate if the work programmes that they established are not fully and effectively implemented and built upon.

II INTERNATIONAL TRADE AND FINANCE

The international economic environment failed to support growth in the world economy in 2001. The volume of world trade actually fell for the first time since 1982 (for comparison, trade growth averaged some 7 per cent per year in the 1990s). The fact that international prices of commodities declined, reaching historic lows in some cases, was especially difficult for many low-income commodity exporting countries. In addition, developing countries transferred almost \$150 billion of financial resources abroad, as net capital inflows were far less than net interest and other investment income payments for the fifth year in a row. Significant inflows of foreign direct investment (FDI) and access to international capital markets remained limited to a restricted number of countries. Official development assistance (ODA) declined once again, although overall official financial flows to developing countries increased, mainly owing to additional support by the International Monetary Fund (IMF) to certain middle-income developing countries in difficult situations.

Prospects for 2002 and 2003 are cautiously favourable. A recovery in world trade is under way, but it will be a modest one owing to sluggish world economic growth. Similarly, international prices of most commodities began to rise in the spring of 2002 and are expected to continue to improve as global demand continues to recover into 2003. External financing conditions for developing countries and economies in transition are likely to improve only marginally in 2002, possibly strengthening further in 2003. While the interest rates on lending declined in early 2002, borrowing costs remain high for several countries and will rise when interest rates increase in key-currency countries later this year and in 2003. On a more positive note, the outlook for ODA, a key financing modality for many low-income countries, improved as several developed countries announced their intention to increase their development assistance budget in the next few years. Moreover, the international policy agenda advanced with the adoption of the Doha Development Agenda by the Fourth Ministerial Conference of the World Trade Organization and the Monterrey Consensus¹ (see annex to the present chapter for the text thereof) by the International Conference on Financing for Development. Implementation challenges are however considerable and need to be urgently tackled.

¹ *Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002* (United Nations publication, Sales No. E.02.II.A.7), Chap. I, resolution 1, annex.

INTERNATIONAL TRADE

² Data refer to the average annual growth of export and import volumes.

International trade fell in 2001. After having expanded by over 12 per cent in volume terms in 2000, merchandise trade declined by 0.9 per cent in 2001, bringing an end to 18 years of uninterrupted trade expansion.² In United States dollars, the contraction was more pronounced, at 4 per cent, as the average prices of both manufactures and commodities fell during the year.

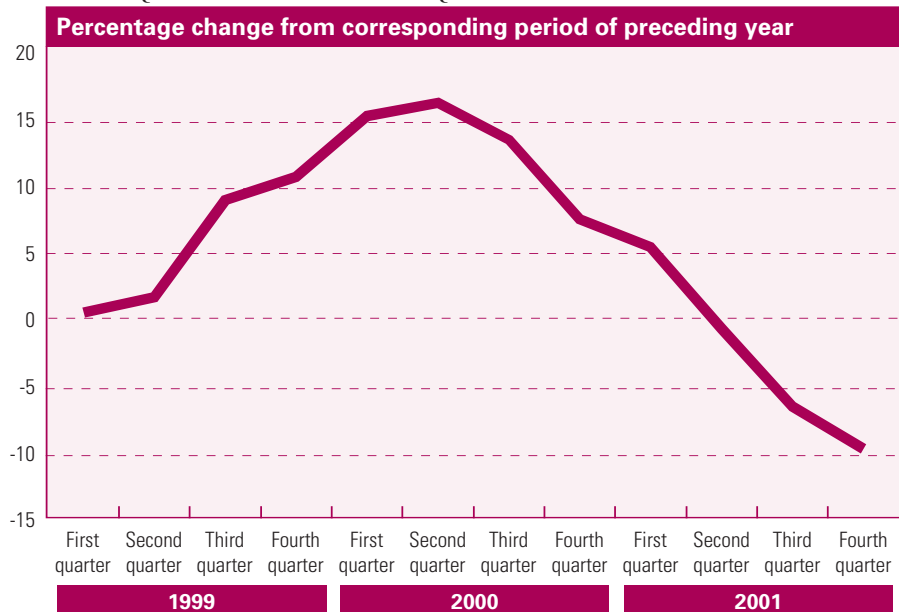
The outlook for 2002-2003 is cautiously positive. International trade should benefit from the turnaround in the world economy, particularly as the recovery gains momentum. However, as discussed in chapter I, the upturn in output is anticipated to be modest in 2002, only strengthening in 2003. Paralleling these forecasts, international trade is likely to grow by 2¼ per cent in 2002 and by 6 per cent in 2003, which is slightly below the average rate of growth during the period 1990-2001.

Main factors underlying the decline in trade

The increased synchronization of the world economies in the slowdown, in part due to growing economic integration, was an important factor behind the reversal in the growth of merchandise trade in 2001. Enhanced trade, investment and financial links led to a brisk expansion of global output and the volume of trade during the upturn of the world economy. However, it also resulted in a fast deceleration of trade as the world economy started to weaken, particularly as the economic slowdown intensified during the year (see figure II.1).

The United States of America had been a major driving force behind the growth in world output and trade since the Asian crisis, with its domestic mar-

Figure II.1.
GROWTH OF THE VALUE OF MERCHANDISE TRADE,
FIRST QUARTER 1999-FOURTH QUARTER 2001



Source: UN/DESA, based on IMF, *Direction of Trade Statistics*.

ket absorbing a large volume of goods produced in other countries and therefore supporting economic activity in countries where domestic demand had been sharply cut back or sluggish. With its economic slowdown, however, import demand declined in the United States,³ and negatively affected overall growth in international trade. The impact was particularly severe for countries with large exposure to the United States market.

As usual, changes in the rate of growth of the volume of trade in 2000 and 2001 were much more accentuated than the changes in the growth of gross world product (GWP). Some commentators have argued that this phenomenon has been in part due to changes in firms' production process. In many industries, firms have been locating different phases of production in different countries, and moving components among countries. As a result, international trade has expanded. However, with individual countries adding little value at each stage of the process, the net impact of such activities on individual countries' gross domestic product (GDP) has been smaller than the gross value of exports would suggest. Another (more important) factor is that GDP includes non-tradable as well as tradable goods and services.

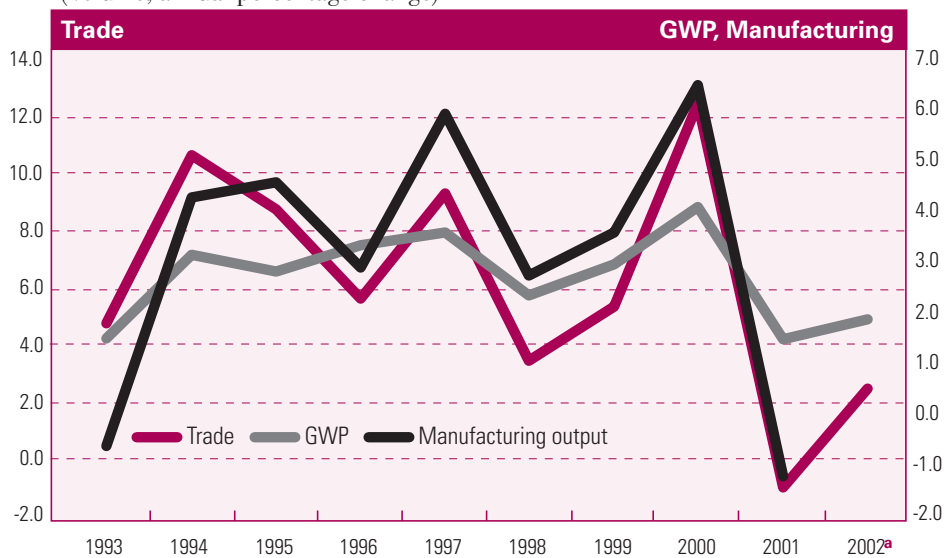
Manufactures are a major part of tradable goods and accounted for about 80 per cent of world merchandise trade in 2000-2001, thus one may expect manufacturing production and world trade to be correlated. Indeed, manufacturing suffered a much sharper slowdown than GWP in 2001, particularly in the Organisation for Economic Cooperation and Development (OECD) economies (see figure II.2). Figure II.3 shows disaggregated data for the volume of exports. Among the broad Standard International Trade Classification⁴ (SITC) categories, manufactures suffered the largest swing in the rate of growth from positive 13.4 to -1.5 per cent in 2001.

A major factor in the decline in the volume of trade in manufactures in 2001 was the sharp slowdown in the information and communication technologies

³ Based on a national accounts concept, United States imports of goods grew in real terms by about 13 per cent per year, on average, during the period 1997-2000 but contracted by 2.8 per cent in 2001. See United States Department of Commerce Bureau of Economic Analysis, "Gross domestic product: first quarter 2002 (advance)", available at <http://www.bea.gov>.

⁴ See *Standard International Trade Classification, Revision 3* and corrigenda, Statistical Papers, No. 34/Rev.3 (United Nations publication, Sales No. E.86.XVII.12 and Corr. 1, and 2).

Figure II.2.
GLOBAL MERCHANDISE TRADE, GROSS WORLD PRODUCT AND
MANUFACTURING PRODUCTION, 1993-2002
(Volume, annual percentage change)



Sources: UN/DESA and OECD.

Note: Manufacturing output refers to OECD member countries only.

^a Forecast.

⁵ The share increased from 8.8 per cent in 1990 to 15.2 per cent in 2000 (World Trade Organization, *International Trade Statistics 2001*, available at http://www.wto.org/english/res_e/statis_e/statis_e.htm).

⁶ Semiconductor Industry Association (<http://www.semichips.org>).

⁷ OECD, *OECD Economic Outlook* (preliminary ed.), vol. 71, April 2002.

⁸ The elimination of trade barriers and domestic policy distortions could raise the price of agricultural products by some 12 per cent. Among the benefits of such an increase, food aid needs of low-income countries would decline by 6 per cent, as higher world prices would encourage domestic production. See Mary E. Burfisher, ed., *Agriculture Policy Reform in the WTO: The Road Ahead*, Economic Research Service (ERS)/United States Department of Agriculture, Agricultural Economics Report, No. 802, May 2001 (<http://www.ers.usda.gov/publications/aer802>).

(ICT) industry. The growth in the demand for ICT products decelerated and the global consolidation of the technology sector entailed a contraction of investment in the sector. As a result, international trade in formerly very dynamic ICT products plunged. For example, exports of office machines and telecommunication equipment had nearly doubled their share in total merchandise exports between 1990 and 2000.⁵ Growth had been particularly strong in 1999 and 2000, with the value of exports of the sector expanding by 12 and 20 per cent respectively, thereby providing a major impetus to international trade during those years. Trade data at the industry level for 2001 are not yet available, but the value of semiconductor sales worldwide suffered a 30.6 per cent decline in 2001 (after having grown by over 35 per cent in 2000).⁶ These figures suggest an equally significant drop in trade of ICT products in 2001.

In all SITC groups except manufactures and fuels, trade expanded in 2001. Exports of food and raw materials, however, grew at a slower pace than in 2000, owing to the contraction in manufacturing, a major source of demand for raw materials. Sizeable stocks of some raw materials in importing countries also moderated the global demand for exports of these commodities. Trade in fuels declined in 2001 owing to lower demand resulting from the economic slowdown as well as production cuts in the major fuel exporting countries.

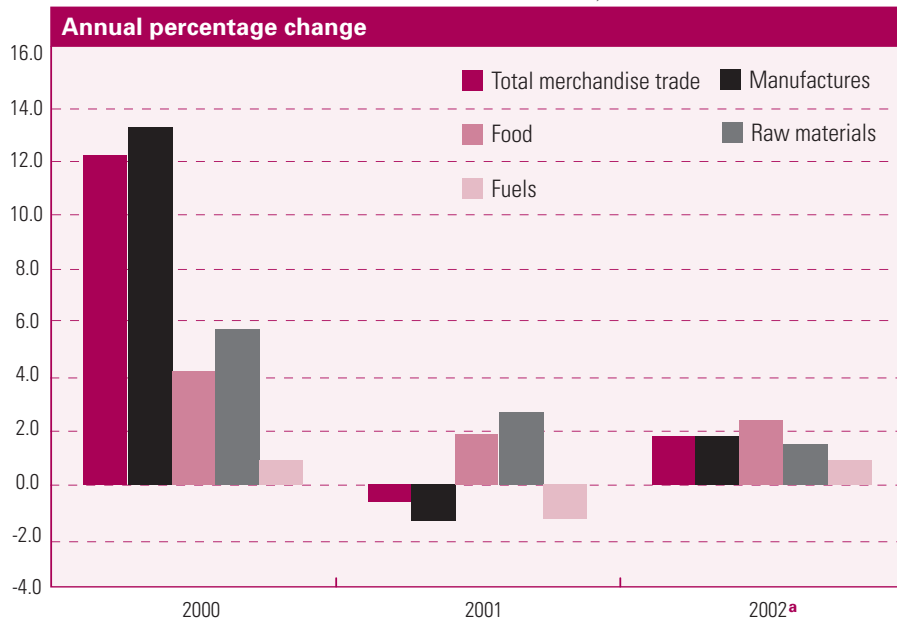
The terrorist attacks of 11 September 2001 had a negative impact on trade, largely on trade in services, such as air transportation and tourism (see chap. III). Merchandise trade was less affected, at least less than anticipated, after the initial impact of the attacks subsided. The fact that the United States airspace was closed for four days and security measures at the United States border increased, implied additional inspections and security costs, as well as significant delays in processing imports. The latter were disruptive for firms that rely on “just-in-time” inventory management methods and depend on international suppliers.⁷ Disruptions were also present elsewhere owing to higher insurance costs. Countries that border Afghanistan were a case in point (see below). Other factors mitigated these increased transaction costs, including lower oil prices in the weeks following the attacks. While the impact of the attacks on world trade was thus small or of short duration, it is not clear what the long-term consequences will be.

Manufacturing is anticipated to recover moderately in 2002 and will support international trade in the year. Growth in the volume of fuel exports will recover somewhat, as world oil demand is anticipated to grow marginally in 2002 (see table A.18). Trade in food is anticipated to grow by about 2¾ per cent in 2002. The high levels of tariffs and subsidies in many developed economies continue to constrain growth of trade in food and agricultural products. Support and protectionist measures have maintained closed markets in goods in which other producers—developing countries in particular—have a comparative advantage. As a result, demand for imported agricultural products is kept artificially low while domestic production expands, supported by subsidies, leading to oversupply and depressed world prices.⁸

Regional perspectives and outlook

At the country and regional levels, the main adverse impact on trade came from the developed countries, particularly the United States and, to a lesser

Figure II.3.
VOLUME OF GLOBAL MERCHANDISE TRADE, 2000-2002



Source: Project LINK.

Note: Food = SITC 0 and 1; raw materials = SITC 2 and 4; Fuels = SITC 3; and manufactures = SITC 5 to 9.

^a Forecast.

extent, Japan (see table A.13). Since the developed economies absorb about two thirds of world exports (see table A.14), lower import demand in these countries represented a major drag on trade growth in 2001.

The decline in business investment and the slowdown in the growth of consumer demand in the United States led to a sharp reversal in the rate of growth of import volumes, with negative consequences for its major trading partners. The volume of United States imports grew by some 15 per cent in 2000, but contracted by about 2 per cent in 2001. The sharp drop in United States imports, however, did little to reduce the external imbalance of the United States economy, as exports contracted almost 6 per cent after having grown by about 11 per cent in 2000. Besides the overall global slowdown, the strong United States dollar continued to discourage faster export growth by the United States. As a share of GDP, the United States current-account deficit dropped to 4.1 per cent in 2001 from 4.5 per cent in 2000 and reached \$423 billion in 2001 (see table A.20). This will ultimately limit the ability of the United States economy to continue to act as the main engine of growth and trade in the global economy so that, unless the other major economies play a more active role in supporting global economic activity, international trade will grow at more modest rates than prior to 2001. In the meantime, as discussed in chapter I, this large imbalance represents a serious downside risk to the world economy.

Japan's exports dropped by over 10 per cent in volume terms in 2001, as global demand for capital goods and ICT-related products tumbled. Imports contracted by some 4 per cent in 2001, as the Japanese economy re-entered a recession. Because exports suffered most, Japan's trade surplus declined by \$46 billion in 2001 (see table A.20). There was some recovery in Japan's exports in the first quarter of 2002, pulled by a revival of economic activity in

the United States and a few Asian economies. The export recovery is nevertheless expected to be modest in 2002. A further decline in imports is anticipated for 2002, reflecting the poor outlook for Japan's economy.

In contrast, the countries of Western Europe continued to experience positive—albeit much slower—trade growth. After having grown by 11 per cent in 2000, exports grew by some 2 per cent in 2001. Among the countries participating in the euro zone, export demand coming from countries outside the zone provided stronger support for export growth than demand coming from member countries, and this was probably due to the persistent weakness of the euro. Imports also decelerated fast in Western Europe, from 9.2 per cent in 2000 to 1.6 per cent in 2001. Trade is anticipated to grow by some 2 per cent in the region in 2002.

The economies in transition were an exception to the overall trends in international trade in 2001. The exports of Central and Eastern European economies continued to grow in real terms at a double-digit rate in 2001 (see table A.13). These countries have little exposure to the United States market (see table A.14) and to ICT products. More important, however, are the gains in industrial competitiveness and the shift to higher value added output by these economies as well as their higher degree of penetration into the European Union (EU) market, their main trading partner.⁹ At the same time, an increase in exports to Commonwealth of Independent States (CIS) countries partially compensated for falling import demand from EU later in the year. Since import demand by EU is expected to remain depressed, growth of the exports of Central and Eastern European economies will slow in 2002 and only in the second half of the year is some pickup expected. The strong growth of imports by Central and Eastern European economies in 2001 (16 per cent) will not be sustained, although in some countries, like Bulgaria, owing to the import of capital goods, and Romania, where energy demand has increased, imports may remain strong.

For the CIS economies, the volume of exports increased by 5.8 per cent in 2001 but the rate of growth of export revenues stagnated owing to lower commodity and oil prices. The growth in the volume of exports by the Russian Federation decelerated during the year, while the country experienced a surge in imports, which grew in real terms by 25 per cent. Strong demand from the Russian Federation, together with improved trade linkages within the region and real depreciation of many CIS currencies against the Russian rouble, supported export growth in other CIS countries. Import growth was also strong in Azerbaijan, Kazakhstan and Turkmenistan. With increased imports and lower export revenues, the current-account balances deteriorated during the year (see table A.21). Imports into the region are anticipated to continue to increase owing to expected robust domestic demand and the appreciation of the currencies of some countries; hence, current-account balances are likely to deteriorate further in 2002.

Among the three groups of countries analysed in the present *Survey*, the developing countries experienced the largest trade losses—both in value and in volume—in 2001. Their volume of trade underwent a contraction of 2.7 per cent, much greater than the fall in total world trade, while the value of their trade declined by 6.3 per cent. The fact that, for this group of economies as a whole, the trade surplus declined by some \$34 billion (see table A.22) put additional pressures on the balance of payments in some countries.

⁹ The share of Central and Eastern European economies in EU imports expanded from 2.4 per cent in 1993 to 4.3 per cent in 2001 (see IMF, *Direction of Trade Statistics Quarterly*, March 2002).

The volume of exports from Africa stagnated in 2001, and lower commodity prices led to a decline in their value. Exports of textiles and apparel increased in countries that could benefit from improved access to the United States market under provisions of the African Growth and Opportunity Act (AGOA). Thirty-five countries qualify for the AGOA programme but, as of April 2002, only 16 countries had taken advantage of the trade benefits since the programme was introduced in June 2000. The United States imported products valued at about \$7.6 billion from Africa under duty-free AGOA provisions in 2001¹⁰. Crude oil imports from Angola, Gabon and Nigeria constituted over 90 per cent of those imports. Nonetheless, there were also noticeable increases—albeit from a small base—in imports of apparel from Kenya, Lesotho, Madagascar and South Africa. For the region as a whole, exports are anticipated to recover somewhat in 2002, while imports will fall in real terms as oil exporters adjust their import demand to lower oil revenues.

The dollar value of exports from most East Asian economies (excluding China) contracted by more than 10 per cent in 2001, with both export volume and prices falling significantly. The contraction in ICT exports was particularly sharp and led the slowdown, reflecting the region's heavy exposure to ICT exports, the United States market and the extensive regional processing links. The upturn in the United States in the first quarter of 2002, the low inventory level (particularly in the ICT sector) and the rising prices of semiconductors and personal computers (PCs) suggest an export upturn later in 2002. As the restocking of depleted inventories in ICT markets speeds up and import orders for these products from the United States increase, the repercussions through the intraregional processing network should have amplifying effects on the region's exports. Looking further ahead, however, it is not clear how much demand for ICT products will grow once inventories are replenished. However, the trade created by the admission of China to the World Trade Organization (see box II.1), combined with a rebound in the major developed countries, will contribute to the growth of the region's exports. Imports are expected to recover owing to the rebound in domestic demand and in exports that have a high import content.

China's trade was also negatively affected by the global slowdown in 2001. Both exports and imports decelerated massively from the previous year. While the growth of exports, in value terms, dropped from 28 per cent in 2000 to less than 7 per cent in 2001, the growth of imports decelerated from 35 to 8 per cent. In real terms, exports grew by 7.7 per cent (after growth of 26 per cent in 2000), while the growth of imports dropped to 11 per cent in 2001. China's trade performance reflected, among other things, the country's efforts at diversifying its export markets. For example, Chinese exports to Africa, Latin America and the Russian Federation grew at double-digit rates in 2001, while the growth of exports to major industrialized countries decelerated. China's trade sector is expected to revive, but the trade surplus is likely to decline owing to strong import growth as a result of the lowering of tariffs following accession to the World Trade Organization.

In South Asia, the export deceleration was caused mainly by the sharp downturn in the United States and the September terrorist attacks. Nonetheless, in a number of countries (including Bangladesh, Nepal and Sri Lanka), supply-side disruptions, such as political unrest and internal conflict, were also

¹⁰ See United States Department of Commerce, International Trade Administration, *U.S.-African Trade Profile* (Washington, D. C., March 2002).

Box II.1**IMPLICATIONS OF THE ACCESSION OF CHINA AND TAIWAN PROVINCE OF CHINA TO THE WORLD TRADE ORGANIZATION: ASIAN PERSPECTIVE**

China and Taiwan Province of China became the one hundred and forty third and one hundred and forty-fourth members of the World Trade Organization, on 11 December 2001 and 1 January 2002, respectively. Both economies agreed to lower tariff and non-tariff barriers further, thus continuing with the liberalization of their external sector, a process they have been carrying out for more than a decade. Both economies are expected to further cut tariffs by about one third of current levels. In absolute terms, however, the additional tariff reduction will be moderate: average tariffs will be reduced by 5 percentage points in the case of China and by less than 3 percentage points in the case of Taiwan Province of China. This notwithstanding, the dispersion of tariff cuts among individual products is significant (see table).

AVERAGE IMPORT TARIFFS BY CHINA AND TAIWAN PROVINCE OF CHINA

Percentage		
	Current	2004-2007
China		
Overall	15.00	10.00
Industrial products	14.80	8.90
Automobiles	80.00	25.00
Agricultural products	18.90	15.00
Taiwan Province of China		
Overall	8.20	5.54
Industrial products	6.03	4.15
Automobiles	44.00	16.00
Agricultural products	20.02	12.90

Sources: World Trade Organization and Governments of China and Taiwan Province of China.

^a Under tariff-rate quotas, imports of the same product receive different rates of duties for a given period. Lower duties apply to volumes lower than the specified quota. Higher tariffs are applied for imports above the quota.

In the case of China, the required reduction of barriers for specific products and adjustments to its domestic regulatory framework are still considerable and have to be implemented in a relatively short period of about five years. The agreed reductions in non-tariff barriers are also substantial. Most import quotas and licensing arrangements will be removed by 2005 and subsidies will be reduced. For strategic agricultural products, such as grains, China will use tariff-rate quotas.^a China will also reduce restrictions on a broad range of activities in the services sectors and a host of other barriers such as requirements on government procurement, technology transfer and local content, as well as on national treatment and export promotion policy. In the case of Taiwan Province of China, the scheduled reduction of barriers covers a wide range of sectors and is significant for a number of industrial and farm products. For the service sector, major commitments include full market access and national treatment in financial services as well as allowing foreign majority stakeholding control in telecommunications.

These accessions are expected to have a positive impact both on these economies themselves and on the world economy, particularly in the longer term. By facilitating freer movement of goods and investment, accelerating domestic reform and fostering competition, the entry of the two economies into the World Trade Organization will lead to an expansion and restructuring of trade and output in individual economies and across the Asian region. Additionally, accession will enhance the possibility of

improving direct economic transactions between the two economies. Their accession is estimated to raise GWP by \$56.1 billion and East Asia's GDP by \$12.5 billion (in 1995 United States dollars).^b The effects will be concentrated in East Asian economies but the gains for the United States and some other developed countries will also be substantial. Owing to the required reforms still to be implemented in China, steeper tariff cuts in some sectors (such as automobiles) and the size of China's economy,^c China's influence on the outcome of accession to the World Trade Organization by both economies will be dominant.

China is expected to reap large gains in trade and output growth in the long term but it will face structural adjustment problems during the transition period as it undergoes sectoral changes and domestic reforms. Its imports will expand in response to the reduction of import barriers and its exports will be boosted by most-favoured-nation (MFN) treatment from other World Trade Organization members. Initially, import increases will outweigh export gains, but over time this pattern will be reversed. Continuing massive foreign direct investment (FDI) inflows, deepening domestic reforms and intensifying competition will enhance the competitiveness of China's exports. The growth of China's exports and GDP are estimated to increase by about 2.5 and by at least 0.5 percentage points annually, respectively.^d

The phased but significant trade liberalization undertaken by China will cause a substantial sectoral shift through changes in relative domestic prices and the competitiveness of individual industries. In the next several years, its labour-intensive and mid-range industries will likely expand. China's exports and output of garments will grow particularly fast owing to the country's competitiveness in this sector and the phasing out of the Agreement on Textiles and Clothing,^e which will come to an end in 2005.^f The service sector will likely exhibit a quantum leap, as China opens up to foreign investment in the sector. Conversely, domestic industries benefiting from high protection, such as the State-owned enterprises (SOEs) in heavy manufacturing, will face considerable difficulties. The automobile industry and the land-intensive segment of the farm sector (grains in particular) are expected to undergo major rationalization and consolidation.^g The farm sector alone is estimated to release 10 million workers.^h This may create social difficulties if sufficient new job opportunities are not created elsewhere, and safety nets are not available. In the long term, China will gain competitiveness in higher-end products as its overall productive technological capacity increases, economies of scale are realized, and its corporate sector is strengthened. FDI inflows will continue to be instrumental in bringing in advanced technology, managerial know-how and capital.ⁱ

The impact on Taiwan Province of China will not be as dramatic as that on China, mainly because Taiwan Province of China scheduled cuts, in absolute terms, in import barriers are smaller (see table). Imports will increase but will be, over time, outweighed by export gains. It is estimated that the GDP rate of growth of Taiwan Province of China will increase by about 60 basis points annually for the next five years.^j High-tech industries, including ICT and petrochemical sectors, will gain, but activities such as agriculture and labour-intensive manufacturing will suffer. FDI outflows will continue to be used to relocate some of Taiwan Province of China manufacturing capacity to China. This is likely to cause widespread unemployment.

Box II.1 (continued)

^b Elena Ianchovichina and Will Martin, *Trade Liberalization in China's Accession to the World Trade Organization*, World Bank Policy Research Working Paper, No. 2623 (Washington, D.C., World Bank, June 2001).

^c China has a population of 1.3 billion and a land mass of 9.6 million square kilometres, while Taiwan Province of China has 22 million people and a land mass of 36,000 square kilometres. China's GDP ranks seventh in the world when calculated in current United States dollars but third in purchasing power parity terms.

^d Export growth forecast is from the Development Research Centre of China's State Council. The Chinese Academy of Social Science estimated China's GDP to increase by half a percentage point while other estimates show faster growth of about 1 percentage point.

^e See *Legal Instruments Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, done at Marrakesh on 15 April 1994* (GATT secretariat publication, Sales No. GATT/1994-7).

^f A World Bank study estimated the share of China's apparel exports in world apparel trade would increase from the current 19 to 47 per cent in 2005 (see Ianchovichina and Martin, *op. cit.*).

^g Feng Lu, "China's WTO accession: impact on its agricultural sector and grain policy", China Centre for Economic Research, Beijing University, 2001.

^h Ministry of Labor and Social Security, Human Resource Research Institute.

ⁱ In the past decade, FDI inflows have increased rapidly, reaching \$43 billion in 2001. Additionally, the size and technical content of investment projects have increased. China's Academy of Social Science estimated that FDI inflows would reach \$100 billion by 2005.

^j Estimate provided by the Office of the Prime Minister.

Box II.1 (continued)

^k The newly industrialized economies include Hong Kong Special Administrative Region of China, the Republic of Korea, Singapore and Taiwan Province of China. The last mentioned is not included in this analysis, however, and was treated separately.

^l East Asia accounts for about half of China's total imports. Japan is the largest trade partner: the share of imports from Japan in total imports by China amounts to 20 per cent. The shares of the Republic of Korea and Taiwan Province of China exceed 10 per cent each, and are comparable with that of the United States.

Increasing imports by China and Taiwan Province of China will be reflected in increased exports and a faster rate of output growth in other Asian economies. Asian newly industrialized economies^k and Japan are likely to gain most because of their high economic interdependence with,^l geocultural proximity to, and structural complementarity with China. For these countries, gains will be concentrated in more advanced technology-intensive manufacturing goods (such as ICT, petrochemicals, high-quality steel and electrical machines), as they are competitive in these products and the China's reduction of trade barriers for these products is relatively large. Conversely, the newly industrialized economies and Japan will face increased competition in low- and mid-range manufacturing products, as well as farm and fishery products. Nonetheless, exports to China will grow faster than imports from China in the short term. Additionally, the service sector, including business services and tourism, in the newly industrialized economies and Japan will get a boost from liberalization by China.

In the long term, however, the newly industrialized economies and Japan will face increasing competition from China in higher-end products as China catches up, helped by rising FDI and supportive government policies. The combination of abundant cheap labour and capital as well as technology accompanying FDI inflows will give China a dynamic competitive edge vis-à-vis the newly industrialized economies and Japan. Over time, these countries will likely relocate their more sophisticated industries to China and change their production mix in favour of higher value added industries and the service sector.

The overall benefits for other South-East Asian countries are mixed. Indonesia, Malaysia, the Philippines and Thailand are likely to benefit less than the newly industrialized economies and the poorer economies in the subregion because of the wide range of overlapping manufacturing industries with China. These second-tier newly industrialized economies stand to face increased competition in their exports of labour-intensive goods, although they will gain a dynamic market for their exports of primary goods such as natural rubber, rice, palm oil, petroleum and natural gas. For the poorer countries in South-East Asia, the impact will be favourable owing to their competitiveness in primary commodities and labour-intensive industries, as labour is still relatively cheap in these countries, when compared with China. Meanwhile, South Asian countries will benefit from increasing demand for their primary commodities but their labour-intensive products, particularly garments will face Chinese competition.

Accession will present difficult domestic adjustment problems in the two new World Trade Organization members. China in particular will face major policy challenges because of the need to implement both its World Trade Organization commitments and ongoing domestic reforms. Taiwan Province of China will also have to face considerable industrial consolidation and unemployment problems. Additionally, the scope for policy manoeuvre is likely to be constrained in these two economies by the World Trade Organization rules, which limit government support. Their accession will also force neighbouring Asian economies to adjust their production structure to the increased competition. The complexity of all the required trade and industrial adjustments in the region will require increased cooperation among countries at both the government and the business level.

responsible. South Asian exports are likely to rebound gradually in 2002 in line with the moderate upturn in world demand, particularly that of the United States, and the reversal of negative impacts from 11 September, and to accelerate further in 2003. As South Asian imports rebound along with rising domestic demand and exports, trade deficits will widen.

There are, however, some negative forces as well. In a number of countries, supply-side disruptions will continue to hamper exports. Additionally, prospects for garment exports are particularly unfavourable, except for Pakistan.¹¹ The greater opening of the United States market to African and Caribbean countries in 2001, together with the phasing out of the Agreement on Textiles and Clothing¹² and China's accession to the World Trade Organization, began to expose the South Asia region's garment exports to increasingly fierce competition.¹³ Faced with the vulnerability of their narrow export base and intensifying competition, countries will have to diversify their trade (in terms of both destination and products) and enhance their competitiveness.

In Western Asia, export revenue fell owing to lower oil prices in the net fuel exporting countries while net fuel importing countries, such as Israel, suffered from the slowdown in global demand and the consolidation in the ICT industry. The imports of the net fuel importing countries declined markedly but this was mainly because of a tremendous trade adjustment by Turkey, prompted by the devaluation of the lira. As a result, Turkey's current account shifted from a deficit of about 5 per cent of GDP in 2000 to a surplus of about 3 per cent in 2001. Both exports and imports in the region are expected to recover modestly in 2002.

The value of merchandise exports fell by 5.7 per cent in Latin America in 2001. Owing to the deceleration in economic activity, imports contracted by about 8 per cent in nominal terms, partially offsetting the negative effect of lower export revenues on the region's trade balance. Both imports and exports contracted in real terms (see table A.13). Oil export volumes fell along with prices, with a strong impact on the external accounts of such exporters as Colombia, Ecuador and Venezuela, whereas export volumes of some commodities increased. Exports of manufactures contracted in countries that maintain strong trade ties with the United States. The volume of Latin American exports is expected to accelerate to about 3¼ per cent in 2002, while imports will contract further in the year, owing to financial constraints and sluggish growth.

Intraregional trade flows in the Andean region, albeit small, maintained momentum in 2001, largely on account of the economic dynamism in Ecuador and Venezuela. Prospects for 2002 are gloomier, however, owing to the worsening of the economic situation in Venezuela and more moderate growth in Ecuador. Intraregional trade has also remained relatively strong in Central America. Further south, the situation in Argentina and the informal collapse of the Southern Cone Common Market (MERCOSUR) are the most notable developments. Brazil's exports to Argentina have contracted sharply, particularly in the automotive and other industrial sectors.

¹¹ In Pakistan, preferential trade treatment, including increased quotas and tariff reductions from the United States and EU, reduced security concerns and the revival of its export refinance facilities will provide an additional boost to its exports over time.

¹² See *Legal Instruments Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, done at Marrakesh on 15 April 1994* (GATT secretariat publication, Sales No. GATT/1994-7).

¹³ The Agreement on Textiles and Clothing took over the Multifibre Arrangement (MFA) in 1995. It aims at integrating textiles and garments into normal World Trade Organization rules. It contains a 10-year schedule at the end of which importing countries will not be able to discriminate against exporters and import quotas will come to an end. See WTO, "Textiles: back in the mainstream" http://www.wto.org/english/thewta_e/whatis_e/tif_e/agrn4_e.htm.

COMMODITY PRICES: TRENDS AND OUTLOOK

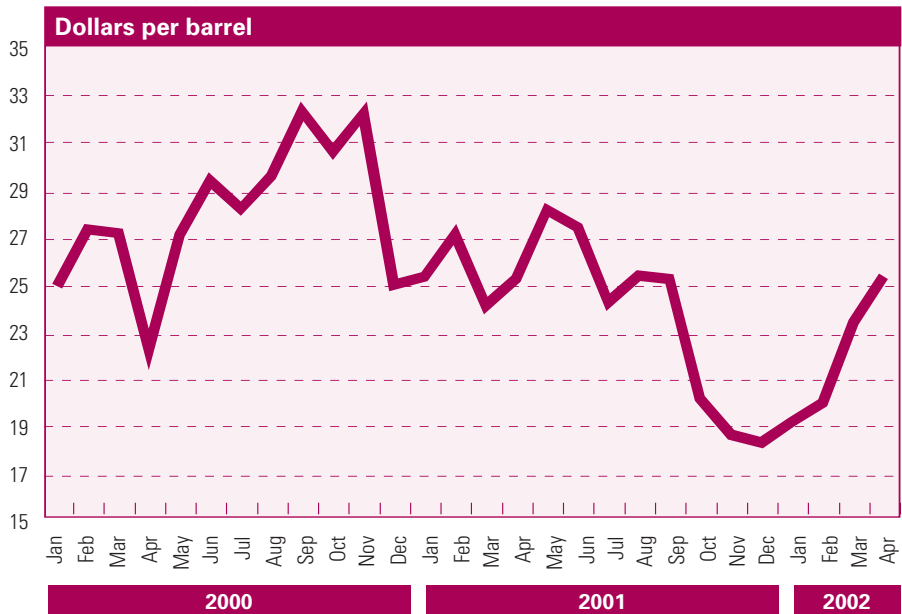
Reflecting the global economic slowdown and the decline in manufacturing output, commodity prices did not sustain their gains of 2000 and dropped again in 2001. The extent of the fall in prices was not uniform, however, across the major commodity groups: the decrease in average fuel prices was steeper (16 per cent) than the decline of non-fuel commodity prices (3.8 per cent). Among the latter, price behaviour was asymmetric, reflecting supply conditions in particular markets. For example, the prices of tropical beverages declined by some 22 per cent, while the prices of foodstuffs achieved a modest recovery in the year. When adjusted for changes in the prices of manufactures, “real” non-fuel commodity prices fell by 1.3 per cent in 2001 (see table A.17).

The prices of most commodities began to rise in the spring of 2002. It is expected that the near-term trend will remain upward in 2002-2003 as global demand continues to recover. Much of this upturn in prices, however, will be modest and temporary. Moreover, prices of a large number of commodities are still around their historic lows. Conversely, fuel prices are expected to decline on average by some 5½ per cent in 2002 but will recover by a similar magnitude in 2003.

Oil prices in 2001 and prospects for 2002

Oil prices exhibited considerable volatility during 2001. Although lower than at the end of 2000, oil prices remained within the desirable range of the Organization of the Petroleum Exporting Countries (OPEC) of \$22-\$28 per barrel (pb) during the first half of the year, partially owing to the fact that the Organization cut production quotas three times, aiming to withdraw 3.5 million barrels per day (bpd) from world markets. Nonetheless, oil prices weakened considerably after the 11 September terrorist attacks (see figure II.4) as

Figure II.4.
OIL PRICES,^a JANUARY 2000-APRIL 2002



Source: IMF.

^a Prices of Brent oil.

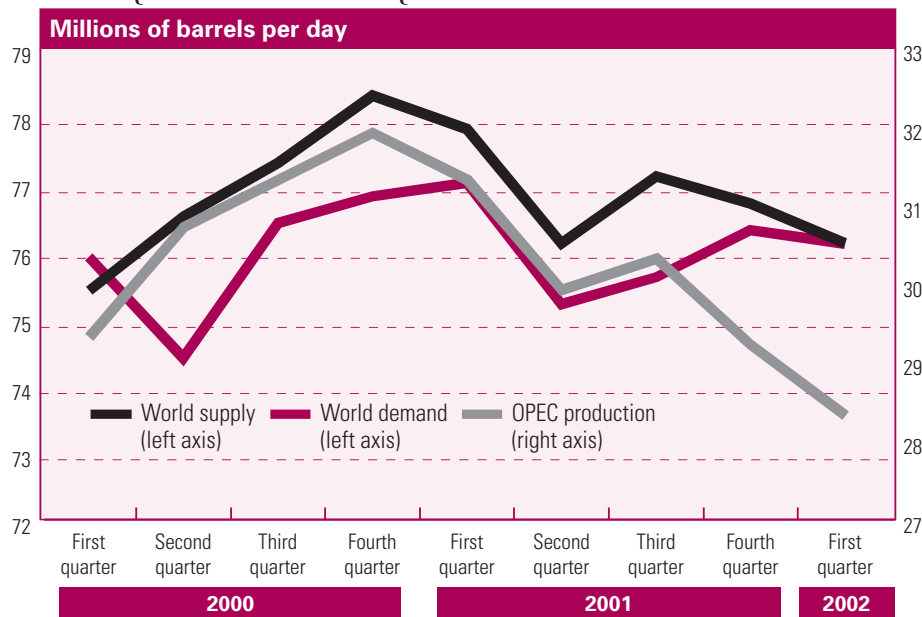
the world economy decelerated and OPEC conveyed its commitment to ensure an adequate supply. For the year as a whole, average oil prices—as measured by Brent crude—fell by some 14 per cent.

Prior to 11 September 2001, world oil demand had already been weakening owing to the global economic slowdown. The events of 11 September aggravated the downward pressure on demand: the airline industry (accounting for 8 per cent of the developed countries’ oil demand) was hit hard as commercial air travel fell and uncertainty mounted, delaying consumption and investment. The demand for jet fuel declined, weakening further world oil demand (see figure II.5). World oil demand grew by 0.1 per cent in 2001—the weakest increase since 1985.

Caught between weak oil demand, declining oil prices and increasing non-OPEC production, OPEC countries held a ministerial meeting on 14 November 2001 to consider possible policy responses to the challenges they were facing. A decision was taken to cut production by an additional 1.5 million bpd, effective January 2002, provided the Organization could get a firm commitment from key non-OPEC oil producers to cut their combined production by 0.5 million bpd.

The response from non-OPEC producers to the Organization’s call for cooperation was uneven. Angola, Mexico, Norway and Oman made conditional pledges to cut their production by a total of 312,000 bpd. The request of OPEC for cooperation was particularly focused, however, on the Russian Federation, whose output had been rising faster than that of any other non-OPEC country. The Russian Federation offered to cut oil exports but not production; initially, commitments were made to reduce oil exports by 30,000 bpd, but this figure was subsequently increased to 150,000 bpd.

Figure II.5.
WORLD OIL SUPPLY AND DEMAND AND OPEC PRODUCTION,
FIRST QUARTER 2000-FIRST QUARTER 2002



Source: International Energy Agency, *Monthly Oil Market Report*.

¹⁴ This excludes Iraq, which had ceilings for oil sales under the oil-for-food programme from 1996 to 1998. Although ceilings were lifted in 1999, Iraq has not been a party to recent OPEC agreements on quota assignments.

¹⁵ OPEC-10 excludes Iraq.

As a result of agreed quota reductions and cooperation by non-OPEC countries, world oil production fell in the first quarter of 2002. The OPEC compliance rate has been estimated at about 83 per cent as OPEC producers have succeeded in removing from the world market 4.2 million bpd of the 5 million bpd targeted by the last round of quota reduction.¹⁴ This gave a strong signal to market participants that cooperation within OPEC had been strengthened. Furthermore, OPEC succeeded in implementing almost 80 per cent of the last agreed production cuts in only two months, faster than in previous reductions. OPEC-10 production was reduced by an estimated 1.2 million bpd by April 2002.¹⁵ Moreover, cooperation between OPEC and non-OPEC countries has improved, with the latter group keeping its commitments to production/export restraints. The five non-OPEC producers (Angola, Mexico, Norway, Oman and the Russian Federation) reduced oil production or exports by a combined 462,500 bpd. In March 2002, OPEC stated that its commitment to the production levels agreed in November 2001 would be extended in the second quarter of 2002.

Oil prices increased during the first four months of 2002, with the price of Brent crude rising to an average of \$25.65 pb in April from \$18.8 pb in December 2001 (see figure II.4). It is not clear, however, how much of this increase was due to market fundamentals and how much to other factors. There has been renewed uncertainty regarding oil supply, but none of it has been related to capacity constraints. The escalation of violence between Palestine and Israel (see chap. III), the Iraqi decision to temporarily suspend oil exports in protest at the Israeli military actions in the occupied territories, the possibility of a United States attack on Iraq and other possible supply disruptions have introduced a risk premium in oil prices. Additionally, the global economic recovery, and the fact that it had started earlier than anticipated, contributed some upward pressure on prices.

Oil demand will likely grow only by ½ per cent in 2002 (see table A.18) and is not anticipated to be a source of pressure for higher oil prices for the year as whole. On the supply side, after the implementation of the production cuts mentioned above, there is some excess capacity that could be easily brought back on stream should there be a need to increase supply. As a result, oil prices are not expected to increase, on average, in 2002, and a further decline is anticipated thereafter: average oil prices are expected to be \$23 pb in 2002, down from \$24.4 pb in 2001.¹⁶

¹⁶ The oil price used here is that of Brent crude, which is usually \$1 to \$1.50 higher than the OPEC basket price.

One source of volatility in oil prices recently has been the political situation in Venezuela. The country had embarked on a strategy to increase capacity, which would lower world oil prices; but it was halted, bringing the country close to the OPEC price strategy. This, however, contributed to the losses in some of the downstream operations of the State oil company, *Petroleos de Venezuela, S.A. (PDVSA)*. Additionally, other costs resulting from adherence to the OPEC reduced quotas were becoming politically and socially difficult to support. Work slowdowns and a strike at PDVSA lowered output further, creating additional pressures on oil prices in early 2002. Immediately after a coup in April, oil prices fell as market analysts thought the country would change its oil policy. Prices went up again when the President was reinstated. In the light of these events, Venezuela may reconsider its oil strategy; if it resumes its plans to increase production and expand capacity, prices will likely fall.

Other downside risks for the oil price forecast presented here refer to the sustainability of the full cooperation between OPEC and non-OPEC producers. For example, Russian officials indicated in May 2002 that they would lift restrictions on oil exports in June. It is not clear whether other non-OPEC countries will follow suit.

In the short run, however, the risks to the price forecast are primarily on the upside. The escalation of the Israeli-Palestinian conflict, for instance, led some OPEC producers to suggest an oil embargo to protest the Israeli military action, but most Arab oil-producing countries did not support this proposal. Iraq, however, decided on 8 April 2002 to suspend its oil-for-food exports for a month, with the possibility of a further extension if the conflicts were not resolved.¹⁷ After the Iraqi announcement, oil prices climbed from \$25 pb on 5 April to \$27.35 pb on 8 April, reflecting concerns about a possible oil shortage. Iraq resumed oil exports in May; oil prices declined somewhat towards the end of the month.

If Iraqi exports are suspended again, other major oil producers can easily replace the Iraqi oil on the market. OPEC is currently producing below capacity.¹⁸ Moreover, Saudi Arabia (the largest oil producer and usually a “supplier of last resort”) can readily compensate for any reduction in oil supplies from Iraq. Among the non-OPEC members, the Russian Federation is expected to increase exports in June, while Norway may revise its strategy after the second quarter of the year.

Non-fuel commodities: modest price recovery ahead

The decline in the prices of non-oil commodities in 2001 put an end to the modest price gain that had taken place during most of 2000. Those advances had been enabled by the increased dynamism in world industrial activity, as well as economic growth of many developing countries that had been hurt by the Asian crises. Non-oil commodity prices have been on a declining trend since 1995, significantly affecting the growth prospects of many developing countries that rely on them as a major source of income. Coffee exporters, for instance, have seen their revenues eroded over the past few years. After reaching a peak of some \$14 billion in 1997, coffee export revenues fell to \$5.4 billion in 2001.¹⁹

Prices of commodities of agricultural origin have been persistently affected, particularly in recent years, by strong increases in productivity, increases in cultivated areas and dispersed production, which makes coordinated supply cuts difficult.²⁰ Additionally, devaluations in many producing countries have given these countries an incentive to increase production, thus keeping a downward pressure on world prices. Moreover, subsidies and other price support schemes in developed countries have continued to contribute to oversupply in certain markets and kept international prices low. In metals and minerals, a more concentrated supply structure has resulted after some years of reforms and consolidation in the sector. Thus, supply is more in line with demand than is the case for agricultural commodities, as reflected in the successive cuts in production of certain metals and minerals as their prices weakened. Nevertheless, producing countries have still suffered a loss of export revenue as a result of reduced output. Meanwhile, inventories have remained high for some metals.

¹⁷ Iraq's oil production is about 2.5 million bpd, representing 3.4 per cent of the world's total oil supply.

¹⁸ According to the United States Energy Information Administration (US/EIA), there are some 5.5 millions of barrels per day (mbd) of surplus capacity in OPEC-10 which could be quickly brought on line (US/EIA, “OPEC”, May 6, 2002, available at <http://www.eia.doc.gov/emeu/cabs/opec.htm/>).

¹⁹ Data refer to export revenues of the members of the International Coffee Organization. Revenue losses have been particularly large in countries that were not able to compensate for the fall in prices with increases in the volume of coffee exports.

²⁰ World Bank, *Global Development Finance, 2002* (Washington, D.C., World Bank 2002).

Prospects for the whole of 2002 are moderately positive, as the expected increase in global demand, along with cuts in production for several commodities following continued price losses, should result in a modest turnaround in prices. Additionally, the rebound in prices will reflect specific market characteristics: for example, the recovery of prices of agricultural raw materials is likely to be broader than that of food, owing to the greater cyclical sensitivity of the former. Price gains are also expected for metal and minerals as world industrial activity gathers strength.

A mild rebound was already apparent in the first quarter of 2002, particularly in prices of minerals and metals (see figure II.6). After two years of uninterrupted declines, a rebound also began in prices of tropical beverages. Nonetheless, the combined price index continues to be far below the levels reached before the Asian financial crises (see table A.17).

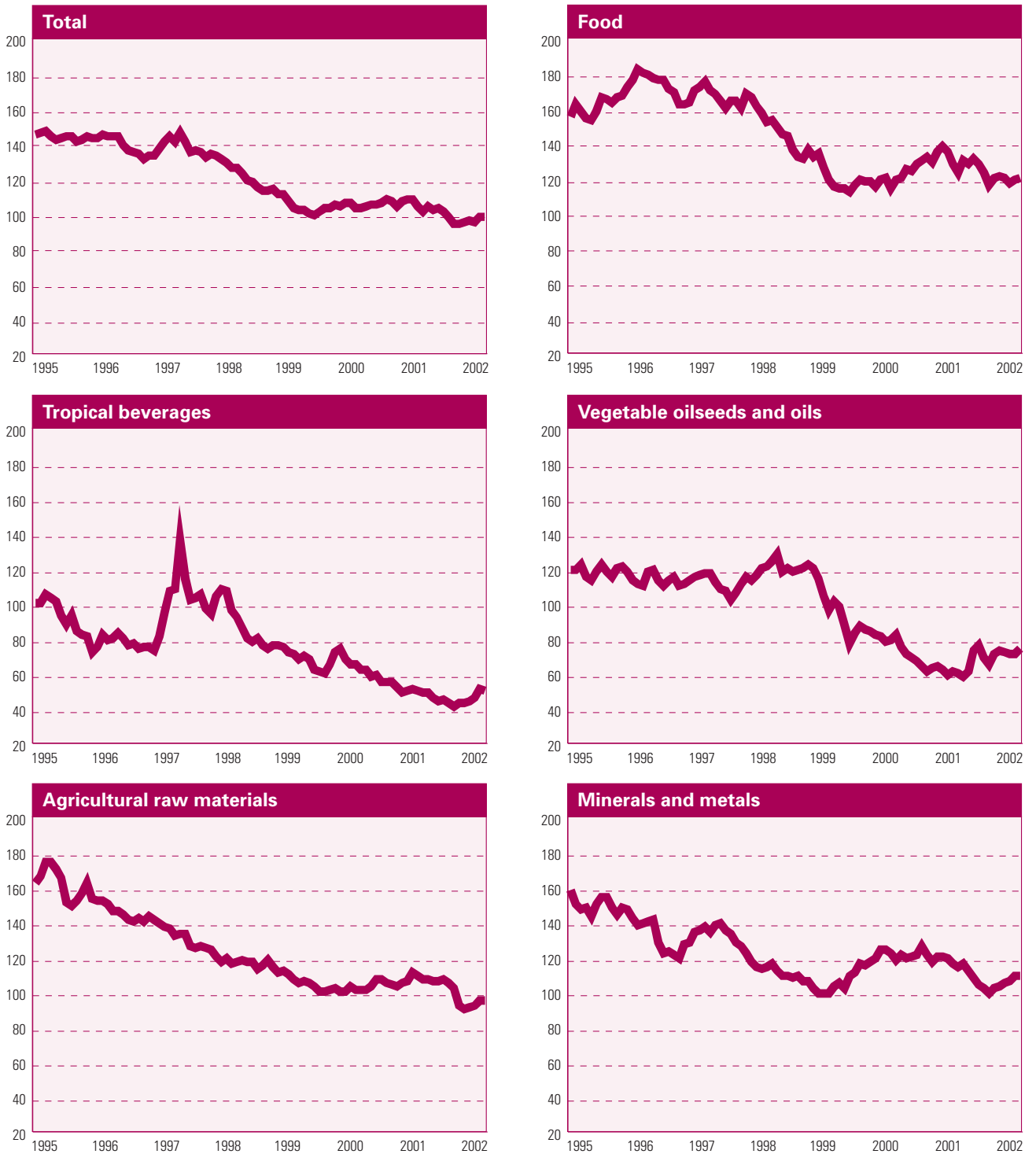
After posting advances in 2000, prices of **food** resumed their decline during most of 2001. By the end of that year, however, the price decline ended. Developments were mixed across particular commodities during the period. The price of rice, for instance, declined by almost 15 per cent in 2001, reflecting the high level of stocks, whereas the price of wheat gained 11 per cent owing to continuing declines in production. Except for rice, stocks-to-consumption ratios for grains have tended to decline in recent years, increasing the likelihood of tighter markets and higher prices in the near future. The price of bananas benefited from strong demand in many developing countries, as well as supply cuts, and posted a 38 per cent gain. Prices are expected to moderate significantly in 2002. Sugar prices registered a moderate increase in 2001 after strong gains in 2000, and are likely to begin to soften in 2002 owing to large stocks. Production increases are expected to be limited, providing some support to prices in the medium term.

All **tropical beverage** prices remain substantially lower than their levels in 1997. Whereas the prices of coffee and tea have continued to decline over the past half decade owing to persistent increases in production and stocks and slow growth in demand, cocoa prices have recovered significantly in 2001 owing to lower-than-expected crops in some of the largest exporters.

Following another negative performance in 2001, prices of coffee bottomed out in the first quarter of 2002, largely owing to lower-than-expected exports in some of the biggest producers (such as Viet Nam). However, with the anticipation of a bumper crop in Brazil and the suspension of the export-retention plan of the Association of Coffee Producing Countries, prices are not expected to recover strongly in the near term, barring unusual weather developments. Cocoa prices continued to increase at the beginning of 2002, owing to current production conditions in the face of recovering demand. Nonetheless, the price of cocoa is likely to moderate in the medium term as production expands. Tea prices are expected to remain in a declining trend in 2002 owing to persistently oversupplied markets.

The prices of **vegetable seeds and oils**, of which the main components in world trade are palm and soybean oils, continued to decline during most of 2001 owing to oversupply. Nonetheless, significant upturns occurred during the third quarter of 2001 and in the first quarter of 2002, in the face of strengthening demand. Prospects are for improved prices in 2002 and 2003, as demand remains strong. The potential effect of China's entry into the World Trade Organization on global demand can be positive as import restrictions fall.

Figure II.6.
NON-FUEL COMMODITY PRICES, 1995-2002
(Indices of dollar prices, 1985=100)



Source: UNCTAD, *Monthly Commodity Price Bulletin*.

After limited gains in 2000, **agricultural raw materials** saw their prices lose ground starting in the second quarter of 2001, largely owing to weak demand and strong production increases. Natural rubber production expanded more than expected in 2001, as a result of strong increases in Viet Nam and other producing countries, which offset weakening output growth in Thailand.

Whereas cotton prices remain weak, the price of natural rubber recovered substantially during the first months of 2002, reflecting this commodity's higher responsiveness to the better prospects of world manufacturing, in particular on account of the expected recovery of demand from tyre producers. Additionally, some progress has been achieved by Indonesia, Thailand and Malaysia, the three biggest producers, in establishing an output restriction agreement. In the case of cotton, prospects for higher prices are better for the medium term than for the 2002/03 season: strengthening demand, particularly from developing countries such as China, will be met by reductions in overall planted areas.

Closely following global economic prospects, the prices of **minerals and metals** bottomed out in the last quarter of 2001 and rose during the first months of 2002. Their combined price index posted an almost 6 per cent increase in the first quarter of 2002 over the previous period. Producers have cut output in the face of growing stocks (due to worsening demand), thus contributing to the recent upturns in prices. Nonetheless, prices remain below their levels of 2000 (see table A.17). The steepest declines in 2001 were recorded in copper, zinc and nickel, which fell by more than 30 per cent in the year. Lead prices, on the other hand, recorded some gains in 2001 after having declined in 2000.

It remains uncertain whether the upturn in metals prices will be sustained over the medium term. Aluminium is a case in point. There is considerable idle capacity that can be quickly put back into use, both in the United States and in Brazil, as these countries recover from an electricity crisis and hydroelectric power shortages, respectively. In spite of these factors, the price of aluminium is expected to firm in 2003 and beyond, as demand gathers strength. Near-term prospects are better for copper, owing to the large production cuts that took place in 2001. A similar picture can be drawn for nickel, of which stocks remain low and production growth is expected to be moderate in spite of the strong price gains recorded since October 2001.

TRADE POLICY DEVELOPMENTS

The year 2001 closed on a hopeful note as far as trade relations at the global level were concerned. In November 2001, the Fourth Ministerial Conference of the World Trade Organization, held at Doha, adopted a declaration (see A/C.2/56/7, annex) calling for a new development agenda for trade negotiations.²¹ Four new members, including trade giants China and Taiwan Province of China, joined the World Trade Organization, bringing its total membership to 144 countries in early 2002. Some 30 other countries have requested membership and their accession processes are progressing at varying speeds. The completion of these processes will not only make the organization a more universal one, but also open new opportunities for trade and growth worldwide over the medium term. These are encouraging developments. On the other hand, signs of tension in bilateral trade relations and increased trade protec-

²¹ On trade policy developments leading to Doha, as well as the new World Trade Organization work programme, see, for example, *World Economic Situation and Prospects, 2002* (United Nations publication, Sales No. E.02.II.C.2), chap. II, sect. entitled Trade policy developments; and *Trade and Development Report, 2002* (United Nations publication, Sales No. E.02.II.D2), chap. II.

tionism appeared during 2001 and in early 2002, and these may inhibit some bilateral trade in the short term while also undermining prospects for a trade liberalization at the global level over the medium term.

Moving the Doha agenda forward

The Doha Development Agenda, provided negotiations are successfully completed, will reduce trade barriers in several areas and thereby make a substantial contribution to the expansion in world trade and production and imply significant structural changes in the years to come. In addition to continuing World Trade Organization negotiations—the “built-in agenda”—on agriculture and services, the Doha Development Agenda includes a broad range of other issues for immediate or future negotiations, such as market access in non-agricultural products, trade-related intellectual property rights (TRIPS), World Trade Organization rules, “Singapore issues”,²² implementation procedures and environmental protection. The negotiations are scheduled to be concluded by 1 January 2005 as a “single undertaking”, that is to say, “nothing is agreed until everything is agreed”. Several issues of special interest to developing countries were included in the agenda.²³

Doha Development Agenda negotiations began in January 2002 and, in some areas, have advanced much faster than in the Uruguay Round of multilateral trade negotiations. A new budget was approved and Cancún, Mexico, was chosen as the venue for the Fifth Ministerial Conference, which is scheduled for September 2003. The Trade Negotiations Committee established by the Doha Ministerial Declaration (para. 46) held its first meeting on 1 February 2002 and created seven negotiating groups (agriculture, services, non-agricultural products, rules, environment, TRIPs and dispute settlement). However, this progress in the procedural arrangements has not been accompanied by any major changes in the positions of individual World Trade Organization members on specific issues since the Third Ministerial Conference, held in Seattle, Washington, in 1999. It will continue to remain difficult to reach agreement during the negotiations on such sensitive issues as trade in agriculture and labour-intensive goods.

Liberalization of trade of agricultural products is one of the most critical tasks ahead. It includes such issues as market access, export subsidies and domestic support. Negotiations on agriculture pre-dated Doha and started in March 2000 under article 20 of the World Trade Organization Agreement on Agriculture.²⁴ Nonetheless, little has been achieved owing to large differences in individual country positions, reflecting domestic political pressures. In March 2002, however, the Committee on Agriculture agreed on its work programme. It aims to finalize the text of the document on modalities or targets for achieving the objectives set out in Doha by 31 March 2003, as envisaged by the Declaration, while individual countries’ comprehensive draft commitments are to be presented to the Fifth Ministerial Conference in Mexico in September 2003.

Negotiations on services were also integrated into the Doha Development Agenda. The developed countries are very competitive in most services and are likely to seek wider and faster market opening, while the developing countries may prefer a more cautious approach. Although advances in the liberalization of some specific service sectors may be possible, major new agree-

²² These are new issues, which were raised after the establishment of the World Trade Organization. They include: trade and investment, interaction between trade and competition policy, transparency in government procurement and trade facilitation measures.

²³ Key issues in this context are market access, special and differential (S&D) treatment, technical assistance and capacity-building. External debt, finance, transfer of technology and small economies were also added as issues for further study by relevant World Trade Organization bodies, albeit not for immediate negotiation.

²⁴ *Legal Instruments Embodying ...*

²⁵ Debra Steger, "The post-Doha world trade agenda", presented at the spring 2002 Project LINK Meeting, 24-26 April 2002, United Nations Headquarters, New York.

²⁶ *Legal Instruments Embodying ...*

²⁷ This is an item-by-item method whereby exporting countries submit a list of requests to importing countries and importers respond with a list indicating what they are prepared to offer.

²⁸ Tariff peaks refer to those tariffs that are well above the average tariff of a given category of products. Tariff escalation refers to the rise in tariffs as the level of processing increases.

ments are unlikely in view of the developing countries' perceptions that they already committed to considerable liberalization on the occasion of the Uruguay Round negotiations.²⁵ On the other hand, developing countries are particularly interested in cross-border movements of natural persons, one of the four modes of supply of services recognized by the General Agreement on Trade in Services (GATS)²⁶. Negotiation on services is using the request/offer method.²⁷ The deadlines for the request and offer lists are 30 June 2002 and 31 March 2003, respectively.

Negotiations on market access in non-agricultural products will focus on reducing or eliminating tariffs (tariff peaks²⁸, high tariffs and tariff escalation) and non-tariff barriers (NTBs). Of particular interest for developing countries is the reduction of tariffs on labour-intensive products, including textiles and garments, because of the high tariff and tariff peaks on these products imposed by developed countries. For developed countries, the lowering of the overall high level of tariffs in developing countries is an important goal. Reduction of NTBs will be particularly difficult to negotiate owing to their complexity. A negotiating group on non-agricultural market access was formed in early 2002. Progress in this area, however, has been slow so far. As of April 2002, this group could not agree on setting a target for modalities of trade liberalization talks on industrial goods.

The Doha Development Agenda also includes the issue of revising World Trade Organization rules on anti-dumping, subsidies, countervailing measures and regional trade agreements. The inclusion of anti-dumping in the Doha Development Agenda was an important achievement of the Doha meeting. Many countries, including Japan, are concerned about the abuse of anti-dumping measures as protectionist devices and want to revise the anti-dumping agreement. The United States, on the other hand, opposes such revision.

The relationship between the proliferating regional trade agreements and the multilateral trading system is another focus of the Doha Development Agenda. While the World Trade Organization acknowledges the regional trade agreements' positive role in trade liberalization, it recognizes the need to improve upon its rules on such agreements in order to eliminate possible negative impacts on third parties, as well as inconsistencies between regional trade agreements and multilateral rules. In February 2002, the negotiating group on World Trade Organization rules was formed to discuss anti-dumping, subsidies and regional trade agreements. It held a first official meeting on 11 March 2002 and agreed to have four additional meetings in 2002.

The new ("Singapore") issues covered by the Doha Development Agenda are investment, competition policy, government procurement and trade facilitation. These topics were proposed by developed countries at the First Ministerial Conference of the World Trade Organization held in Singapore in 1996 but opposed by developing countries, which questioned the relevance of these issues for trade and argued that the World Trade Organization was not the proper forum in which to address them.²⁹ The negotiations on the new issues are contingent, however, on agreement by the Fifth Ministerial Conference on their modalities.

The issue of trade and environment has continued to be discussed in the Committee on Trade and Environment since the launch of the World Trade

²⁹ Amit Dasgupta, "WTO and new issues", presented at the fifth economic cooperation conference on government-private sector partnership, South Asian Association on Regional Cooperation (SAARC) secretariat, Kathmandu, 4 February 2001.

Organization and, despite the strong opposition by developing countries. Negotiations will be geared towards preventing disputes and towards reducing existing inconsistencies between multilateral trade and environmental agreements. The cooperation with environmental protection and development agencies will also be sought, particularly in anticipation of the World Summit on Sustainable Development, to be held in Johannesburg, South Africa, from 26 August to 4 September 2002.

The Doha Development Agenda also recognizes the need to strengthen the special and differential (S&D) treatment provisions applying to developing countries. Additionally, progress has been made by World Trade Organization, other multilateral agencies and donor countries in providing technical assistance on trade to developing countries, as well as on the creation of a global trust fund for capacity-building so that developing countries can participate more effectively in the negotiations.

The separate ministerial declaration on the TRIPs Agreement and public health (WT/MIN(01)/DEC/2) adopted at Doha stipulates conditions under which Governments can, in effect, curtail property rights in pharmaceuticals and grant compulsory licences to domestic generic drug producers in the event of public-health crises, including human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and other epidemics. The Conference also adopted the Decision on Implementation-related Issues and Concerns, (WT/MIN(01)/DEC/17), which refers to the implementation of agreements negotiated during the Uruguay Round. These (according to developing countries) have not been followed as expected, thus preventing the developing countries from fully benefiting from trade liberalization. Additionally, issues such as subsidies on agriculture and export credits, required further clarification and were also included in the decision on Implementation-related Issues and Concerns. Of particular interest to developing countries is the provision to encourage the accelerated liberalization in trade of textiles and garments.

Doha Development Agenda negotiations are likely to be contentious and difficult, particularly in the case of agricultural products. The possibility of increased trading opportunities in this area is critically important for developing countries but is currently subject to complex trade barriers and supports, and the subsidies to the agricultural sector in major developed countries are a politically sensitive issue. The recently approved agriculture subsidy scheme for the next decade in the United States can potentially have a negative impact on the negotiations. Owing to the principle of the “single undertaking” underlying the negotiations, agreement on trade liberalization in agriculture is critical to the successful conclusion of all Doha Development Agenda negotiations. For their part, many developing countries are hesitant about additional liberalization of trade in services and non-agricultural products owing to concerns about their “infant industries” and the encroachment on their policy sovereignty, as well as the developed countries’ lack of implementation of previous commitments. In the case of labour-intensive goods, however, developed countries seem to be reluctant about reducing barriers to trade. On World Trade Organization rules, there is likely to be considerable resistance to the revision of the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade, 1994³⁰ (anti-dumping agreement). Similarly, the tightening of rules on regional arrangements will not be easy, as most World Trade

³⁰ *Legal Instruments Embodying ...*

Organization members belong to at least one regional agreement. Furthermore, recently increased trade tensions among major exporters and importers as well as the frequent use of protectionist measures (see sect. below) are a serious risk to the successful completion of the negotiations.

Conflicting trends at the policy level: increasing protectionism?

Besides negotiating new trade agreements, the World Trade Organization also provides a forum for challenging violations of World Trade Organization agreements. The abuse of anti-dumping trade restrictions is a primary case in point. The number of anti-dumping and countervailing investigations increased again in 2001 after having declined in 2000 (see table II.1), while the number of new safeguard investigations continued its upward trend. The initiation of an investigation, however, does not necessarily mean that a complaining country will be authorized to impose corrective measures. Moreover, there is always a time lag between the initiation of an investigation and the final decision to impose measures, but, should the result of the investigation support such a decision, the data suggest an increase in the number of measures in the near future.

During 2001, World Trade Organization member countries initiated 330 anti-dumping investigations, a figure considerably above that for the total launched in 2000. About 40 per cent of the 2001 initiations (138 cases) originated in the base metal industry; most of them related to steel products. Both developing and developed countries have been making use of anti-dumping instruments. For instance, India initiated the highest number of anti-dumping investigations in 2001 (75 cases), most of which were for chemical products. It was closely followed by the United States (74 cases). On the other hand, most anti-dumping investigations are directed against exports from developing countries. Additionally, there has been an increase in the number of countries included in each investigation, which may indicate that anti-dumping is being abused. When a number of exporting countries are investigated in anti-dumping, it suggests that the problem is with the affected domestic industry rather than that several diverse but competing producers are all using unfair price practices.³¹

³¹ C. Stevenson, *Global Trade Protection Report, 2002* (London, Mayer, Brown, Rowe and Maw, April 2002).

Table II.1.
TRADE PROTECTION AND DISPUTES, 1995-2001

	Anti-dumping		Countervailing		Safeguards ^a		Disputes: new requests for con- sultations
	Initiations	Measures	Initiations	Measures	Initiations	Measures	
1995	157	118	10	19	2	0	23
1996	224	84	7	5	5	1	42
1997	243	124	16	3	1	4	46
1998	254	162	25	6	11	1	44
1999	356	181	41	14	14	14	31
2000	281	234	17	19	24	21	30
2001	330	163	27	12	30	20	27

Source: World Trade Organization.

^a Not on a calendar-year basis. Data reflect the period of review by the World Trade Organization Committee on Safeguards, usually from November to October.

Similarly, the number of new countervailing investigations (anti-subsidies) jumped from 17 in 2000 to 27 in 2001. Again, most investigations referred to the base metals industry (14 cases). The fact that all but one of these new investigations were initiated in parallel with an anti-dumping investigation suggests that countries use a combination of measures to protect their domestic industry from perceived adverse import competition. Developed countries have usually dominated in the launching of countervailing investigations, while developing countries have initiated considerably fewer investigations; and this pattern continued in 2001, when developed countries initiated all but one of the new investigations.³²

The number of safeguard initiations increased in 2001. Developing countries have been the major initiators of safeguard investigations, perhaps because they are relatively simple to conduct and may be less costly in political terms; safeguards—although more restrictive than anti-dumping and countervailing measures—do not single out any particular country or any particular industry of a given country for not being in conformity with World Trade Organization rules. Until 2001, with the exception of the United States, developed countries rarely initiated safeguard investigations or imposed safeguard measures.³³ Most of the United States investigations have been on steel products, the latest of which led to the adoption of definitive safeguard measures and triggered an international reaction. It led the European Commission for the first time since the establishment of the World Trade Organization to impose provisional safeguard measures and Canada to initiate its first safeguard investigation (see box II.2)

Countries affected by protective measures can make use of the World Trade Organization machinery to contest the imposition of such measures as well as any other policy actions if they have reasons to believe these practices to be inconsistent with World Trade Organization rules. There have been a considerable number of requests for consultations using the dispute settlement framework at the World Trade Organization (see table II.1).

In the past, developed countries, the European Commission and the United States in particular, have been the most frequent users of the dispute settlement mechanism at the World Trade Organization, both as “defendants” and as “plaintiffs”. Only a few developing countries have previously taken disputes to the World Trade Organization (Argentina, Brazil, India, the Republic of Korea, Thailand and Turkey, among others). Moreover, most of their consultations and disputes have involved other developing countries. This changed in 2001 when most of the disputes were initiated by the developing countries and a higher number of them involved contesting measures taken by developed economies.³⁴

The number of new disputes brought before the World Trade Organization, however, has been declining since 1998.³⁵ A possible explanation may be that countries are settling their differences outside the World Trade Organization. Another likely reason is that some of these measures, anti-dumping for instance, have been largely imposed on countries that were not members of the organization (China, Taiwan Province of China, the Russian Federation and Ukraine, among others) and could not make use of its machinery. As seen above, however, most protective measures are imposed on exports of developing countries and it may be that these countries cannot afford, either financially or technically, to challenge all these measures: dispute settlement is a long and costly process, usually involving the hiring of overseas experts and consultants

³² During the period 1995-2001, a total of 143 countervailing investigations were launched, 115 of which by developed countries. With 58 investigations during the period, the United States was the country that initiated the most countervailing investigations. Only nine developing countries conducted countervailing investigations during the period: Argentina, Brazil, Chile, Egypt, Israel, Mexico, Peru, South Africa and Venezuela (http://www.wto.org/english/tratope/Scm_e/Scm_stattab2_2.htm).

³³ Besides the United States, Japan was the other developed country that imposed (provisional) safeguard measures prior to March 2002. Australia also conducted safeguard investigations (swine meat) but did not find grounds to impose safeguard measures.

³⁴ Developing countries brought a total of 19 new disputes in 2001, 8 of them involving developed countries. This contrasts with a total of 13 disputes in 2000 (3 involving developed countries) and only 6 disputes in 1999 (only 1 of them involved a developed country).

³⁵ It is possible that this trend will be interrupted in 2002, as 12 new disputes were initiated during the first four months of 2002.

Box II.2

THE CONTROVERSY ON THE IMPOSITION OF STEEL SAFEGUARDS: A THREAT TO INTERNATIONAL TRADE?

- ^a According to the International Iron and Steel Institute, the United States was the third largest consumer of steel products in 2001. It was preceded by the European Union, with apparent consumption estimated at 143.8 million metric tons, and by China, with consumption estimated at 141.2 million metric tons. Steel consumption in the United States was estimated at 103 million metric tons in 2001. See "Trends and Indicators: World Steel Consumption Data" (available at http://www.worldsteel.org/trends_cons/cons01).
- ^b Agreement on Safeguards (http://www.wto.org/english/tratop_e/safeint.htm).
- ^c For the purposes of Proclamation 7529, the United States defines developing countries as the beneficiaries of its Generalized System of Preferences (GSP). This category differs significantly from the one used in this *Survey*. Potentially, therefore, safeguards may affect imports from all non-GSP beneficiaries (all developed countries with the exception of Canada, as well as such developing countries as China, Taiwan Province of China and the Republic of Korea, and economies in transition such as the Russian Federation and Ukraine, among others) and products from GSP beneficiaries whose share exceeds the 3 per cent limit (Brazil, India, the Republic of Moldova, Romania, Thailand, Turkey and Venezuela). See "Developing countries with products not excluded from remedy" (available at <http://www.ustr.gov/sectors/industry/steel201/2002-03-05-exclusions.pdf>).

On 5 March 2002, the President of the United States of America announced the imposition of temporary safeguards on the imports of certain steel products (Proclamation 7529). The measures were taken on the basis of the findings of an investigation by the United States International Trade Commission, which concluded that imports had been seriously affecting the United States steel industry.^a

According to World Trade Organization rules, safeguard measures may be imposed when imports are found—following an investigation by competent authorities—"to cause or threaten to cause serious injury to the domestic industry that produces like or directly competitive products" (Agreement on Safeguards, article 2, para. 1). Measures are to be temporary, applied in a non-selective manner, and progressively liberalized when in effect. Low volume of imports from developing countries is expected to be exempted from the measures. Additionally, compensation should be given to World Trade Organization members whose exports are affected. In the absence of an agreement on compensation, affected exporting members—after obtaining approval from a World Trade Organization arbitration panel—may individually suspend equivalent concessions or obligations towards the country that caused the safeguards to be imposed. Such suspension, however, is not to take place during the first three years of the application of the safeguard measures if these have been taken "as a result of an absolute increase in imports" (article 8, para. 3) and are in conformity with World Trade Organization provisions. Under critical circumstances, provisional safeguard measures may be imposed, but are allowed to last no longer than 200 days.^b

The measures adopted by the United States include higher import duties on key steel products (new tariffs range from 8 to 30 per cent) and tariff-rate quotas on imports of slabs, with the quota initially set at 4.8 million metric tons and the over-quota tariff at 30 per cent. Safeguards are to be phased out in a three-year period during which tariffs would gradually decline and quotas increase. The safeguards are not to be applied to imports from trading partners that have a free trade agreement with the United States (Canada, Israel, Jordan and Mexico). Similarly, imports from individual developing countries accounting for less than 3 per cent of the total imports of each designated steel product are also excluded.^c The Proclamation also authorized the United States Trade Representative to consider requests for product exclusions as a means to guarantee United States consumers access to needed products.

The United States measures triggered a wide range of reactions. Some coun-

and requiring a great deal of expertise and resources. Thus, it may be possible that developing countries, their means permitting, tend to concentrate on the disputes that are most crucial for them and pass on the others.

FINANCIAL FLOWS TO DEVELOPING ECONOMIES

For the fifth year in a row, the developing countries have made a net transfer of financial resources to other countries. This meant that the net foreign payments of investment income and capital outflow were greater than the corresponding inflows.³⁶ It was the third year that the outward or "negative" trans-

³⁶ For a discussion of the net transfer concept, see *World Economic Survey, 1986* (United Nations publication, Sales No. E.86.II.C.I), annex III.

tries (Brazil, China, members of the European Union (EU), Japan, New Zealand, Norway, the Republic of Korea and Switzerland), questioning the compatibility of United States actions with World Trade Organization rules, asked for consultations with the United States within the World Trade Organization dispute settlement framework. China, EU, Japan and the Republic of Korea have also asked for a World Trade Organization panel to rule on the legality of the United States actions. China, EU, Japan, Norway and Switzerland have already submitted a list of products imported from the United States that will have concessions suspended pending a decision of the World Trade Organization panel or the expiration of the three-year waiting period in March 2005.^d Other countries have pursued direct bilateral negotiations seeking to be exempted from the measures, while some countries have asked to be compensated for the imposition of higher tariffs on steel. A few countries, concerned that products originally intended for the United States would be diverted to their own domestic markets, started to close their markets by imposing higher tariffs on steel imports.^e Mexico and Venezuela are cases in point. Canada and China initiated their own safeguard investigation on steel products, whereas China also imposed provisional safeguards on the imports of certain steel products. More significantly, however, EU announced the introduction of provisional safeguards (tariff-rate quotas on 15 categories of steel products) that will affect roughly 40 per cent of EU steel imports or about 5.7 million tons. Quotas are to be filled on a first-come-first-served basis and are not to affect products originating from developing countries; exceptions, however, apply.^f The adoption of safeguards by EU generated another round of adverse reactions.

Taken together, the United States action and the responses negatively affect not only international steel markets but global trade in general, particularly if additional markets are closed and further concessions are withdrawn. Steel producers in developing countries and economies in transition are being directly adversely affected, but there are also secondary effects on their trading partners. With the recovery still in its early stage, international trade needs to be stimulated, not constrained. More generally, the imposition of new barriers to trade, the retaliatory protectionist reactions, and the withdrawal of previous concessions extended cast a damaging shadow over the new trade negotiations launched in Doha in November 2001, particularly in the light of the increased attention otherwise being given to the potential benefits of trade for development and the consequent need of further trade liberalization, especially by developed countries.

Box II.2 (continued)

- ^d About \$800 million of trade would be affected. Additionally, EU and Japan submitted a smaller list of products that might suffer punitive sanctions earlier, as the three-year restraint period refers to those safeguards that “ha(d) been taken as a result of an absolute increase in imports” and “conform(ed) to the provisions” of the Agreement on Safeguards (see article 8, para. 3, of the Agreement).
- ^e The United States imported some 27 million tons of steel products in 2001, of which 21 million tons were in finished form. Industry analysts believe the protective measures may reduce United States imports of finished steel products by some 5 million tons per year in the next two years. Brazil, Canada, China, EU, Japan, Mexico, Russian Federation, Taiwan Province of China and Turkey are the major steel suppliers to the United States markets.
- ^f Total quotas were established at about the 2001 level of imports. Tariffs ranging from 14.9 to 26 per cent will apply to imports above established quotas. Safeguards do not apply to imports from Kazakhstan, the Russian Federation and Ukraine, which are ruled by separate quantitative arrangements. However, they apply to certain steel products from Argentina, Brazil, China, Egypt, Indonesia, India, the Islamic Republic of Iran, the Libyan Arab Jamahiriya, Malaysia, South Africa, Thailand, Taiwan Province of China, Venezuela and Viet Nam. See “Commission Regulation (EC) No. 560/2002 of 27 March 2002 imposing provisional safeguard measures against imports of certain steel products”, *Official Journal Of the European Communities*, 28/03/2002, pp. L85/1-L85/39.

fer exceeded \$100 billion, although the amount in 2001 was less than in 2000 (see table II.2). However, it was still more than twice the largest net inward transfer ever, which had occurred in 1993.

By definition, the net transfer is the financial counterpart of the balance of trade in goods and services and is thus the result of concurrent developments in the trade and financial accounts. In 2001, as reviewed earlier, the most significant factor in developing-country trade was the weakness in exports associated with the global economic slowdown, as well as the much reduced revenues from tourism and travel since the 11 September terrorist attacks. These factors reduced trade surpluses and increased trade deficits and external financing

Table II.2.
NET TRANSFER OF FINANCIAL RESOURCES TO DEVELOPING COUNTRIES, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
Developing countries	66.3	33.9	36.0	24.2	-1.3	-34.1	-120.4	-186.4	-146.9
Africa	2.5	3.6	4.5	-6.9	-4.8	15.1	3.8	-18.3	-8.9
Sub-Saharan (excluding Nigeria and South Africa)	11.9	6.9	6.0	7.1	6.2	10.1	12.7	3.7	1.8
Eastern and Southern Asia	10.0	2.1	23.0	25.4	-28.5	-128.0	-131.6	-111.1	-102.6
Western Asia	39.0	7.7	7.4	1.2	4.2	30.4	-4.7	-54.6	-36.2
Latin America	14.8	20.6	1.1	4.5	27.8	48.4	12.0	-2.4	0.8
Memorandum item: Heavily indebted poor countries (HIPC)	12.2	8.5	9.4	9.3	10.2	13.0	9.4	3.6	6.5

Sources: UN/DESA, based on International Monetary Fund (IMF), *World Economic Outlook*, April 2002, and IMF, *Balance of Payments Statistics*, various issues.

^a Preliminary estimate.

needs. On the other hand, for many countries that lacked access to adequate compensating finance, export weakness quickly translated into curtailed imports. Coupled with the reduction in import demand owing to weaker domestic economic conditions, this tended to have the reverse effect on the trade balances. Moreover, in Argentina and Turkey, financial crises resulted in economic contraction and large reductions in import demand, inevitable concomitants of their crisis-related reduction in external financial inflows.

In Africa and Asia, there were substantial net outward transfers of financial resources in 2001, albeit smaller than those in 2000. The large net outward resource transfers from Eastern and Southern Asia reflected the continuing but diminishing consequences of the 1997 financial crisis as foreign financial institutions continued to reduce their exposure to the region and as post-crisis loans were repaid. In Latin America, the preliminary estimates suggest that there was no net transfer to or from the region as a whole in 2001. There was a large increase in official lending to the region, especially by IMF (see below), but no net transfer because there was a significant retreat of private financing. This is a far cry from the large net resource transfers to Latin America from large private inflows, which ended in 1998.

There was a small net inward transfer of financial resources to sub-Saharan Africa and to the heavily indebted poor countries (HIPC), which are mainly in Africa. As these countries were also hit with low commodity export prices, their financial inflow needs were far from being met. Given their very limited access to or capacity to service private finance, and the revenue losses from low commodity prices, these countries have no short-term escape from dependency on increased official assistance and debt reduction (which reduces the contribution of debt-servicing to the outflows included in the net transfer figures). The solution lies in the medium term, with stepped-up investment in produc-

tion of diversified tradable goods, increased productivity, and economic growth and development.

Excluding net foreign payment of interest and profits and accumulation of official reserves, the net financial flow to developing countries as a whole in 2001 totalled \$63 billion (see table II.3). Net official financial flows rose in 2001 because of the increase in international assistance to countries in financial distress. Private flows included large direct investment flows to a limited number of countries and substantial net outflows of credit, primarily repayments of private credits by Argentina, Turkey and several East Asian countries. Official flows thus exceeded net private financial flows for the first time in many years.

Private flows

The low net level of private financial flows in 2001 was the result of continued caution by foreign investors and lenders to emerging markets, as well as constrained local demand for financing. There was rising investor concern about risk in emerging markets during the year, especially associated with the growing difficulties in Argentina, aggravated by the perceived risk to global financial markets after the 11 September terrorist attacks. Following the attacks, prospects of a global economic slowdown, which had been a concern of many people earlier in the year, turned into widespread expectation of global recession, and further violent disruption in the world's financial infrastructure was feared. The political and military ramifications of the attacks and the ensuing military campaign in Afghanistan further heightened uncertainty and discouraged investment in developing economies.

By November 2001, the global financial system seemed less threatened and

Table II.3.

NET FINANCIAL FLOWS TO DEVELOPING ECONOMIES, 1991-2001

Billions of dollars							
	Average 1991-1995	1996	1997	1998	1999	2000	2001 ^a
Net private capital flows	133.5	210.7	108.0	45.6	55.5	6.9	27.1
Net direct investment	54.4	104.5	126.9	133.3	140.4	130.6	151.5
Net portfolio investment ^b	56.0	73.6	38.8	-9.1	30.8	-7.1	-32.6
Other net investment ^c	23.0	32.7	-57.8	-78.6	-115.6	-116.6	-91.8
Net official flows	28.0	-3.8	32.0	42.3	13.3	5.3	35.8
Total net flow	161.5	206.9	140.0	87.9	68.8	12.2	62.9

Source: International Monetary Fund, World Economic Outlook Database, April 2002.

^a Preliminary.

^b Including portfolio debt and equity flows.

^c Including short- and long-term bank lending. It may include some official flows owing to data limitations.

³⁷ The sharp drop in Latin American spreads over United States Treasury bonds shown in the top panel of figure II.7 occurred at about the same time as Argentine spreads rose from about 40 percentage points above United States Treasuries to almost 60 percentage points, as seen in the second panel. This is because this index uses the market value of a country's bonds as its weight in the index average. After Argentina's default, the Latin American index shows essentially the average spread for Latin America excluding Argentina.

³⁸ This is not to deny the very real impact on neighbouring countries, which are major trading partners of Argentina, such as Brazil and Uruguay (see chap. III).

counter-crisis monetary easing undertaken by the major economy countries restored a measure of confidence in the global economy. Investor aversion to risk thus eased in the last two months of 2001 and this continued into early 2002, as reflected in the decline in the spread between yields of emerging-market bonds and the risk-free benchmark, United States Treasury bonds (see figure II.7).³⁷ The volume of private financial flows to developing economies also picked up somewhat in this period. Successive interest rate cuts in the developed countries during 2001 increased liquidity and, with the easing of market fears in the final months of 2001, demand returned for additional investment in emerging markets, motivated by the quest for diversification and higher yields.

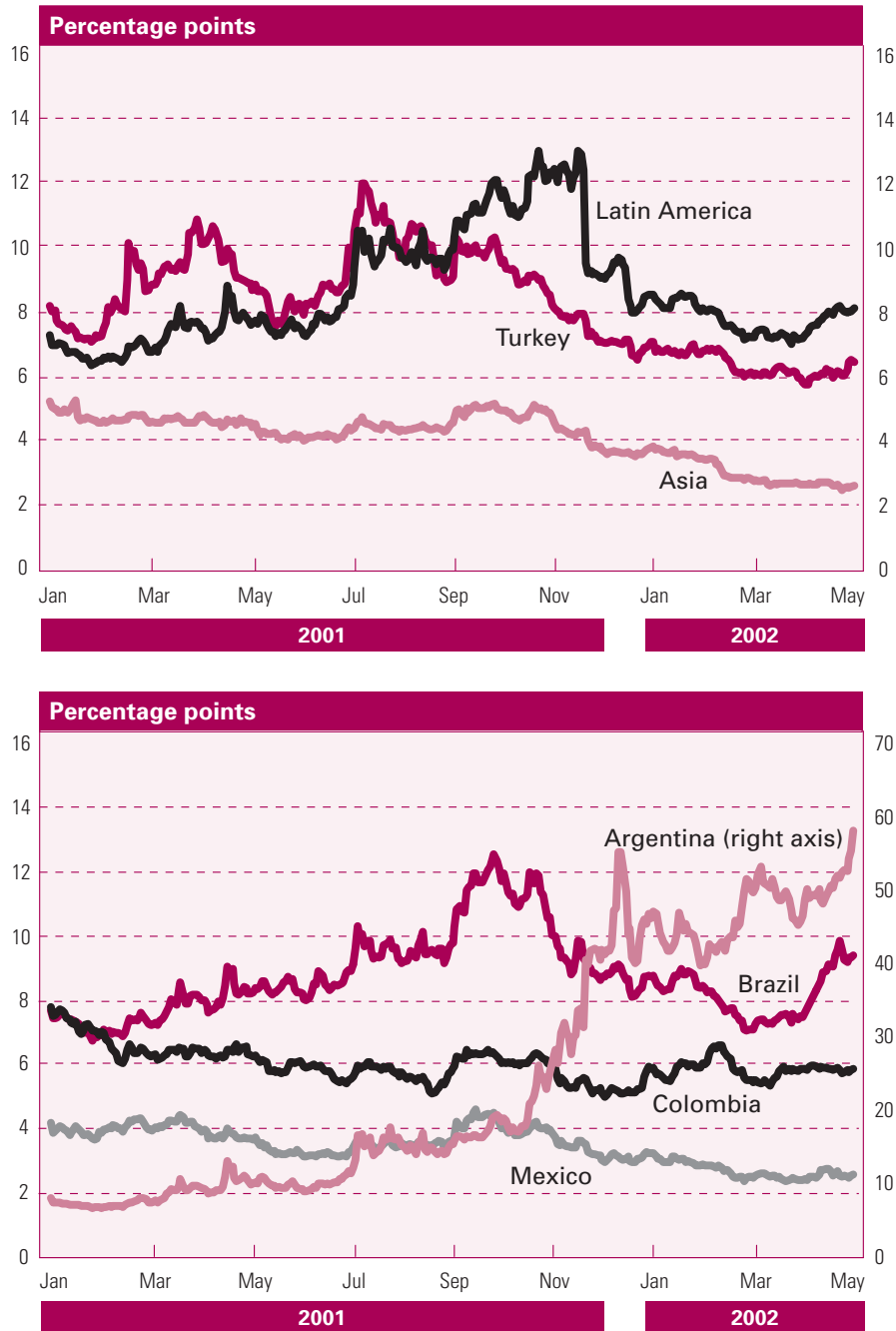
Argentina's default on its debt to private creditors in December 2001 had been long feared by many market observers. It was thus followed by limited "financial" contagion; that is to say, investors discriminated among the riskiness of the bonds of different countries.³⁸ The long duration of Argentina's financial difficulties had prompted and enabled many foreign investors to reallocate their funds to lower-risk markets before the default, limiting their portfolio adjustment after the default. Although the crisis in Argentina continued to deepen after its default, with the banking system in virtual collapse by late April 2002 and the economy contracting precipitously, the international markets have treated the situation largely as *sui generis*. From November on, for example, spreads on Turkish securities declined and then remained steady, reflecting progress in addressing Turkey's financial crisis and the international support for its adjustment programme.

Private credit flows

The volume of new bank loans to developing economies was sharply lower in 2001, comparable with levels in the aftermath of the 1997-1998 crises. Internationally active banks limited their lending to less creditworthy borrowers, out of concern for the overall riskiness of their operations in a time of uncertainty and possible recession. Meanwhile, weak global economic conditions reduced the demand for loans by borrowers with high credit ratings. Loans to large countries in Latin America, excluding Argentina, accounted for a large share of bank lending at the end of 2001, as demand from Asian borrowers was weak. Demand for credit remained tepid in early 2002 and bank lending was also constrained by continued efforts by banks to reduce exposure to higher-risk borrowers. It is thus expected that the volume of new bank loans will remain low for 2002 as a whole.

In contrast, the level of bond issuance in 2001 was comparable with that of 2000, boosted by the strong rebound in the last two months of the year after extremely subdued activity in the third quarter. A healthy level of issuance continued into early 2002, benefiting from a series of credit rating upgrades, notably to "investment grade" for the sovereign debt of Mexico and the Republic of Korea. The most creditworthy borrowers, concentrated in large Latin American countries, excluding Argentina, and a number of Asian countries, overwhelmingly made the new bond issues. It is expected that, during 2002, market access will extend down the credit rating scale to more issuers and that bond issuance will remain active as economic conditions improve.

Figure II.7.
 YIELD SPREADS ON EMERGING MARKET BONDS,
 2 JANUARY 2001-21 MAY 2002



Source: Data of J.P. Morgan Co., New York.

³⁹ See United Nations Conference of Trade and Development (UNCTAD), "FDI downturn in 2001 touches almost all regions" (TAD/INF/PR37), 23 January 2002, for a detailed discussion.

⁴⁰ For additional detail on FDI flows in 2001, see *World Economic Situation and Prospects, 2002* (United Nations publication, Sales No. E.02.II.C.2), chap. II, sect. entitled "Reduced foreign investment flows".

Private equity flows

FDI was the sole net source of private financial inflow to developing economies in 2001. The terrorist attacks appear to have had limited immediate impact on FDI, although poor domestic economic conditions in 2001 had a depressing effect on investment flows to some countries.³⁹ Also, the slowdown in privatization investment and mergers and acquisitions reduced FDI flows to a number of countries, including Argentina, Brazil and the Republic of Korea. Nevertheless, in other countries, such as Mexico and South Africa, large mergers and acquisitions and privatizations provided the impetus for increases in FDI. In addition, China received a substantial increase in FDI in 2001.⁴⁰ This is expected to be sustained for the next several years as a result of the country's accession to the World Trade Organization and its increased competitiveness in the production of a growing number of manufactured goods (see box II.1 above).

Net foreign portfolio equity investment in developing economies, usually small in relation to FDI, fell substantially in 2001. New equity issuance dropped to a level well below that of the previous two years. However, there was a substantial increase in investment flows at the end of the year and by the beginning of 2002, stock prices in developing economies began to rebound in parallel with prices in developed-country stock markets, erasing the price plunge following the terrorist attacks. Prices and portfolio equity investment flows favoured those countries likely to benefit most from a global economic recovery through strengthened exports. There was, however, a consolidation of prices of stocks in emerging markets in the second quarter of 2002, as volatility in global stock markets increased.

Official financial resource flows

The major change in official financial flows to developing countries in 2001 was the resurgence in lending by IMF. Net flows to the developing countries reached a record high of \$17.6 billion, ending two consecutive years of net repayments totalling \$15.7 billion (see table A.23; see also table A.24 on transition economies). Fund assistance flows during the year, however, were almost entirely in the form of financial packages for three countries, Argentina, Brazil and Turkey. The disbursements were tranches from standby facilities approved for Turkey in 1999, and Brazil in 2001, and two augmentations of a standby facility initially approved for Argentina in 2000.

Overall, Fund commitments to lending programmes for developing countries rose about 9 per cent in 2001 to \$24.2 billion, most of which was for a standby facility provided to Brazil. Pakistan received a \$1.3 billion commitment for subsidized lending from the Poverty Reduction and Growth Facility (PRGF). Among the economies in transition, the largest commitment was a \$300 million standby facility for Romania.

Multilateral resource commitments for development in 2001

Resource commitments to developing and transition economies by the multilateral development institutions and programmes increased by 14 per cent in dollar terms in 2001 to \$47 billion, a rise of about 16 per cent measured in constant prices and exchange rates (see table A.27). The increase ends two

consecutive years of decline since the crisis-related peak in lending in 1998. Non-concessional commitments grew by 13 per cent, led by a 47 per cent increase in commitments from the Inter-American Development Bank (IDB). The largest source of non-concessional multilateral lending remains the International Bank for Reconstruction and Development (IBRD), the non-concessional lending facility of the World Bank, with almost \$12 billion committed in 2001,⁴¹ although IDB has become an increasingly strong second largest source with \$7.5 billion lent.

Commitments of concessional resources (low-interest loans and grants) grew 16 per cent. Most notably, concessional commitments from IDB, albeit small in total amount, rose 44 per cent, as approvals to the social sector increased markedly. Commitments grew 17 per cent from the largest source, the International Development Association (IDA), the concessional lending arm of the World Bank, led by sizeable approvals for India, Pakistan, Uganda, the United Republic of Tanzania and Viet Nam (together they received 38 per cent of total IDA commitments in 2001). Resource commitments from the operational agencies of the United Nations increased by almost 30 per cent during the year.

Part of the increase in multilateral flows was in response to the consequences of the 11 September terrorist attacks.⁴² With this crisis and the global economic slowdown in view, the international financial institutions reviewed their lending policies and their flexibility in providing additional assistance. The World Bank, in its review, noted that it could extend new loans or restructure, increase or accelerate existing programmes.⁴³ In this context, it observed that it had the capacity to provide additional credits to countries where adverse external factors had dampened export demand and weakened commodity prices, on condition that the countries were maintaining sound macroeconomic policies and implementing reform programmes. For other strongly performing countries, the Bank could accelerate the preparation of new adjustment operations to counter adverse external circumstances. Moreover, beginning 1 May 2002, borrowing countries judged to have sound macroeconomic policies and good programme implementation would be able to avail themselves of the Bank's new "deferred drawdown option" (DDO), which is, in effect, a contingent credit line to protect core structural programmes should a country face reduced access to international financial markets. It is available to countries that are qualified to borrow non-concessional funds from the Bank or that use a mixture of non-concessional resources and IDA credits.⁴⁴

For the time being, the multilateral development institutions have the capacity to expand their non-concessional lending to the developing and transition economies. However, as of May 2002, the capacity for extending multilateral concessional finance in the short term was in doubt, mainly owing to delays in reaching agreement on the replenishment of IDA resources for the three-year period beginning July 2002 ("IDA-13"). The disagreement revolved around how much of IDA disbursements, which go only to low-income countries, should be in the form of grants. Negotiations to replenish the African Development Fund (ADF), the soft loan window of the African Development Bank, also extended beyond their planned conclusion. "ADF IX", covering the period 2002-2004, should have begun operation in January 2002.

⁴¹ The recipients of the largest IBRD commitments were Turkey (\$2.2 billion), India (\$1.6 billion), Brazil (\$1.5 billion), Mexico (\$860 million) and Argentina (\$735 million). Together, commitments to these five countries amounted to about 60 per cent of total IBRD commitments.

⁴² For example, Afghanistan received about \$110 million from the World Bank in emergency grants for, among other purposes, budget support and to assist the Afghanistan Interim Administration in managing donor resources for rebuilding the country.

⁴³ See "Impact of recent events on low- and middle-income countries: response of the World Bank Group" (Development Committee document DC2001-0028), report prepared by the staff of the World Bank, Washington, D.C., 7 November 2001.

⁴⁴ A DDO gives the option of deferring the receipt of a single-tranche adjustment loan for up to three years provided that overall programme implementation and the macroeconomic framework remain adequate. See "Proposal to introduce a deferred drawdown option (DDO) for use with IBRD adjustment loans" (R2001-0174), World Bank, 26 September 2001.

Official development assistance

ODA from the member countries of the Development Assistance Committee (DAC) of OECD declined again in 2001 to \$51.4 billion from \$53.7 billion in 2000 (see tables II.4 and A.25 and A.26). The fall was 4.4 per cent in nominal terms, but excluding the effects of inflation and exchange-rate movements, “real” ODA fell only 1.4 per cent. The ODA “effort” of DAC member countries as a group, measured as the ratio of ODA to donor gross national product (GNP), remained at the low level of 0.22 per cent.

“Real” ODA from Ireland and Luxembourg rose by double-digit percentages in 2001 and assistance from Spain rose 45 per cent. However, net disburse-

Table II.4.
OFFICIAL DEVELOPMENT ASSISTANCE OF MEMBER COUNTRIES
OF THE DEVELOPMENT ASSISTANCE COMMITTEE, 2001

	ODA (Millions of dollars)	ODA/GNP ^a (Percentage)	Real change 2000 to 2001 ^b (Percentage)
Australia	852	0.25	-6.3
Austria	457	0.25	9.2
Belgium	866	0.37	6.7
Canada	1 572	0.23	-7.1
Denmark	1 599	1.01	-3.7
Finland	389	0.33	5.7
France	4 293	0.34	5.9
Germany	4 879	0.27	-1.5
Greece	194	0.19	-13.4
Ireland	285	0.33	20.0
Italy	1 493	0.14	8.8
Japan	9 678	0.23	-18.1
Luxembourg	142	0.80	17.3
Netherlands	3 155	0.82	-1.1
New Zealand	111	0.25	1.1
Norway	1 346	0.83	6.8
Portugal	267	0.25	-2.9
Spain	1 748	0.30	44.8
Sweden	1 576	0.76	-3.1
Switzerland	908	0.34	0.1
United Kingdom	4 659	0.32	6.2
United States	10 884	0.11	7.0
Total	51 354	0.22	-1.4
Average country effort (unweighted)	..	0.40	..
Memorandum items:			
EU countries combined	26 004	0.33	4.4
European Commission	5 915	..	21.1

Source: Organisation for Economic Cooperation and Development, news release, Paris, 13 May 2002 (<http://www.oecd.org/dac>).

^a Beginning in 2001, ODA/GNP ratios are being reported by the DAC secretariat as a percentage of gross national income (GNI) instead of gross national product (GNP). The change was made necessary by the 1993 revision of the System of National Accounts which had discontinued the term GNP and replaced it with GNI, an equivalent concept.

^b Taking account of both inflation and exchange-rate movements.

ments of Japanese “real” ODA decreased by about 18 per cent during the year, the result of several factors, including the completion of scheduled disbursements to multilateral organizations and heavier receipts of loan repayments from Asian countries that had been assisted after the Asian financial crisis of 1997. As a result of the decline in Japanese ODA, the United States replaced Japan as the largest donor among the DAC member countries.

In March 2002, however, the prospects for halting the decline in ODA improved when some of the major donors announced substantial increases in ODA at the International Conference on Financing for Development in Monterrey, Mexico (see concluding sect. of this chap.). The United States announced plans to raise its core development assistance by \$5 billion annually (about a 50 per cent increase) by 2006. The additional funds will be placed in a new Millennium Challenge Account to be distributed to developing countries showing a strong commitment towards good governance, health and education, as well as sound economic policies to promote enterprise development and entrepreneurship. The member countries of EU pledged to increase their ODA to 0.39 per cent of their GNP by 2006 as a step towards reaching the 0.7 per cent target.⁴⁵ In pursuit of this goal, France has recently announced that it is raising its ODA in 2002 to 0.36 per cent of GNP. Canada has also said that it will increase its ODA by 8 per cent annually over the next few years.

Several DAC member countries, including Greece, Ireland, Sweden, Switzerland and the United Kingdom of Great Britain and Northern Ireland, have also adopted specific targets for increasing ODA in the near-to-medium term. The Netherlands and Norway have fixed targets for the ratio of ODA to GNP, which are expected to raise ODA significantly, and Germany has said that it would increase ODA in budgetary appropriations in 2002.

The declines in ODA in the 1990s were attributed, in part, to the loss of confidence by donor Governments that recipient countries were using their aid effectively. The recent increased commitments of ODA indicate greater confidence that reforms undertaken by many ODA-receiving countries now warrant increased international support. The declaration of the International Conference on Financing for Development, known as the Monterrey Consensus, reflects this new and increasingly firm partnership between donors and recipients of ODA. It is also recognized that greater aid effectiveness is a donor as well as a recipient responsibility. This calls for further “untying” of aid and reducing “transaction costs” of aid delivery by harmonizing bilateral and multilateral donor policies and procedures, coordinating disbursement and delivery mechanisms, and moving towards “common pooling” arrangements, wherein donors would increasingly provide direct budgetary support to country-owned programmes of the recipient Governments.

The treatment of excessive debt burdens of low-income countries

In 2001, the external debt of developing countries totalled \$2,071 billion, a slight increase from the \$2,028 billion reached in 2000 (see tables A.28 and A.29). For many countries, debt levels were within sustainable limits. For many others, however, debt levels were excessive and needed to be addressed through international policy interventions.

For the grouping of low-income countries whose debt levels are recognized by the international community to be unsustainable, namely, the heavily

⁴⁵ Within this general objective, all EU members would strive to achieve an ODA-to-GNP ratio of at least 0.33 per cent by 2006, with members whose contribution was above that level maintaining or raising further their ODA contribution.

⁴⁶ Total HIPC debt was estimated at \$187 billion at the end of 2001, having peaked at \$206 billion in 1995 and fluctuated between \$185 billion and \$192 billion since 1997 (see IMF, *World Economic Outlook* (Washington, D.C., IMF, April 2002), p. 215).

⁴⁷ See "Heavily Indebted Poor Countries (HIPC) Initiative: status of implementation" (Development Committee document DC2002-0009), report prepared by the staffs of IMF and the World Bank, Washington, D.C., 14 April 2002.

⁴⁸ The heavy share of concessional loans in the debt of the HIPCs means that the nominal value of their debt does not provide a meaningful measure of their debt-servicing obligations. To address this, their level of debt and the policy-arranged reduction of their debt are measured in terms of the net present value (NPV) of the future cash flow required for interest and principal payments. NPV is the amount of money one would have to put aside today so that its earnings at market interest rates would cover the debt-servicing obligations in the future.

⁴⁹ No analysis of debt indicators was available for Burkina Faso, which had just reached its completion point. Concern was expressed for the situations of Bolivia and Uganda.

indebted poor countries (HIPCs), the nominal level of debt has not changed very much in recent years;⁴⁶ that is to say, although significant progress has been made in implementing the international initiative to reduce their debt, much remains to be done. As of April 2002, 26 countries were benefiting from the HIPC Initiative, although only 5 countries (Bolivia, Burkina Faso, Mozambique, Uganda and the United Republic of Tanzania) had reached the "completion point" of the process. In the 12 months to April 2002, four countries (Chad, Ethiopia, Ghana and Sierra Leone) were added to those that had reached the intermediate benchmark, called the "decision point". In the rest of 2002, three more countries (Benin, Mali and Mauritania) were expected by the staffs of IMF and the World Bank to reach the completion point and it was expected that Côte d'Ivoire could reach its decision point. Three countries (the Central African Republic, the Comoros and the Democratic Republic of the Congo) were expected to reach the stage of "preliminary HIPC documents", assuming they made expected progress in their Fund-sponsored adjustment programmes.⁴⁷

The "net present value" (NPV) of the relief under the HIPC Initiative that has been committed to the 26 countries that have reached their decision point is \$26 billion.⁴⁸ The stock of debt of these countries will thus fall by about two thirds—from about \$62 billion (in NPV terms) to \$27 billion—after applying the pre-HIPC debt-relief mechanisms and assistance under the HIPC programme—and to \$22 billion after additional bilateral debt relief has been received beyond the HIPC Initiative. Annual debt service paid by these countries in the period 2001-2005 will be reduced by about a third from the actual yearly debt-service payments made in 1998-1999. This equals an annual average decline in debt-service payments of 1.3 per cent of their GNP. Debt service as a share of exports is expected to fall from an annual average of 16 per cent in past years to 8.8 per cent in 2001-2005; as a share of government revenues, debt service is projected to decline from an annual average of 24.3 per cent in 1998-1999 to 13.1 per cent in 2001-2005.

The preceding forecasts assume that the HIPCs "stay on track" in terms of policy adjustments, that donors deliver the relief anticipated, and that export forecasts are accurate. In this regard, the experience over the past year shows that those assumptions do not necessarily hold true. For example, some countries needed more time than expected to reach agreement with the World Bank and IMF on poverty reduction strategies that are part and parcel of the HIPC programme. Some countries experienced delays in implementing programmed economic reforms and some donors did not deliver relief as expected.

Moreover, even in cases in which the HIPC programme was on target, the timetable set for some countries to exit from their debt problems suffered a setback. The worsened global economic environment and markedly lower commodity prices resulted in unexpectedly weak export performance, slower economic growth and thus a deterioration in the external debt indicators of these countries. Of the five countries that had passed their completion point, the staffs of IMF and the World Bank judged only Mozambique and the United Republic of Tanzania as having reached debt sustainability.⁴⁹ The prospects for debt sustainability for most of the other HIPC countries have also deteriorated, owing to a slump in exports; however, thus far, they are judged not to have been seriously impaired. Several countries could nevertheless complete their

HIPC programme with debt-to-export ratios above 150 per cent, the maximum acceptable level. In light of such concerns, the Development Committee decided to review the question of long-term debt sustainability at its fall 2002 meeting.⁵⁰

Another concern with the HIPC Initiative is that certain of the potentially eligible countries have been in conflict situations or have had substantial multilateral arrears. Such countries need to achieve a durable security situation and rebuild sound institutions and policies. Moreover, to qualify for debt relief under the HIPC Initiative entails the preparation of a Poverty Reduction Strategy Paper (PRSP), a process that involves the participation of all segments of society. For those countries emerging from conflict, this undertaking can be especially challenging since many segments of their population are displaced (see below on the 2001-2002 PRSP review).

A further challenge is that not all countries in the HIPC programme received anticipated additional assistance. Six HIPC countries recorded lower net aid inflows in 2001 compared with the levels of 1997-2000. Guinea, Guinea-Bissau and Sao Tome and Principe suffered from delays in completing PRGF reviews for IMF; Chad, Mali and Mauritania experienced delays in grant and loan disbursements.⁵¹ Also, many smaller African and Arab multilateral development institutions, as well as EU (as a multilateral creditor), have been slow to reach agreement on their relief commitment with decision point countries. The delays have been due to administrative bottlenecks, problems in completing legal agreements and slow data reconciliation between debtor and creditor countries. According to IMF and World Bank, some multilateral creditors have not yet even expressed their intention to extend relief to their HIPC debtors.⁵²

MAIN DEVELOPMENTS IN INTERNATIONAL FINANCIAL POLICY

Over the past year, five developments in international financial policy that affect development stood out. The first was the heightened concern about “money-laundering”, in light of its potential involvement in the financing of terrorism and the necessity for greater international cooperation to curtail it. The second was the broad acknowledgement that a new approach was needed in the process for restructuring the external debt of emerging economies in financial crisis. As a result, two major proposals reviewed below are now under consideration. Third, the notable contravention of business accounting standards in developed countries, particularly the United States, raised a warning flag about the international strategy to develop and promote international standards and codes covering a wide range of activities in developing and transition economies; that is to say, it highlighted the critical need for their full acceptance and observance by all the relevant actors and for measures to ensure both acceptance and observance. Fourth, the Bretton Woods institutions took stock of recent efforts to reform the relationship between the international financial institutions and donor Governments, on the one hand, and the countries receiving assistance from them, on the other hand. This included IMF reviews of surveillance and conditionality and the joint IMF and World Bank review of the process for preparing PRSPs. Fifth, new ground was broken on the integrated treatment of domestic and international dimensions of financial, trade and development policy in March 2002, when the International

⁵⁰ See communiqué of the Joint Ministerial Committee of the Boards of Governors of the World Bank and the International Monetary Fund on the Transfer of Real Resources to Developing Countries (Development Committee), Washington, D.C., 21 April 2002, ninth paragraph (reprinted in IMF Survey, 29 April 2002, pp. 126-127).

⁵¹ Thus was the result mainly of delayed aid disbursements by a major donor in the case of Chad, and administrative problems and an unexpected delay in fishing royalty payments in the case of Mauritania.

⁵² For the list of multilateral creditors that are delivering or are committed to delivering relief and those that have not yet approved relief for any HIPCs, see “Heavily indebted poor countries (HIPC) Initiative: status of implementation” . . . , table 6.

Conference on Financing for Development was held in Monterrey, Mexico. It brought together for the first time all major stakeholders, inter alia, at the most senior level, to develop common views and consider innovative proposals on critical issues in the financing of development.

Cooperation to combat corruption, money-laundering and terrorist financing

There has been a spreading agreement in all countries about the deep damage done to societies by corruption of officials and of the valuable assistance that countries can give each other in fighting corruption. One frequently seen aspect of corruption is disguising and moving illicitly acquired funds across borders, that is to say, money-laundering. This can be done through unregulated—in some cases, illegal—money transfer systems; however, when the funds are large, the formal financial systems of source and destination countries are almost inevitably involved in the funds transfers.

Corruption is just one source of funds for money-laundering; crime, including the drug trade and human trafficking, is another. “Laundered” funds are moved across borders through informal and formal financial systems. This applies equally to the financing of terrorism, the funds for which may originate in legal activities. There is thus considerable interest in the abuse of formal and informal financial systems for corrupt, illegal and terrorist purposes.

After the 11 September 2001 attacks on New York and Washington, D.C., national authorities and international organizations undertook a number of initiatives to better track and trap funds that had been laundered. In particular, the Security Council established the “Counter-Terrorism Committee” (CTC), which has been reviewing national efforts, country-by-country, and working with countries to prevent and suppress the financing of terrorist acts.⁵³ In addition, the Financial Action Task Force on Money Laundering (FATF) in an extraordinary plenary meeting on 29 and 30 October 2001 expanded its mission to include detection and prevention of the misuse of the world financial system by terrorists. This has led it, for example, to develop special guidance, released in April 2002, for financial institutions to help them detect the techniques and mechanisms used in the financing of terrorism.⁵⁴

In addition, IMF and the World Bank are working in consultation with FATF on a comprehensive methodology to assess observance of the FATF standard on anti-money laundering and combating the financing of terrorism. It could come to be included in the Fund/Bank programme of reviews of standards and codes. At the same time, IMF, the World Bank, the United Nations Global Programme Against Money Laundering, CTC, the Egmont Group of Financial Intelligence Units and others have been working to coordinate technical assistance and identify gaps and resources needed for strengthening institutional capacities.

Moreover, the General Assembly launched negotiations in 2002 to create a broad and effective United Nations convention against corruption. The convention is to address corruption in all its aspects and should aim, inter alia, to prevent and combat the transfer of funds of illicit origin derived from acts of corruption, including the laundering of funds, and returning such funds. The Assembly urged the negotiators to adopt a comprehensive and multidisciplinary approach and sought to involve the full and effective participation of the

⁵³ Formally called the Security Council Committee established pursuant to resolution 1373 (2001) concerning counter-terrorism, CTC had received national reports from 155 Member States and others as of 30 May 2002 (for additional information on CTC, see <http://www.un.org/Docs/sc/committees/1373>).

⁵⁴ See FATF, *Guidance for Financial Institutions in Detecting Terrorist Financing*, Paris, 24 April 2002 (on the Internet at http://www.fatf-gafi.org/pdf/GuidFITF01_en.pdf).

developing countries. It also invited the negotiators to take into consideration contributions of non-governmental organizations and civil society and targeted completion of the negotiations by the end of 2003.⁵⁵

While the nations of the world are thus seeking to promote stronger cooperation to combat money-laundering, they also need to enhance the delivery of technical assistance to developing countries and transition economies so as to assist them in implementing the antimoney laundering initiatives. Meanwhile, it is also important that all countries ratify and implement fully the United Nations instruments to counter the financing of terrorism, freeze terrorist assets, establish financial intelligence units and ensure the sharing of information.⁵⁶ Moreover, to the degree that measures to combat money-laundering and terrorist financing alter existing financial transfer mechanisms, whether informal or formal, possible negative consequences for innocent users of these systems should be assessed and alternative mechanisms considered that could provide low-cost and safe means to make international financial transfers.

New thinking about sovereign debt restructuring

Since the 1997-1998 international financial crisis, there has been growing consensus that private sector participation in the resolution of sovereign debt crises should become more “meaningful”. In other words, it has been recognized that in some, hopefully rare, cases, debt crises may arise in which a country faces a large short-term external financing requirement at a time when it no longer has access to international financial markets. To address such a situation, it is now argued that, along with official assistance, private creditors should limit their demand for timely debt-servicing (for example, they should quickly agree to roll over maturing credits on a temporary basis) and enter into a process for renegotiating the country’s debt. However, there is no precise framework for actually carrying out such a prompt and orderly debt restructuring with the panoply of external creditors. It is well agreed now in the major intergovernmental forums that reform is overdue.

The task of creating better mechanisms to facilitate the orderly and timely restructuring of unsustainable sovereign debt is a difficult one. First and foremost, it is not clear how to solve the “collective action” problem: each individual creditor has an incentive to try to collect on its loan at the expense of other creditors but it is only a collective approach that can solve the problem adequately. The increasing diversity of capital flows to emerging markets, especially the shift to greater use of bond financing, has made this problem more complicated. Private bondholders are more numerous than banks, anonymous, difficult to coordinate, and less worried about the effects of their actions on any long-term business relations with a particular country.

The first attempt to overcome these difficulties was made in 2000. A broad framework on “private sector involvement” in crisis prevention and resolution was agreed upon at the Annual Meetings of the Board of Governors of IMF and the World Bank Group in Prague. The basic principle of the framework was that private investors and creditors have to bear the consequences of their decisions.⁵⁷ However, despite agreement at the broad level, there remained great uncertainty about how each creditor’s claims would be treated in a crisis situation or who would decide its fate. This uncertainty complicates decision-making for all parties involved—the private sector, the official creditors and the debtor Government.

⁵⁵ Additional details of the terms of reference for the negotiations may be found in General Assembly resolution 56/260, adopted on 31 January 2002.

⁵⁶ As of 10 April 2002, only 34 States had ratified the International Convention for the Suppression of the Financing of Terrorism, adopted by the General Assembly in its resolution 54/109 of 9 December 1999.

⁵⁷ For more details, see report of the Secretary-General (A/56/173 and Add. 1 and 2) entitled “International financial architecture and development, including net transfer of resources between developing and developed countries” of 11 July 2001, sect. III.E.

To deal with the coordination problems inherent in a sovereign debt restructuring and to reduce the uncertainty that deters new flows, two broad approaches are now being explored. The first would establish a statutory framework that would make it easier for a sovereign debtor and a specified majority of its creditors to reach an agreement that would be binding on all creditors. The second approach would add new clauses to sovereign bond contracts on how to carry out comprehensive restructuring in crisis situations.

Proposal for a new statutory framework

Until recently, the analysis of a new statutory framework was undertaken mainly by academics, non-governmental organizations and UNCTAD.⁵⁸ Ms. Anne Krueger, First Deputy Managing Director of IMF, presented her vision of the approach in November 2001.⁵⁹ While the proposal has been subsequently revised, the principle remains that effective collective action requires that the various classes of creditors reach decisions on restructuring their claims by appropriate majorities and that a new sovereign debt restructuring mechanism (SDRM) could facilitate the process.

The proposed arrangement would enable a requisite majority of a diverse set of creditors to make a restructuring agreement binding on all creditors. Three other important features of the proposal are a stay on litigation following an agreed payment suspension triggered by the onset of the crisis, protection of creditor interests during the stay, and the provision of new financing by the private creditors (as well as official institutions). Some of the features of SDRM resemble those envisaged in the second new approach to a debt restructuring process, namely, the use of collective (or majority) action clauses (CACs) in bond issues. However, unlike CACs, SDRM would entail a formal statutory regime established through international treaty obligations that applied to all foreign-currency indebtedness, namely, international and domestically held bonds, bank loans, trade credit and official claims.

Many issues relevant to the design of SDRM either are not clear yet or are controversial. There is no consensus about the roles of the different participants in the process. The initial proposal would have empowered the Fund to make decisions on key issues concerning the operation of the mechanism: the activation of the stay on litigation, the extension of that stay, and the approval of the restructuring agreement (the latter to be agreed with the requisite majority of creditors). It has been argued that the status of IMF as a creditor organization owned and controlled by Governments, both debtors and creditors, could create a perception of bias that would damage the regime's legitimacy.⁶⁰ Accepting the point, Ms. Krueger offered another version of the proposal, which would place all key decision-making powers in the collective hands of the debtor and a qualified majority of its creditors, with the role of the Fund being largely confined to decisions regarding the provision of its own resources.⁶¹ This option would require the formation of a new independent judicial organ for the verification of claims and resolution of disputes.

The proposed workout procedures are loosely modelled on chapter 11 of the United States Bankruptcy Code, which deals with corporations.⁶² However, some analysts think that the model for such a mechanism should be chapter 9 of the United States Bankruptcy Code, which provides for the bankruptcy of subnational governmental organizations, such as municipalities or counties.

⁵⁸ See Kenneth Rogoff and Jeromin Zettelmeyer, *Early Ideas on Sovereign Bankruptcy Reorganization: A Survey*, IMF Working Paper, WP/02/57 (Washington, D.C., International Monetary Fund, March 2002).

⁵⁹ Anne Krueger, "International financial architecture for 2002: a new approach to sovereign debt restructuring", address given at the National Economists' Club Annual Members' Dinner, American Enterprise Institute, Washington, D.C., 26 November 2001 (this and subsequently cited statements by Ms. Krueger may be found on the IMF web site at <http://www.imf.org>).

⁶⁰ See, for instance, Michael Chamberlin, "Revisiting the IMF's sovereign bankruptcy proposal and the quest for more orderly sovereign work-outs", remarks at the Conference on "Sovereign Debt Workouts: Hopes and Hazards", Institute for International Economics, Washington, D.C., 2 April 2002.

⁶¹ Anne Krueger, "New approaches to sovereign debt restructuring: an update on our thinking", remarks at the Conference on "Sovereign Debt Workouts: Hopes and Hazards", Institute for International Economics, Washington, D.C., 1 April 2002.

⁶² Anne Krueger, "Should countries like Argentina be able to declare themselves bankrupt?" *El País*, 18 January 2002.

Under this provision, people affected by a planned financial reorganization meant to address a crisis situation are given the right to voice their views. Applying this principle to sovereign debt should make the debt restructuring process more open, transparent and accountable to the citizens who usually bear the brunt of the burden in a sovereign debt crisis.⁶³

Another unresolved issue is which creditors should be included. Under the SDRM proposal, credits from the Fund and multilateral development banks would not be subject to restructuring, following the long-standing convention and agreements according them “preferred creditor” status. However, it has been argued that there should be no preferred creditors, inasmuch as whoever takes lending decisions should also accept the responsibility for the financial risks.⁶⁴ Also, it is not clear yet how to treat sovereign debt held by nationals of the debtor country.

A further concern arises from the fact that it may be necessary for the authorities to impose capital controls for a temporary period so as to arrest capital flight during a financial crisis. The authorities operating exchange controls are likely to rank debt-servicing by private firms as a lower priority than paying for essential imports and servicing debt owed to multilateral creditors, and this could interrupt debt-service payments by non-sovereign domestic debtors to non-residents. It is not clear how to protect healthy domestic enterprises that might be subject to litigation because they are forced into default solely because of the imposition of controls.

Unlike Chapter 11 (and Chapter 9) provisions, the SDRM proposals are explicitly restricted to cases of unsustainable debt, that is to say, solvency crises.⁶⁵ However, it is very difficult, if not impossible, to distinguish between illiquidity and insolvency under crisis conditions. IMF is working to strengthen the analytical basis used to make this judgement; but, whatever is done, an unequivocal judgement could hardly be expected in the midst of a crisis.⁶⁶ Thus, the markets could not know in advance whether a country in crisis would be deemed as warranting application of SDRM or not. This could add additional uncertainty at the already uncertain moment of crisis. Some observers think that this is a weakness of the proposal.⁶⁷

The implementation of the SDRM proposal could require new international treaties, changes in national legislation, or amendments to the Articles of Agreement of IMF. This would take time. According to Ms. Krueger, even with unanimous political support (which is not anticipated) the SDRM could not be in place for at least two to three years.⁶⁸ In the meantime, further work on the legal, institutional and procedural aspects of the proposal is under way.

Proposals for new lending contracts

It is believed that the CACs or contractual approach could be implemented much faster than SDRM. It aims to achieve much the same results as the statutory approach, but in a decentralized, market-oriented manner. Under this approach, sovereign debtors would put new clauses into their bond contracts to cover the contingency of debt restructuring. The role of the official sector would be to work with borrowers and creditors to make the clauses as effective as possible and to create incentives to encourage the incorporation of the new terms in debt contracts.

Like the SDRM proposal, the central element of the second approach is a

⁶³ See, for instance, Ann Pettifor, “Chapter 9/11? Resolving international debt crises”, a report from Jubilee Research at New Economics Foundation, February 2002, p. 10.

⁶⁴ See Kunibert Raffer, “Solving sovereign debt overhang by internationalising Chapter 9 procedures”, report for the Austrian Institute for International Affairs, June 2001, p. 28.

⁶⁵ For handling liquidity crises, mention is made of collective action clauses (see Krueger, “New approaches to sovereign debt restructuring” ...).

⁶⁶ “Managing Director’s report to the International Monetary and Financial Committee: Fund surveillance and crisis prevention and resolution”, 16 April 2002.

⁶⁷ See, for instance, Marcus Miller, “Sovereign debt restructuring: new articles, new contracts—or no change?”, International Economic Policy Brief, No. PB02-3, Institute for International Economics, Washington, D.C., April 2002, p. 5.

⁶⁸ Krueger, “New approaches to sovereign debt restructuring” ..., p. 2.

⁶⁹ See, for instance, John Taylor, "Sovereign debt restructuring: a U.S. perspective", remarks at the Conference on "Sovereign Debt Workouts: Hopes and Hazards", Institute for International Economics, Washington, D.C., 2 April 2002.

⁷⁰ Willem Buiters and Anna Sibert, "A contribution to the new international financial architecture", *International Finance*, vol. 2, No. 2 (July 1999), pp. 227-247.

⁷¹ See, for instance, "Kenen, Calvo offer new proposals in debate over preventing and resolving financial crises", *IMF Survey*, 25 February 2002, p. 52.

⁷² Anne Krueger, "New approaches to sovereign debt restructuring"

⁷³ John Taylor, loc. cit., p. 3.

⁷⁴ See report of the Secretary-General to the Preparatory Committee for the High-level International Intergovernmental Event on Financing for Development (A/AC.257/12), 18 December 2000, para. 125.

⁷⁵ At the 2002 Spring meetings of IMF and the World Bank, the Group of 7 Finance Ministers and Central Bank Governors, and the Group of 10 Finance Ministers and Central Bank Governors announced that they had decided to work on the market-oriented approach to sovereign debt restructuring, (see their respective communiqués in *IMF Survey*, 29 April 2002, pp. 128 and 129).

⁷⁶ See, for instance, Marcus Miller, loc. cit., p. 9.

process to prevent a small minority of creditors from sabotaging the restructuring. In addition, many proponents of this approach advocate the inclusion of representation clauses (specifying how debtors and creditors would come together in the event of restructuring) and initiation clauses (describing how the sovereign debtor would initiate the restructuring).⁶⁹ It has also been suggested that rollover options may be added to the debt contracts, which would allow the debtor to extend the maturity of the bond for a specific period at a predetermined spread under predefined conditions.⁷⁰ According to some observers, securing the assent of creditors, when they first sign debt contracts, to the possibility of fixed-term debt suspensions under certain conditions would be the most attractive way to impose a standstill should the need arise later.⁷¹

This contractual approach, however, is seen to have several weak points, including the problems of aggregation and transition.⁷² The former refers to the need to coordinate creditors across different classes of debt. The latter refers to the fact that, if CACs are included only in new issues, it will take many years before the overwhelming majority of outstanding bonds have these clauses.

To extend the coverage of CACs, it has been proposed that the same clauses could be included in bank debt as well as bonds. This would still not result in universal coverage of all the creditors of a country. Moreover, it is presumed that clauses would be incorporated into debt instruments on an issue-by-issue or loan-by-loan basis. This could lead to inconsistencies caused by the fact that different types of issues would be subject to the laws of different jurisdictions. In this regard, it has been suggested that disputes between creditors could be handled in an arbitration process provided for in the contracts themselves.⁷³

Such an approach, however, may not achieve simultaneous, fair and full treatment of all of a country's foreign debt obligations, matched with the adequate provision of new funds by the international community or other creditors. A further mechanism has thus been suggested, namely, an additional, voluntary option for restructuring debt from private and official creditors through an independent, mediation mechanism that would be invoked by a country under specified conditions to bring together committees and institutions representing all types of creditors.⁷⁴

Several measures have been proposed as incentives for borrowers and lenders to incorporate the new clauses in their debt contracts. These would include the requirement that the clauses be used by every country that has or seeks an IMF programme, and that countries using the clauses pay lower charges on their IMF borrowings. Also, financial incentives to creditors to swap their existing debt instruments for those with the new clauses are being considered.

In the past, most developing-country Governments were hesitant to introduce CACs, mainly out of concern not to lower their reputation in the market. It has been suggested that one way to overcome this reluctance is for the Governments of the seven major industrialized countries (G-7) to introduce CACs as a standard feature in their own sovereign debt instruments. Thus far, only Canada, Germany and the United Kingdom have adopted CACs in their foreign currency bond and note issues. If this approach is to gather momentum, other G-7 countries should follow their example.⁷⁵

The most important CAC incentive, according to many observers, derives from viewing it as the alternative to the proposed statutory scheme for debt restructuring.⁷⁶ Most lenders as well as borrowers are wary about the prospect of a new centralized mechanism's being imposed on them. Thus, as the statu-

tory proposal is further refined, the private sector has an incentive to quickly develop alternatives within the contractual approach. However, it is doubtful that a purely market-oriented approach would suffice, as only the official sector could deal with some issues, including those of inter-creditor equity. Consequently, the two-pronged strategy of developing both reform proposals is more likely to produce comprehensive results than either approach in isolation.

Accounting standards and their implementation

One integral component of the strategy to strengthen the international financial architecture has been to develop and foster adoption, especially by emerging economies, of key standards and codes of behaviour in several economic and financial areas. International accounting standards (IAS) have been one of the priority areas where this approach has been applied in developing and transition economies. A study by the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting concluded in February 1999 that widespread deficiencies in the areas of accounting and auditing had contributed to the accumulation of problems leading to the Asian financial crisis and to its virulence. Most of the failed firms in East Asian countries had been audited and given a clean bill of health by local members of the then six major international accounting firms. However the study found that the firms were not in compliance with IAS.⁷⁷ The study noted that, had the firms in these countries strictly followed IAS in preparing their financial statements, investors would not have been misled and could have taken appropriate decisions in a more timely fashion.⁷⁸

Complete and objective disclosure of relevant accounting information as a result of the fuller implementation of IAS was thus expected to provide reliable microlevel information which, coupled with macroeconomic indicators, would serve as an early warning signal for the prevention of similar episodes in future. The implication was that IAS should be further developed, disseminated and implemented. Developments over the past year underlined the critical importance of the latter in developed as much as in developing and transition economies.

Strengthening international standard-setting

A new machinery for setting IAS was inaugurated in 2001. The International Accounting Standards Committee, which had started in 1973 as a part-time voluntary organization for the harmonization of accounting and auditing standards worldwide, was converted into a full-time standard-setting body, called the International Accounting Standards Board (IASB). This was the culmination of developments that increased the importance of IAS, including the endorsement of the use of IAS in cross-border offerings and listings by the International Organization of Securities Commissions (IOSCO) in 2000. In addition, the European Commission proposed that EU-listed companies publish IAS-compliant consolidated financial statements by 2005, which would make IAS compulsory for at least 7,000 listed companies in Europe. In the United States, which uses its own Generally Accepted Accounting Principles (GAAP) rather than IAS, the Securities and Exchange Commission issued a “concept release” in February 2000 seeking opinions on IAS use by foreign companies in United States financial markets. As of May 2002, that issue was still under consideration.

⁷⁷ UNCTAD, “The role of accounting disclosures in the East Asian financial crisis” (chap.VI), in *International Accounting and Reporting Issues; 1999 Review* (United Nations publication, Sales No. E.99.II.D.27), sect. IV, entitled “Review and analysis of accounting practices”, pp.139-147.

⁷⁸ *Ibid.*, chap. VI, pp. 117–124.

International Financial Reporting Standards, as the IASB output will be known, are to be based on the best international practice and to improve on it in the light of new demands. Given the central role of the United States financial markets in the global system, United States accounting standards have exerted a strong influence on IAS. However, IASB would not necessarily conform to United States practice in all details. For example, IASB decided in 2001 to prepare a standard dealing with the accounting for stock options, while the Financial Accounting Standards Board of the United States has been unable to agree on such a standard since the early 1990s owing to opposition of United States corporations.

The new crisis in investor confidence: need for strong implementation of standards

Meanwhile, the collapse of the Enron Corporation in the United States and the related scandal involving its auditor, Arthur Anderson, have jolted the global accounting community because of concerns about the possible role of accountants in failures of corporate governance. The blatant abuse of accounting and auditing standards in the country often held out as “the standard of the standards” raised questions about the credibility of the standards themselves, and about the need for drastic changes.⁷⁹

The recent financial failures not only of Enron, but also of Global Crossing and some other large firms, signal that problems might be far more widespread than imagined in financial reporting and auditing of companies around the world. Even in the case of companies that have not gone bankrupt, suspicions of accounting irregularities increasingly arise as firms in the United States and elsewhere unexpectedly restate their past earnings and experience severe reductions in their stock prices. It is feared that, if such doubts become more general, large institutional investors might increasingly withdraw from emerging markets as a group as they realize that their overall portfolios have more risk than intended and that they can reduce their overall risk exposure by holding fewer emerging-market assets. Indeed, the Financial Stability Forum, which brings together the key financial officials of the major industrialized countries and the main international bodies on financial regulation issues, took up in March 2002 the question whether or not the accounting irregularities might have systemic consequences for international financial stability. It will further discuss the issue in September 2002.

The problem highlighted by recent corporate failures is that accounting standards are only as strong as their implementation. They are undermined by poor compliance by firms and by the sub-standard auditing that condones this. Before the revelations in the United States, most discussion of the abuse of accounting standards was in an emerging-market context. Now it is realized that the problem is a global one. It is the responsibility of all countries to curtail accounting abuse in the future and restore the confidence of investors in the quality of financial accounts, whether in developed or developing economies. At the same time, the accounting standards themselves need to be strong and appropriate. The new IASB can make a major contribution on this score. In addition, devising appropriate incentives for accounting firms to follow agreed professional standards and disincentives to prevent abuse of those standards warrants greater international attention.

⁷⁹ For example, the widely read United States magazine *Business Week* concluded that “in the fast-moving 1990s, with intensifying pressure to produce ever-rising earnings and stock prices, Corporate America began to push the accounting boundaries like never before ... The accounting industry has strenuously resisted change even in the face of repeated audit failures and the scandals. That is about to change. The size and scope of the Enron disaster is simply too huge to ignore” (“Special report: accounting in crisis”, *Business Week*, 28 January 2002, pp. 44-45).

Review of surveillance, conditionality and ownership in the Bretton Woods institutions

In response to disappointing results of multilateral interventions during the Asian financial crisis at the end of the 1990s, and the longer-running disappointment with the economic situation in many low-income countries, the Bretton Woods institutions have been engaged in a reassessment of the relationship and the flow of policy advice between them and the countries that receive their support.

The International Monetary and Financial Committee (IMFC) recently reviewed the reform of IMF policies on surveillance of all member countries and the policy conditions for the use of Fund resources. One outcome of the surveillance review is that stronger emphasis will be placed on assessing the global impact of policies in individual countries, particularly the largest, as well as on international vulnerabilities that may arise from instability in individual countries and international financial markets. In addition, more candid and comprehensive assessments of exchange arrangements will be made. IMFC also encouraged the Fund to draw more effectively on non-Fund sources with respect to surveillance matters outside its core expertise and to further integrate the work on multilateral and regional surveillance with its traditional country-level surveillance. In addition, IMFC sought to strengthen Fund-supported adjustment programmes through “streamlined and focused conditionality and strong national ownership” and to consider taking “a fresh perspective and appropriate distance from day-to-day programme implementation issues.”⁸⁰ One concern, however, was that the streamlining of IMF conditions not shift conditionalities to the World Bank and regional development banks, leaving the overall burden of conditionality unchanged.⁸¹ Indeed, there is considerable interest in how these guidelines will translate into individual country programmes.

A theme that permeates all reviews of creditor/donor relationships with assistance-receiving countries is that of enhanced national ownership of policy programmes. That theme grows out of a greater international appreciation of both the political economy of reform and the irreplaceable value of in-depth country expertise for the design of effective reform. The mechanism to put this thinking into practice in the low-income countries is the consultative process for developing the Poverty Reduction Strategy Papers (PRSPs). IMF and the World Bank reviewed the experience with the PRSPs in 2001-2002 and the Development Committee shared their positive assessment, particularly in enhancing ownership. However, the Committee also recognized that there was scope for improvement, notably in extending the participatory processes for the elaboration and monitoring of PRSPs, implementing pro-poor growth policies, and better aligning the programmes of multilateral and bilateral development agencies with country strategies.⁸²

The limited experience and technical capacity of many low-income countries make the preparation of a PRSP a challenging task and there have been questions whether the PRSPs designed in the low-income countries have truly involved all relevant segments of society in their preparation. Such involvement was not attempted in the “interim PRSPs”, which had to be put quickly in place in order not to delay the HIPC process for several countries. They were meant to be the exception. However, not all countries have been in a situation

⁸⁰ See communiqué of the International Monetary and Financial Committee of the Board of Governors of the International Monetary Fund, 20 April 2002, ninth and sixteenth paragraphs (reprinted in *IMF Survey*, 29 April 2002, pp. 118-122).

⁸¹ See communiqué of the Intergovernmental Group of 24 on International Monetary Affairs and Development, 19 April 2002, twenty-fourth paragraph (reprinted in *IMF Survey*, 29 April 2002, pp. 130-133).

⁸² See communiqué of the Development Committee, 21 April 2002, fourth paragraph (reprinted in *IMF Survey*, April 2002, pp. 126-127).

in which intensive engagement of all stakeholders was practical or in which Governments, the Bretton Woods institutions and civil society shared a common vision on the appropriate scope or content of the PRSP. In sum, while there have been some encouraging developments in the “PRSP approach,” it is still a work in progress.

The Monterrey Consensus and the millennium development goals

The policy developments reviewed above are all crucial pieces of a larger policy puzzle, namely, how best to mobilize and deploy financial resources to promote development and eradicate poverty. This matter has challenged policy makers around the world for half a century, but over the past several years a unique international process emerged to better address the issue. That process has brought together all the major stakeholders in order to effectively advance this agenda.

Centred on the United Nations, the new process reached a milestone at the International Conference on Financing for Development held in Monterrey, Mexico, from 18 to 22 March 2002. There, heads of State and Government, ministers of finance, trade, development and foreign affairs, the heads of the international financial institutions and the World Trade Organization, and other intergovernmental organizations, as well as business leaders and civil society organizations from the North and the South, held discussions that were unprecedented in scope and intensity. The outcome included agreement on a comprehensive but concise set of policies that address national, international and systemic issues relating to financing for development “in a holistic manner in the context of globalization and interdependence” and identify means for ensuring the availability of sufficient financial resources to reach the goals set by the major United Nations conferences and summits in the 1990s.⁸³

The outcome of the Conference was embodied in the Monterrey Consensus. The affirmation of the agreed text by heads of State and Government and other leaders was accompanied by what many have called a new and positive “spirit of Monterrey”. It was reflected in the significant commitments at the Conference to increasing ODA, as noted earlier, and in the discussions that ensued in the April Bretton Woods meetings on implementing the Monterrey Consensus.⁸⁴ The spirit could be seen as well in the high-level participation in the Monterrey round tables for ministers and government leaders⁸⁵ and in the numerous proposals brought to Monterrey by Governments, civil society and the private sector.⁸⁶

One particular concern brought by governments to Monterrey was that many developing countries were not on track with respect to reaching by 2015 the millennium development goals, to which the world’s nations had committed themselves at the Millennium Summit held at the United Nations in September 2000.⁸⁷ One aspect of the Monterrey Consensus was that it embodied a strong partnership compact between developed and developing countries to increase the chances that all countries would attain the goals. To focus continuing attention on policy and financial needs in this regard, the Monterrey Consensus endorsed an initiative of the Secretary-General under which the United Nations Development Programme is launching a major drive to harness the political will in all countries so as to achieve these goals. The project will be based on

⁸³ This sentence paraphrases the expressed intention of the General Assembly in establishing the Preparatory Committee for the International Conference on Financing for Development in December 1999 (see Assembly resolution 54/196, para. 3).

⁸⁴ See the communiqués of the Development Committee and the International Monetary and Financial Committee, in *IMF Survey*, 29 April 2002, pp. 126-127 and 118-122, respectively.

⁸⁵ See the summaries of the multi-stakeholder round tables held at the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002 (A/CONF.198/8 and Add.1-12).

⁸⁶ These included innovative financing mechanisms (such as new allocations of special drawing rights (SDRs) by IMF for use as grants to non-governmental entities), methods to encourage private investment in developing countries (such as a global clearing house on the Internet for putting directly useful information about countries at the fingertips of investors), innovative public/private partnerships (building on Latin American experiences), financing investment in health and other global public goods and so on (see the Conference web site for more details (<http://www.un.org/esa/ffd>)).

⁸⁷ See United Nations Millennium Declaration (General Assembly resolution 55/2), adopted on 8 September 2000.

three pillars. The first is the Millennium Project, a research initiative involving United Nations agencies, the Bretton Woods institutions, and other partners to prepare studies and statistics tracking progress towards the millennium development goals and to help the United Nations promote these goals. The second pillar is the Millennium Reports, which will track global and national progress towards achieving the millennium development goals.⁸⁸ The third pillar is the Millennium Campaign, which will use the findings of the Millennium Reports to foster awareness and global coalitions to promote efforts to attain the millennium development goals.

While this critical campaign is but one element of the Monterrey process, it is indicative of how the international community—understood here to include Governments, international organizations, and business and civil society organizations—can mobilize itself when it so chooses for concerted progress on development. The challenge of Monterrey, aptly called “staying engaged” in the Consensus, is to continue to bring all the relevant stakeholders together for effective collaboration, coherence and consistency of national and international efforts to achieve the necessary progress in all the essential facets of financing for development.

⁸⁸ The Millennium Reports will entail country-by-country assessment of progress towards attainment of the millennium development goals. The first pilot reports on Bolivia, Cameroon, Cambodia, Chad, Nepal, the United Republic of Tanzania and Viet Nam have already been completed, and are available at: <http://www.undp.org/mdg/countryreports.html>.

ANNEX

MONTERREY CONSENSUS OF THE INTERNATIONAL CONFERENCE ON FINANCING FOR DEVELOPMENT

Confronting the challenges of financing for development: a global response

We the heads of State and Government, gathered in Monterrey, Mexico, on 21 and 22 March 2002, have resolved to address the challenges of financing for development around the world, particularly in developing countries. Our goal is to eradicate poverty, achieve sustained economic growth and promote sustainable development as we advance to a fully inclusive and equitable global economic system.

We note with concern current estimates of dramatic shortfalls in resources required to achieve the internationally agreed development goals, including those contained in the United Nations Millennium Declaration.^a

Mobilizing and increasing the effective use of financial resources and achieving the national and international economic conditions needed to fulfil internationally agreed development goals, including those contained in the Millennium Declaration, to eliminate poverty, improve social conditions and raise living standards, and protect our environment, will be our first step to ensuring that the twenty-first century becomes the century of development for all.

Achieving the internationally agreed development goals, including those contained in the Millennium Declaration, demands a new partnership between developed and developing countries. We commit ourselves to sound policies, good governance at all levels and the rule of law. We also commit ourselves to mobilizing domestic resources, attracting international flows, promoting international trade as an engine for development, increasing international financial and technical cooperation for development, sustainable debt financing and external debt relief, and enhancing the coherence and consistency of the international monetary, financial and trading systems.

The terrorist attacks on 11 September 2001 exacerbated the global economic slowdown, further reducing growth rates. It has now become all the more urgent to enhance collaboration among all stakeholders to promote sustained economic growth and to address the long-term challenges of financing for development. Our resolve to act together is stronger than ever.

Each country has primary responsibility for its own economic and social development, and the role of national policies and development strategies cannot be overemphasized. At the same time, domestic economies are now interwoven with the global economic system and, inter alia, the effective use of trade and investment opportunities can help countries to fight poverty. National development efforts need to be supported by an enabling international economic environment. We encourage and support development frameworks initiated at the regional level, such as the New Partnership for Africa's Development and similar efforts in other regions.

Globalization offers opportunities and challenges. The developing countries and countries with economies in transition face special difficulties in responding to those challenges and opportunities. Globalization should be fully inclusive and equitable, and there is a strong need for policies and measures at the national and international levels, formulated and implemented with the full and effective participation of developing countries and countries with economies in transition to help them respond effectively to those challenges and opportunities.

In the increasingly globalizing interdependent world economy, a holistic approach to the interconnected national, international and systemic challenges of financing for development—sustainable, gender-sensitive, people-centred development—in all parts of the globe is essential. Such an approach must open up opportunities for all and help to ensure that resources are created and used effectively and that strong, accountable institutions are established at all levels. To that end, collective and coherent action is needed in each interrelated area of our agenda, involving all stakeholders in active partnership.

Recognizing that peace and development are mutually reinforcing, we are determined to pursue our shared vision for a better future, through our individual efforts combined with vigorous multilateral action. Upholding the Charter of the United Nations and building upon the values of the Millennium Declaration, we commit ourselves to promoting

national and global economic systems based on the principles of justice, equity, democracy, participation, transparency, accountability and inclusion.

Leading actions

Mobilizing domestic financial resources for development

In our common pursuit of growth, poverty eradication and sustainable development, a critical challenge is to ensure the necessary internal conditions for mobilizing domestic savings, both public and private, sustaining adequate levels of productive investment and increasing human capacity. A crucial task is to enhance the efficacy, coherence and consistency of macroeconomic policies. An enabling domestic environment is vital for mobilizing domestic resources, increasing productivity, reducing capital flight, encouraging the private sector, and attracting and making effective use of international investment and assistance. Efforts to create such an environment should be supported by the international community.

Good governance is essential for sustainable development. Sound economic policies, solid democratic institutions responsive to the needs of the people and improved infrastructure are the basis for sustained economic growth, poverty eradication and employment creation. Freedom, peace and security, domestic stability, respect for human rights, including the right to development, and the rule of law, gender equality, market-oriented policies, and an overall commitment to just and democratic societies are also essential and mutually reinforcing.

We will pursue appropriate policy and regulatory frameworks at our respective national levels and in a manner consistent with national laws to encourage public and private initiatives, including at the local level, and foster a dynamic and well functioning business sector, while improving income growth and distribution, raising productivity, empowering women and protecting labour rights and the environment. We recognize that the appropriate role of government in market-oriented economies will vary from country to country.

Fighting corruption at all levels is a priority. Corruption is a serious barrier to effective resource mobilization and allocation, and diverts resources away from activities that are vital for poverty eradication and economic and sustainable development.

We recognize the need to pursue sound macroeconomic policies aimed at sustaining high rates of economic growth, full employment, poverty eradication, price stability and sustainable fiscal and external balances to ensure that the benefits of growth reach all people, especially the poor. Governments should attach priority to avoiding inflationary distortions and abrupt economic fluctuations that negatively affect income distribution and resource allocation. Along with prudent fiscal and monetary policies, an appropriate exchange rate regime is required.

An effective, efficient, transparent and accountable system for mobilizing public resources and managing their use by Governments is essential. We recognize the need to secure fiscal sustainability, along with equitable and efficient tax systems and administration, as well as improvements in public spending that do not crowd out productive private investment. We also recognize the contribution that medium-term fiscal frameworks can make in that respect.

Investments in basic economic and social infrastructure, social services and social protection, including education, health, nutrition, shelter and social security programmes, which take special care of children and older persons and are gender sensitive and fully inclusive of the rural sector and all disadvantaged communities, are vital for enabling people, especially people living in poverty, to better adapt to and benefit from changing economic conditions and opportunities. Active labour market policies, including worker training, can help to increase employment and improve working conditions. The coverage and scope of social protection needs to be further strengthened. Economic crises also underscore the importance of effective social safety nets.

We recognize the need to strengthen and develop the domestic financial sector, by encouraging the orderly development of capital markets through sound banking systems and other institutional arrangements aimed at addressing development financing needs, including the insurance sector and debt and equity markets, that encourage and channel savings and foster productive investments. That requires a sound system of financial intermediation, transparent regulatory frameworks and effective supervisory mechanisms, supported by a solid central bank. Guarantee schemes and business development services should be developed for easing the access of small and medium-sized enterprises to local financing.

Microfinance and credit for micro-, small and medium-sized enterprises, including in rural areas, particularly for women, as well as national savings schemes, are important for enhancing the social and economic impact of the financial sector. Development banks, commercial and other financial institutions, whether independently or in cooperation, can be effective instruments for facilitating access to finance, including equity financing, for such enterprises, as well as an adequate supply of medium- and long-term credit. In addition, the promotion of private-sector financial innovations and public-private partnerships can also deepen domestic financial markets and further develop the domestic financial sector. The prime objective of pension schemes is social protection, but when those schemes are funded they can also be a source of savings. Bearing in mind economic and social considerations, efforts should be made to incorporate the informal sector into the formal economy, wherever feasible. It is also important to reduce the transfer costs of migrant workers' remittances and create opportunities for development-oriented investments, including housing.

It is critical to reinforce national efforts in capacity-building in developing countries and countries with economies in transition in such areas as institutional infrastructure, human resource development, public finance, mortgage finance, financial regulation and supervision, basic education in particular, public administration, social and gender budget policies, early warning and crisis prevention, and debt management. In that regard, particular attention is required to address the special needs of Africa, the least developed countries, small island developing States and landlocked developing countries. We reaffirm our commitment to the Programme of Action for the Least Developed Countries for the Decade 2001-2010,^b adopted by the Third United Nations Conference on the Least Developed Countries, held in Brussels from 14 to 20 May 2001, and the Global Programme of Action for the Sustainable Development of Small Island Developing States.^c International support for those efforts, including technical assistance and through United Nations operational activities for development, is indispensable. We encourage South-South cooperation, including through triangular cooperation, to facilitate exchange of views on successful strategies, practices and experience and replication of projects.

***Mobilizing international resources for development:
foreign direct investment and other private flows***

Private international capital flows, particularly foreign direct investment, along with international financial stability, are vital complements to national and international development efforts. Foreign direct investment contributes toward financing sustained economic growth over the long term. It is especially important for its potential to transfer knowledge and technology, create jobs, boost overall productivity, enhance competitiveness and entrepreneurship, and ultimately eradicate poverty through economic growth and development. A central challenge, therefore, is to create the necessary domestic and international conditions to facilitate direct investment flows, conducive to achieving national development priorities, to developing countries, particularly Africa, least developed countries, small island developing States, and landlocked developing countries, and also to countries with economies in transition.

To attract and enhance inflows of productive capital, countries need to continue their efforts to achieve a transparent, stable and predictable investment climate, with proper contract enforcement and respect for property rights, embedded in sound macroeconomic policies and institutions that allow businesses, both domestic and international, to operate efficiently and profitably and with maximum development impact. Special efforts are required in such priority areas as economic policy and regulatory frameworks for promoting and protecting investments, including the areas of human resource development, avoidance of double taxation, corporate governance, accounting standards, and the promotion of a competitive environment. Other mechanisms, such as public/private partnerships and investment agreements, can be important. We emphasize the need for strengthened, adequately resourced technical assistance and productive capacity-building programmes, as requested by recipients.

To complement national efforts, there is the need for the relevant international and regional institutions as well as appropriate institutions in source countries to increase their support for private foreign investment in infrastructure development and other priority areas, including projects to bridge the digital divide, in developing countries and countries with economies in transition. To this end, it is important to provide export credits, co-financing, venture capital and other lending instruments, risk guarantees, leveraging aid resources, information on investment opportunities, business development services, forums to facilitate business contacts and cooperation between enterprises of developed and developing countries, as well as funding for feasibility studies. Inter-enterprise partnership is a powerful means for transfer and dissemination of technology. In this regard, strengthening of the multilateral and regional financial and

development institutions is desirable. Additional source country measures should also be devised to encourage and facilitate investment flows to developing countries.

While Governments provide the framework for their operation, businesses, for their part, are expected to engage as reliable and consistent partners in the development process. We urge businesses to take into account not only the economic and financial but also the developmental, social, gender and environmental implications of their undertakings. In that spirit, we invite banks and other financial institutions, in developing countries as well as developed countries, to foster innovative developmental financing approaches. We welcome all efforts to encourage good corporate citizenship and note the initiative undertaken in the United Nations to promote global partnerships.

We will support new public/private sector financing mechanisms, both debt and equity, for developing countries and countries with economies in transition, to benefit in particular small entrepreneurs and small and medium-size enterprises and infrastructure. Those public/private initiatives could include the development of consultation mechanisms between international and regional financial organizations and national Governments with the private sector in both source and recipient countries as a means of creating business-enabling environments.

We underscore the need to sustain sufficient and stable private financial flows to developing countries and countries with economies in transition. It is important to promote measures in source and destination countries to improve transparency and the information about financial flows. Measures that mitigate the impact of excessive volatility of short-term capital flows are important and must be considered. Given each country's varying degree of national capacity, managing national external debt profiles, paying careful attention to currency and liquidity risk, strengthening prudential regulations and supervision of all financial institutions, including highly leveraged institutions, liberalizing capital flows in an orderly and well sequenced process consistent with development objectives, and implementation, on a progressive and voluntary basis, of codes and standards agreed internationally, are also important. We encourage public/private initiatives that enhance the ease of access, accuracy, timeliness and coverage of information on countries and financial markets, which strengthen capacities for risk assessment. Multilateral financial institutions could provide further assistance for all those purposes.

International trade as an engine for development

A universal, rule-based, open, non-discriminatory and equitable multilateral trading system, as well as meaningful trade liberalization, can substantially stimulate development worldwide, benefiting countries at all stages of development. In that regard, we reaffirm our commitment to trade liberalization and to ensure that trade plays its full part in promoting economic growth, employment and development for all. We thus welcome the decisions of the World Trade Organization to place the needs and interests of developing countries at the heart of its work programme, and commit ourselves to their implementation.

To benefit fully from trade, which in many cases is the single most important external source of development financing, the establishment or enhancement of appropriate institutions and policies in developing countries, as well as in countries with economies in transition, is needed. Meaningful trade liberalization is an important element in the sustainable development strategy of a country. Increased trade and foreign direct investment could boost economic growth and could be a significant source of employment.

We acknowledge the issues of particular concern to developing countries and countries with economies in transition in international trade to enhance their capacity to finance their development, including trade barriers, trade-distorting subsidies and other trade-distorting measures, particularly in sectors of special export interest to developing countries, including agriculture; the abuse of anti-dumping measures; technical barriers and sanitary and phytosanitary measures; trade liberalization in labour intensive manufactures; trade liberalization in agricultural products; trade in services; tariff peaks, high tariffs and tariff escalation, as well as non-tariff barriers; the movement of natural persons; the lack of recognition of intellectual property rights for the protection of traditional knowledge and folklore; the transfer of knowledge and technology; the implementation and interpretation of the Agreement on Trade-related Aspects of Intellectual Property Rights^d in a manner supportive of public health; and the need for special and differential treatment provisions for developing countries in trade agreements to be made more precise, effective and operational.

To ensure that world trade supports development to the benefit of all countries, we encourage the members of the World Trade Organization to implement the outcome of its Fourth Ministerial Conference, held in Doha, Qatar, from 9 to 14 November 2001.

We also undertake to facilitate the accession of all developing countries, particularly the least developed countries, as well as countries with economies in transition, that apply for membership of the World Trade Organization.

We will implement the commitments made in Doha to address the marginalization of the least developed countries in international trade as well as the work programme adopted to examine issues related to the trade of small economies.

We also commit ourselves to enhancing the role of regional and subregional agreements and free trade areas, consistent with the multilateral trading system, in the construction of a better world trading system. We urge international financial institutions, including the regional development banks, to continue to support projects that promote subregional and regional integration among developing countries and countries with economies in transition.

We recognize the importance of enhanced and predictable access to all markets for the exports of developing countries, including small island developing States, landlocked developing countries, transit developing countries and countries in Africa, as well as countries with economies in transition.

We call on developed countries that have not already done so to work towards the objective of duty-free and quota-free access for all least developed countries' exports, as envisaged in the Programme of Action for the Least Developed Countries adopted in Brussels. Consideration of proposals for developing countries to contribute to improved market access for least developed countries would also be helpful.

We further recognize the importance for developing countries as well as countries with economies in transition of considering reducing trade barriers among themselves.

In cooperation with the interested Governments and their financial institutions and to further support national efforts to benefit from trade opportunities and effectively integrate into the multilateral trading system, we invite multilateral and bilateral financial and development institutions to expand and coordinate their efforts, with increased resources, for gradually removing supply-side constraints; improve trade infrastructure; diversify export capacity and support an increase in the technological content of exports; strengthen institutional development and enhance overall productivity and competitiveness. To that end, we further invite bilateral donors and the international and regional financial institutions, together with the relevant United Nations agencies, funds and programmes, to reinforce the support for trade-related training, capacity and institution building and trade-supporting services. Special consideration should be given to least developed countries, landlocked developing countries, small island developing States, African development, transit developing countries and countries with economies in transition, including through the Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries and its follow-up, the Joint Integrated Technical Assistance Programme, the World Trade Organization Doha Development Agenda Global Trust Fund, as well as the activities of the International Trade Centre.

Multilateral assistance is also needed to mitigate the consequences of depressed export revenues of countries that still depend heavily on commodity exports. Thus, we recognize the recent review of the International Monetary Fund Compensatory Financing Facility and will continue to assess its effectiveness. It is also important to empower developing country commodity producers to insure themselves against risk, including against natural disasters. We further invite bilateral donors and multilateral aid agencies to strengthen their support to export diversification programmes in those countries.

In support of the process launched in Doha, immediate attention should go to strengthening and ensuring the meaningful and full participation of developing countries, especially the least developed countries, in multilateral trade negotiations. In particular, developing countries need assistance in order to participate effectively in the World Trade Organization work programme and negotiating process through the enhanced cooperation of all relevant stakeholders, including the United Nations Conference on Trade and Development, the World Trade Organization and the World Bank. To those ends, we underscore the importance of effective, secure and predictable financing of trade-related technical assistance and capacity-building.

Increasing international financial and technical cooperation for development

Official development assistance (ODA) plays an essential role as a complement to other sources of financing for development, especially in those countries with the least capacity to attract private direct investment. ODA can help a country to reach adequate levels of domestic resource mobilization over an appropriate time horizon, while human capital, productive and export capacities are enhanced. ODA can be critical for improving the environment for private

sector activity and can thus pave the way for robust growth. ODA is also a crucial instrument for supporting education, health, public infrastructure development, agriculture and rural development, and to enhance food security. For many countries in Africa, least developed countries, small island developing States and landlocked developing countries, ODA is still the largest source of external financing and is critical to the achievement of the development goals and targets of the Millennium Declaration and other internationally agreed development targets.

Effective partnerships among donors and recipients are based on the recognition of national leadership and ownership of development plans and, within that framework, sound policies and good governance at all levels are necessary to ensure ODA effectiveness. A major priority is to build those development partnerships, particularly in support of the neediest, and to maximize the poverty reduction impact of ODA. The goals, targets and commitments of the Millennium Declaration and other internationally agreed development targets can help countries to set short- and medium-term national priorities as the foundation for building partnerships for external support. In that context, we underline the importance of the United Nations funds, programmes and specialized agencies, and we will strongly support them.

We recognize that a substantial increase in ODA and other resources will be required if developing countries are to achieve the internationally agreed development goals and objectives, including those contained in the Millennium Declaration. To build support for ODA, we will cooperate to further improve policies and development strategies, both nationally and internationally, to enhance aid effectiveness.

In that context, we urge developed countries that have not done so to make concrete efforts towards the target of 0.7 per cent of gross national product (GNP) as ODA to developing countries and 0.15 to 0.20 per cent of GNP of developed countries to least developed countries, as reconfirmed at the Third United Nations Conference on Least Developed Countries, and we encourage developing countries to build on progress achieved in ensuring that ODA is used effectively to help achieve development goals and targets. We acknowledge the efforts of all donors, commend those donors whose ODA contributions exceed, reach or are increasing towards the targets, and underline the importance of undertaking to examine the means and time frames for achieving the targets and goals.

Recipient and donor countries, as well as international institutions, should strive to make ODA more effective. In particular, there is a need for the multilateral and bilateral financial and development institutions to intensify efforts to:

- Harmonize their operational procedures at the highest standard so as to reduce transaction costs and make ODA disbursement and delivery more flexible, taking into account national development needs and objectives under the ownership of the recipient country.
- Support and enhance recent efforts and initiatives, such as untying aid, including the implementation of the Organisation for Economic Cooperation and Development/Development Assistance Committee recommendation on untying aid to the least developed countries, as agreed by the Organisation for Economic Cooperation and Development in May 2001. Further efforts should be made to address burdensome restrictions.
- Enhance the absorptive capacity and financial management of the recipient countries to utilize aid in order to promote the use of the most suitable aid delivery instruments that are responsive to the needs of developing countries and to the need for resource predictability, including budget support mechanisms, where appropriate, and in a fully consultative manner.
- Use development frameworks that are owned and driven by developing countries and that embody poverty reduction strategies, including poverty reduction strategy papers, as vehicles for aid delivery, upon request.
- Enhance recipient countries' input into and ownership of the design, including procurement, of technical assistance programmes; and increase the effective use of local technical assistance resources.
- Promote the use of ODA to leverage additional financing for development, such as foreign investment, trade and domestic resources.
- Strengthen triangular cooperation, including countries with economies in transition, and South-South cooperation, as delivery tools for assistance.
- Improve ODA targeting to the poor, coordination of aid and measurement of results.

We invite donors to take steps to apply the above measures in support of all developing countries, including immediately in support of the comprehensive strategy that is embodied in the New Partnership for Africa's Development and similar efforts in other regions, as well as in support of least developed countries, small island developing States and

landlocked developing countries. We acknowledge and appreciate the discussions taking place in other forums on proposals to increase the concessionality of development financing, including greater use of grants.

We recognize the value of exploring innovative sources of finance provided that those sources do not unduly burden developing countries. In that regard, we agree to study, in the appropriate forums, the results of the analysis requested from the Secretary-General on possible innovative sources of finance, noting the proposal to use special drawing rights allocations for development purposes. We consider that any assessment of special drawing rights allocations must respect the International Monetary Fund's Articles of Agreement and the established rules of procedure of the Fund, which requires taking into account the global need for liquidity at the international level.

Multilateral and regional development banks continue to play a vital role in serving the development needs of developing countries and countries with economies in transition. They should contribute to providing an adequate supply of finance to countries that are challenged by poverty, follow sound economic policies and may lack adequate access to capital markets. They should also mitigate the impact of excessive volatility of financial markets. Strengthened regional development banks and subregional financial institutions add flexible financial support to national and regional development efforts, enhancing ownership and overall efficiency. They also serve as a vital source of knowledge and expertise on economic growth and development for their developing member countries.

We will ensure that the long-term resources at the disposal of the international financial system, including regional and subregional institutions and funds, allow them to adequately support sustained economic and social development, technical assistance for capacity-building, and social and environmental protection schemes. We will also continue to enhance their overall lending effectiveness through increased country ownership, operations that raise productivity and yield measurable results in reducing poverty, and closer coordination with donors and the private sector.

External debt

Sustainable debt financing is an important element for mobilizing resources for public and private investment. National comprehensive strategies to monitor and manage external liabilities, embedded in the domestic preconditions for debt sustainability, including sound macroeconomic policies and public resource management, are a key element in reducing national vulnerabilities. Debtors and creditors must share the responsibility for preventing and resolving unsustainable debt situations. Technical assistance for external debt management and debt tracking can play an important role and should be strengthened.

External debt relief can play a key role in liberating resources that can then be directed towards activities consistent with attaining sustainable growth and development, and therefore, debt relief measures should, where appropriate, be pursued vigorously and expeditiously, including within the Paris and London Clubs and other relevant forums. Noting the importance of re-establishing financial viability for those developing countries facing unsustainable debt burdens, we welcome initiatives that have been undertaken to reduce outstanding indebtedness and invite further national and international measures in that regard, including, as appropriate, debt cancellation and other arrangements.

The enhanced Heavily Indebted Poor Countries Initiative provides an opportunity to strengthen the economic prospects and poverty reduction efforts of its beneficiary countries. Speedy, effective and full implementation of the enhanced Initiative, which should be fully financed through additional resources, is critical. Heavily indebted poor countries should take the policy measures necessary to become eligible for the Initiative. Future reviews of debt sustainability should also bear in mind the impact of debt relief on progress towards the achievement of the development goals contained in the Millennium Declaration. We stress the importance of continued flexibility with regard to the eligibility criteria. Continued efforts are needed to reduce the debt burden of heavily indebted poor countries to sustainable levels. The computational procedures and assumptions underlying debt sustainability analysis need to be kept under review. Debt sustainability analysis at the completion point needs to take into account any worsening global growth prospects and declining terms of trade. Debt relief arrangements should seek to avoid imposing any unfair burdens on other developing countries.

We stress the need for the International Monetary Fund and the World Bank to consider any fundamental changes in countries' debt sustainability caused by natural catastrophes, severe terms of trade shocks or conflict, when making policy recommendations, including for debt relief, as appropriate.

While recognizing that a flexible mix of instruments is needed to respond appropriately to countries' different economic circumstances and capacities, we emphasize the importance of putting in place a set of clear principles for the management and resolution of financial crises that provide for fair burden-sharing between public and private sectors and between debtors, creditors and investors. We encourage donor countries to take steps to ensure that resources provided for debt relief do not detract from ODA resources intended to be available for developing countries. We also encourage exploring innovative mechanisms to comprehensively address debt problems of developing countries, including middle-income countries and countries with economies in transition.

Addressing systemic issues: enhancing the coherence and consistency of the international monetary, financial and trading systems in support of development

In order to complement national development efforts, we recognize the urgent need to enhance coherence, governance, and consistency of the international monetary, financial and trading systems. To contribute to that end, we underline the importance of continuing to improve global economic governance and to strengthen the United Nations leadership role in promoting development. With the same purpose, efforts should be strengthened at the national level to enhance coordination among all relevant ministries and institutions. Similarly, we should encourage policy and programme coordination of international institutions and coherence at the operational and international levels to meet the Millennium Declaration development goals of sustained economic growth, poverty eradication and sustainable development.

Important international efforts are under way to reform the international financial architecture. Those efforts need to be sustained with greater transparency and the effective participation of developing countries and countries with economies in transition. One major objective of the reform is to enhance financing for development and poverty eradication. We also underscore our commitment to sound domestic financial sectors, which make a vital contribution to national development efforts, as an important component of an international financial architecture that is supportive of development.

Strong coordination of macroeconomic policies among the leading industrial countries is critical to greater global stability and reduced exchange rate volatility, which are essential to economic growth as well as for enhanced and predictable financial flows to developing countries and countries with economies in transition.

The multilateral financial institutions, in particular the International Monetary Fund, need to continue to give high priority to the identification and prevention of potential crises and to strengthening the underpinnings of international financial stability. In that regard, we stress the need for the Fund to further strengthen its surveillance activities of all economies, with particular attention to short-term capital flows and their impact. We encourage the International Monetary Fund to facilitate the timely detection of external vulnerability through well designed surveillance and early warning systems and to coordinate closely with relevant regional institutions or organizations, including the regional commissions.

We stress the need for multilateral financial institutions, in providing policy advice and financial support, to work on the basis of sound, nationally owned paths of reform that take into account the needs of the poor and efforts to reduce poverty, and to pay due regard to the special needs and implementing capacities of developing countries and countries with economies in transition, aiming at economic growth and sustainable development. The advice should take into account social costs of adjustment programmes, which should be designed to minimize negative impact on the vulnerable segments of society.

It is essential to ensure the effective and equitable participation of developing countries in the formulation of financial standards and codes. It is also essential to ensure implementation, on a voluntary and progressive basis, as a contribution to reducing vulnerability to financial crisis and contagion.

Sovereign risk assessments made by the private sector should maximize the use of strict, objective and transparent parameters, which can be facilitated by high-quality data and analysis.

Noting the impact of financial crisis or risk of contagion in developing countries and countries with economies in transition, regardless of their size, we underline the need to ensure that the international financial institutions, including the International Monetary Fund, have a suitable array of financial facilities and resources to respond in a timely and appropriate way in accordance with their policies. The International Monetary Fund has a range of instruments available and its current financial position is strong. The contingent credit line is an important signal of the strength of

countries' policies and a safeguard against contagion in financial markets. The need for special drawing rights allocations should be kept under review. In that regard, we also underline the need to enhance the stabilizing role of regional and subregional reserve funds, swap arrangements and similar mechanisms that complement the efforts of international financial institutions.

To promote fair burden-sharing and minimize moral hazard, we would welcome consideration by all relevant stakeholders of an international debt workout mechanism, in the appropriate forums, that will engage debtors and creditors to come together to restructure unsustainable debts in a timely and efficient manner. Adoption of such a mechanism should not preclude emergency financing in times of crisis.

Good governance at all levels is also essential for sustained economic growth, poverty eradication and sustainable development worldwide. To better reflect the growth of interdependence and enhance legitimacy, economic governance needs to develop in two areas: broadening the base for decision-making on issues of development concern and filling organizational gaps. To complement and consolidate advances in those two areas, we must strengthen the United Nations system and other multilateral institutions. We encourage all international organizations to seek to continually improve their operations and interactions.

We stress the need to broaden and strengthen the participation of developing countries and countries with economies in transition in international economic decision-making and norm-setting. To those ends, we also welcome further actions to help developing countries and countries with economies in transition to build their capacity to participate effectively in multilateral forums.

A first priority is to find pragmatic and innovative ways to further enhance the effective participation of developing countries and countries with economies in transition in international dialogues and decision-making processes. Within the mandates and means of the respective institutions and forums, we encourage the following actions:

- International Monetary Fund and World Bank: to continue to enhance participation of all developing countries and countries with economies in transition in their decision-making, and thereby to strengthen the international dialogue and the work of those institutions as they address the development needs and concerns of these countries.
- World Trade Organization: to ensure that any consultation is representative of its full membership and that participation is based on clear, simple and objective criteria.
- Bank for International Settlements, Basel Committees and Financial Stability Forum: to continue enhancing their outreach and consultation efforts with developing countries and countries with economies in transition at the regional level, and to review their membership, as appropriate, to allow for adequate participation.
- Ad hoc groupings that make policy recommendations with global implications: to continue to improve their outreach to non-member countries, and to enhance collaboration with the multilateral institutions with clearly defined and broad-based intergovernmental mandates.

To strengthen the effectiveness of the global economic system's support for development, we encourage the following actions:

- Improve the relationship between the United Nations and the World Trade Organization for development, and strengthen their capacity to provide technical assistance to all countries in need of such assistance.
- Support the International Labour Organization and encourage its ongoing work on the social dimension of globalization.
- Strengthen the coordination of the United Nations system and all other multilateral financial, trade and development institutions to support economic growth, poverty eradication and sustainable development worldwide.
- Mainstream the gender perspective into development policies at all levels and in all sectors.
- Strengthen international tax cooperation, through enhanced dialogue among national tax authorities and greater coordination of the work of the concerned multilateral bodies and relevant regional organizations, giving special attention to the needs of developing countries and countries with economies in transition.
- Promote the role of the regional commissions and the regional development banks in supporting policy dialogue among countries at the regional level on macroeconomic, financial, trade and development issues.

We commit ourselves to negotiating and finalizing as soon as possible a United Nations convention against corruption in all its aspects, including the question of repatriation of funds illicitly acquired to countries of origin, and also

to promoting stronger cooperation to eliminate money-laundering. We encourage States that have not yet done so to consider signature and ratification of the United Nations Convention against Transnational Organized Crime.^e

We urge as a matter of priority all States that have not yet done so to consider becoming parties to the International Convention for the Suppression of the Financing of Terrorism,^f and call for increased cooperation with the same objective.

We attach priority to reinvigorating the United Nations system as fundamental to the promotion of international cooperation for development and to a global economic system that works for all. We reaffirm our commitment to enabling the General Assembly to play effectively its central role as the chief deliberative, policy-making and representative organ of the United Nations, and to further strengthening the Economic and Social Council to enable it to fulfil the role ascribed to it in the Charter of the United Nations.

Staying engaged

To build a global alliance for development will require an unremitting effort. We thus commit ourselves to keeping fully engaged, nationally, regionally and internationally, to ensuring proper follow-up to the implementation of agreements and commitments reached at the present Conference, and to continuing to build bridges between development, finance, and trade organizations and initiatives, within the framework of the holistic agenda of the Conference. Greater cooperation among existing institutions is needed, based on a clear understanding and respect for their respective mandates and governance structures.

Building on the successful experience of the Conference and the process leading up to it, we shall strengthen and make fuller use of the General Assembly and the Economic and Social Council, as well as the relevant intergovernmental/governing bodies of other institutional stakeholders, for the purposes of conference follow-up and coordination, by substantively connecting, in ascending series, the following elements:

- (a) Interactions between representatives of the Economic and Social Council and the directors of the executive boards of the World Bank and the International Monetary Fund can serve as preliminary exchanges on matters related to follow-up to the Conference and preparations for the annual spring meeting between those institutions. Similar interactions can also be initiated with representatives of the appropriate intergovernmental body of the World Trade Organization;
- (b) We encourage the United Nations, the World Bank and the International Monetary Fund, with the World Trade Organization, to address issues of coherence, coordination and cooperation, as a follow-up to the Conference, at the spring meeting between the Economic and Social Council and the Bretton Woods institutions. The meeting should include an intergovernmental segment to address an agenda agreed to by the participating organizations, as well as a dialogue with civil society and the private sector;
- (c) The current high-level dialogue on strengthening international cooperation for development through partnership, held every two years in the General Assembly, would consider the financing for development-related reports coming from the Economic and Social Council and other bodies, as well as other financing for development-related issues. It would be reconstituted to enable it to become the intergovernmental focal point for the general follow-up to the Conference and related issues. The high-level dialogue would include a policy dialogue, with the participation of the relevant stakeholders, on the implementation of the results of the Conference, including the theme of coherence and consistency of the international monetary, financial and trading systems in support of development;
- (d) Appropriate modalities to enable participation in the reconstituted high-level dialogue by all relevant stakeholders, as necessary, will be considered.

To support the above elements at the national, regional and international levels, we resolve:

- To continue to improve our domestic policy coherence through the continued engagement of our ministries of development, finance, trade and foreign affairs, as well as our central banks.
- To harness the active support of the regional commissions and the regional development banks.
- To keep the financing for development process on the agenda of the intergovernmental bodies of all main stakeholders, including all United Nations funds, programmes and agencies, including the United Nations Conference on Trade and Development.

We recognize the link between financing of development and attaining internationally agreed development goals and objectives, including those contained in the Millennium Declaration, in measuring development progress and helping to guide development priorities. We welcome in that regard the intention of the United Nations to prepare a report annually. We encourage close cooperation between the United Nations, the World Bank, the International Monetary Fund and the World Trade Organization in the preparation of that report. We shall support the United Nations in the implementation of a global information campaign on the internationally agreed development goals and objectives, including those contained in the Millennium Declaration. In that respect, we would like to encourage the active involvement of all relevant stakeholders, including civil society organizations and the private sector.

To underpin those efforts, we request the Secretary-General of the United Nations to provide—with collaboration from the secretariats of the major institutional stakeholders concerned, fully utilizing the United Nations System Chief Executives Board for Coordination mechanism—sustained follow-up within the United Nations system to the agreements and commitments reached at the present Conference and to ensure effective secretariat support. That support will build on the innovative and participatory modalities and related coordination arrangements utilized in the preparations of the Conference. The Secretary-General of the United Nations is further requested to submit an annual report on those follow-up efforts.

We call for a follow-up international conference to review the implementation of the Monterrey Consensus. The modalities of that conference shall be decided upon not later than 2005.

Notes

^a See General Assembly resolution 55/2.

^b A/CONF.191/11.

^c *Report of the Global Conference on the Sustainable Development of Small Island Developing States, Bridgetown, Barbados, 25 April-6 May 1994* (United Nations publication, Sales No. E.94.I.18 and corrigenda), chap. I, resolution 1, annex II.

^d *The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts* (Geneva, GATT secretariat, 1994), annex 1C.

^e See General Assembly resolution 55/25.

^f See General Assembly resolution 54/109, annex.

III

THE CURRENT SITUATION IN THE WORLD'S ECONOMIES

The overwhelming majority of countries grew less rapidly in 2001 than in the previous year. The notable exceptions were China and India, both of which are expected to sustain their high rates of growth in 2002 and 2003. For the rest of the world, these two years will be a period of consolidation and recovery from the setbacks that started in 2001. Most economies are unlikely to regain their momentum of 2000 until the end of 2003 and several are likely to encounter further setbacks in the meantime.

Assuming no further common shocks, the developed market economies are expected to experience a sequential recovery from their synchronous downturn, with North America leading Western Europe and Japan lagging these two regions. There are, however, risks to the recovery in each of these economies, notably the possibility of a sudden reaction to the external deficits of the United States of America, a premature tightening of policy in Western Europe and a private sector financial setback in Japan.

The economies in transition are lagging most of the rest of the world in the current economic cycle. Having proved relatively resilient to the slowdown in 2001, these countries are expected to experience a further deceleration in growth in 2002 before beginning to recover in 2003.

Overall, the developing countries are expected to experience a progressive but slow rebound from their severe slowdown in 2001. In Western Asia, where output declined in 2001, positive but modest growth is anticipated in 2002. Following their second major slowdown in less than five years, the East Asian countries are forecast to recover more rapidly, with many having started to do so in early 2002. Assuming there is no escalation in political tensions in South Asia, the region should more than recover in 2002 the limited setback it encountered in 2001. For Latin America, one of the regions hit hardest by the slowdown in the developed world in 2001, the outlook is less promising. The crisis in Argentina was having an increasingly widespread negative impact on the region as 2002 progressed, with the result that any growth in Latin America is likely to be negligible until 2003. Growth in Africa did not decline as much as in other regions in 2001, and the situation is not expected to improve greatly in 2002. Growth in the continent is forecast to continue to hover around 3 per cent, insufficient to have any impact on deprivation. Moreover, for the first time in about a decade, part of the region was haunted by the prospect of famine in the second half of 2002.

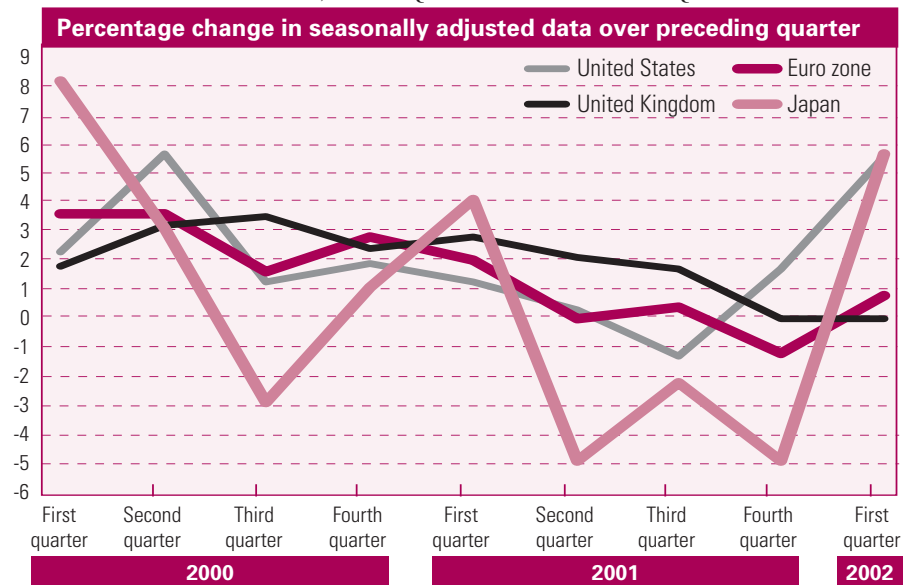
DEVELOPED ECONOMIES

Despite the synchronicity in the economic downturn of 2001 among many developed economies in North America, Western Europe and Japan (see figure III.1), there are marked disparities in the current recovery across these economies. Since the beginning of 2002, an upturn in North America has been confirmed by a spate of statistics, but signs of a recovery in Western Europe remain tentative, with most indications of improvement showing only in business surveys rather than in concrete outcomes. Japan continues to face a contraction in domestic demand, although exports have regained some strength. Meanwhile, the stance and the focus of macroeconomic policies also vary noticeably. In the outlook, the recovery in these economies is expected to solidify and broaden gradually over the second half of 2002, with the momentum gathering further in 2003. The United States will continue to lead the recovery in the group, but the pace is expected to be modest. While the economies in Western Europe are forecast to strengthen in the second half of 2002, no tangible growth is expected for Japan until year-end.

In hindsight, the seemingly increased synchronicity among the major developed economies during 2000-2001 was mainly due not to a convergence in the structure of these economies but to a series of common shocks: the bursting bubbles in high-tech equity prices, tightening monetary policy, higher energy prices, a consolidation in the information and communication technologies (ICT) cycle, and the 11 September 2001 attacks. Meanwhile, international economic linkages among these developed economies turned out to be much stronger than those suggested by such traditional measures as bilateral trade flows, particularly between North America and Western Europe, so that the impact of these common shocks was amplified more intensely than anticipated

Figure III.1.

GROWTH OF REAL GDP IN THE UNITED STATES, EURO ZONE, UNITED KINGDOM AND JAPAN, FIRST QUARTER 2000-FIRST QUARTER 2002



Sources: UN/DESA, based on data of IMF, *International Financial Statistics*; Organisation for Economic Cooperation and Development (OECD); and national authorities.

among these economies. As the common shocks abate, the growth performances of these economies are expected to return to their normal paths, dominated by the idiosyncrasies of their individual structures.

A common risk in the outlook for all developed economies is the persistent external imbalances among these economies. The large current-account deficits of the United States and the corresponding surpluses in Japan and Western Europe, which widened over the 1990s, narrowed only marginally during the slowdown of 2001. Paradoxically, given the characteristics of the current recovery, the imbalances are anticipated to grow again, portending an increasing risk for an inevitable reversal in the future; the larger the imbalances grow, the higher the likelihood for a severe correction. Highly related to this issue is the uncertainty with respect to the stability of the exchange rates among the three major currencies: the United States dollar, the euro and the Japanese yen. An abrupt adjustment in the external imbalances among the major developed economies would be accompanied by a sharp devaluation of the United States dollar vis-à-vis the euro and the yen. This represents potential instability not only for these economies, but also for the rest of the world.

North America: a modest recovery

After a year of the worst economic performance in a decade, a recovery is under way in North America. Whether or not the **United States**, with an annual growth rate of 1.2 per cent, had a recession in 2001 is moot; both economies in the region suffered at least a “growth recession”, namely, a pace of growth much lower than the potential rate of growth. Meanwhile, recession in manufacturing and in corporate profits was unambiguous.¹ While most statistics have confirmed the turning point,² uncertainties remain regarding the strength and the sustainability of the recovery in the outlook. With risks on both the downside and upside, the baseline forecast projects growth of 2½ per cent for the region in 2002, to be followed by acceleration to 3½ per cent in 2003.

The driving forces for the current recovery include fiscal stimulus, accommodative monetary policy, large inventory replenishment, resilient consumer spending, and solid gains in productivity—particularly in the United States. The sustainability of the recovery, however, will depend on improvements in corporate profits, capital spending, and labour markets. Meanwhile, a number of weaknesses are likely to be a drag on the momentum of the recovery, particularly in the United States: the low savings rates of households, high debt levels in the private sector, and large imbalances in the trade and current accounts.

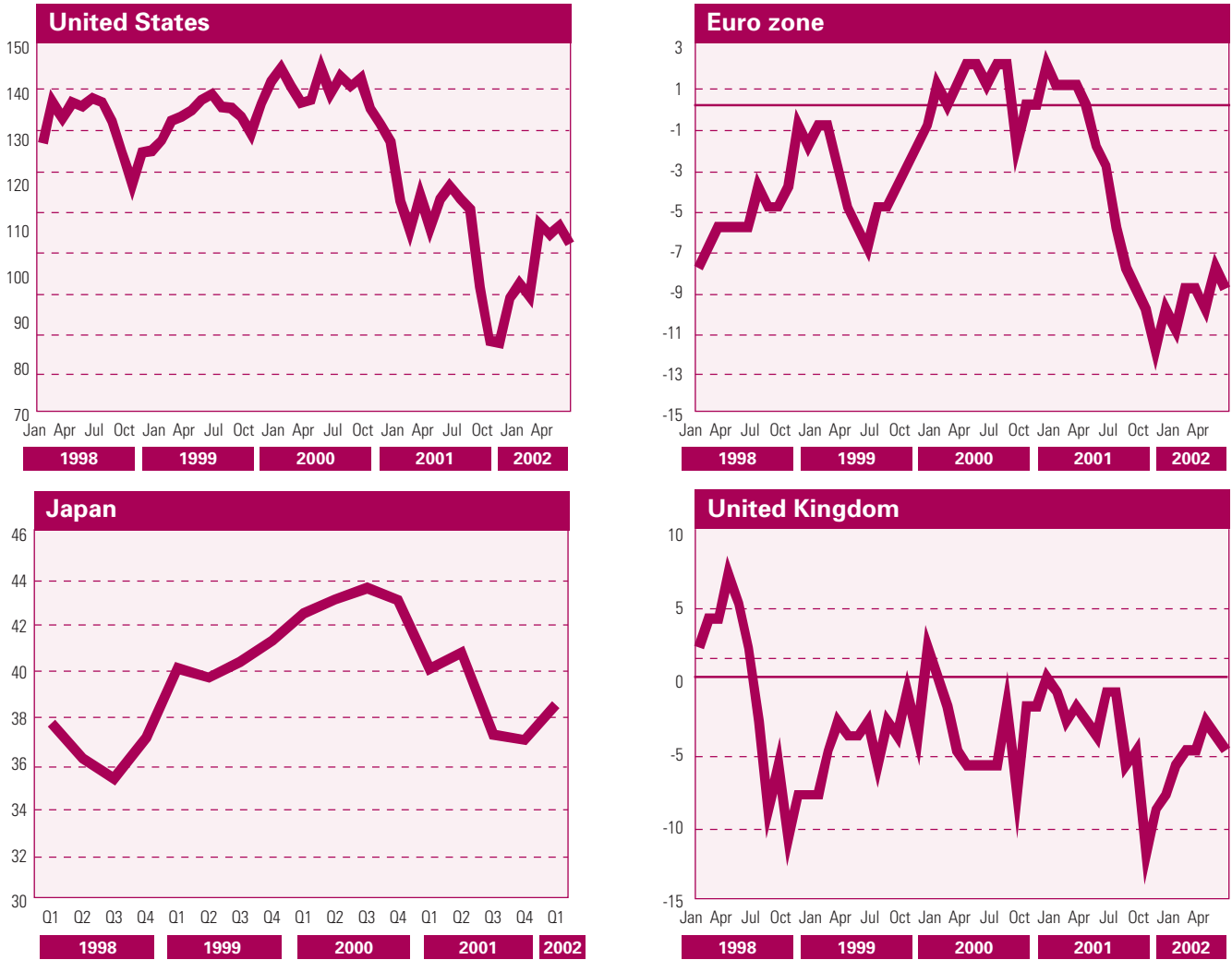
Policy stimuli have played important roles in turning the economies from an investment-led downturn, aggravated by the terrorist attacks on the United States, to the current stage of recovery. A combination of monetary easing and fiscal expansion in 2001 was decisive in arresting the erosion of confidence (see figure III.2), short-circuiting the vicious circle of downward adjustment, and bolstering effective demand. These policy stimuli will continue to be critical in strengthening the recovery.

The central banks of both economies had been reducing interest rates gradually since the beginning of 2001, but the policy stance eased at an unprecedented pace after the 11 September incident. The Federal Reserve (Fed) of the United States reduced its policy-targeted interest rates by a total of 475 basis

¹ For more detailed analysis of the causes of the cyclical downturn in the region and the impact of the terrorist attacks on the United States, see *World Economic and Social Survey, 2001* (United Nations publication, Sales No. E.01.II.C.1); *Global Economic Slowdown Aggravated by the Attack on the United States*, at <http://www.un.org/esa/analysis/ddpa.htm>; and *World Economic Situation and Prospects, 2002* (United Nations publication, Sales No. E.02.II.C.2).

² The rapid recuperation of the United States from the economic shock of the terrorist attacks surprised many forecasters. After a rise in GDP by 1.7 per cent in the fourth quarter of 2001, rather than a continued decline as most forecasters had anticipated, the United States registered growth of 6.1 per cent in the first quarter of 2002.

Figure III.2.
CONSUMER CONFIDENCE IN MAJOR ECONOMIES, 1998-2002^a



Sources: United States: The Conference Board; Japan: Economic and Social Research Institute; all euro zone: *European Economy*; Business and Consumer Surveys.

^a For the United States, measure is an index (1985=100); for Japan, measure is a composite index (percentage); for euro zone, measure shows percentage of respondents to survey who expect an improvement minus percentage of those who expect a deterioration.

points (bps) over a period of 12 months and the Bank of Canada cut its rate by 375 bps. With policy-targeted interest rates standing at the lowest levels in four decades, the corresponding real interest rates in both economies are virtually zero, providing a plethora of liquidity to the financial markets and to the real economy. Money and credit expanded rapidly and growing evidence has indicated the benefits of the aggressive easing for both households and businesses: household mortgage refinancing surged, and businesses strengthened their balance sheets. These benefits of the low interest rates are expected to prevail for the rest of 2002.

The key issues regarding monetary policy are the timing and the degree of the tightening; the degree will probably be more crucial than the timing. The Bank of Canada started to tighten in April 2002, as the rebound in the Canadian economy seems to be stronger than expected and the weak Canadian dollar vis-à-vis the United States dollar needs to be supported by a larger differential in the interest rates between these two economies. The degree of monetary tightening in the future will to a certain extent depend on the development in inflation. Inflation rates in both economies are at historic lows, but the headline inflation rates were on the rise in the first few months of 2002 because of a surge in energy prices and a rebound in the prices of other commodities. The rise is more evident in Canada, as the economy has a greater concentration in energy and other commodities. In the baseline outlook, inflation, especially measured by the core rates, is expected to remain tame, as the spare capacity in both economies is not expected to be absorbed soon.

Fiscal policy in both economies has been expansionary, particularly since the 11 September attacks. Both Governments have implemented significant tax reductions: the United States through the Economic Growth and Tax Relief Act and Canada through the Five-year Can\$100 Billion Tax Cut Plan. Government expenditures have also been increased in both economies, especially in the United States, where government spending rose by more than 10 per cent in the fourth quarter of 2001 and another 7 per cent in the first quarter of 2002. According to the latest budget statements, fiscal policy for 2002 in the region continues in the same direction: further tax cuts to be combined with increases in spending on homeland security and other items and in military spending in the United States. In the United States, an economic stimulus package, which had been designed in the aftermath of the terrorist attacks, was passed in early March. Although too late to initiate the recovery, the package will provide an additional \$50 billion stimulus to the economy in 2002.

Fiscal balances have deteriorated in both economies, resulting from a combination of tax cuts, increases in spending and the decline in revenues due to the economic slowdown. While a small government surplus is expected for Canada, the four-year-long budget surplus in the United States is expected to turn into a deficit.

Whereas policy stimuli were important for launching the recovery, a full recovery will depend largely on regaining the strength of private consumption and business investment.

Consumer spending in both economies was especially resilient during the economic slowdown in 2001, growing in the United States by 6 per cent in the fourth quarter of 2001, with spending on durable goods surging by 39 per cent. Buoyant consumer spending was supported by such factors as an improvement in household finances as a result of lower interest rates, mortgage refinancing, and tax rebates; discount and financial incentives from retailers (for example, zero-financing from some auto dealers); increases in home values offsetting some negative wealth effects from the equity-market losses; and an increase in real labour income because of lower inflation, compensating for some of the adverse impact of the drop in total payrolls.

A critical question is whether the strength in household spending can be sustained. The extraordinary pace of spending on durable goods at the end of 2001 is unlikely to persist; it may imply a drop in spending for the remainder of 2002.

The labour market and the real estate market will be pivotal in sustaining household spending.

There was some improvement in the labour market for both economies in early 2002, with a surprising surge in employment in Canada for the first quarter; however, it is expected to take at least several months of above-potential growth in the economy to fully recoup the total loss in employment during the slowdown.

In contrast to the depressed equity market, real estate prices in both economies have been rising rapidly, leading some observers to warn of a growing bubble, which could burst and withdraw an important source of support for private consumption. In addition, even though consumer confidence in the United States has rebounded to its pre-September 2001 levels, the high level of debt and the low savings rate may constrain household spending. These factors suggest that the growth of private consumption will be moderate; data indicate a slowdown in consumer spending in the first quarter of 2002.

A relay from the resilience in household spending to a revival in business spending would be ideal for sustaining the overall recovery. The slowdown of 2001 featured a deep and protracted decline in business investment in the region, particularly in the ICT-related area. It was especially severe in the United States, with a double-digit rate of decline in ICT investment on average in every quarter of 2001. Subsequent data suggest that the cut in capital spending might have bottomed, but a solid recovery in the growth of business investment, particularly investment spending on ICT, is not foreseen until the second half of 2002. Moreover, in nominal terms, many analysts believe that ICT-related spending will not regain its pre-2000 peak level for a number of years. A resurgence in the ICT sector, a recovery of corporate profits, and a rebound in equity markets are among the key determinants for the future growth of business investment. Just as most analysts failed to anticipate the rapid rate of ICT innovation and diffusion in the late 1990s, it is difficult to foresee the ending of the consolidation, and even more difficult to predict the emergence of the next ICT wave. Corporate profits, after declining sharply for more than a year, are finally showing signs of revival, but neither the growth of earnings nor equity values are expected to return to the levels of the late 1990s in the near future.

Inventory investment may provide a brisker spur to the economy than fixed investment in the short run. Factory inventories declined in every month in 2001, with stockpiles in the technology sector being reduced the most relentlessly, but a slower pace of liquidation appears to have begun. A replenishment of inventories, together with growth in other categories of demand, will accelerate industrial production. Changes in inventories contributed to more than half of the gross domestic product (GDP) growth in the first quarter of the 2002 in the United States. Moreover, this restocking will be cyclical and can be expected to boost growth only in the short term.

For the United States in particular, a positive and more structural supporting factor is the continued gain in productivity growth. In spite of the slowdown, labour productivity grew by 5.2 per cent in the last quarter of 2001 and 1.9 per cent for the year as whole. This makes the current business cycle different from the previous ones, where productivity usually declined within a recession. Although the more aggressive shedding of labour by the corporate sector might have been a reason for maintaining the growth in output per hour of work, gains

from structural changes caused by technological progress have continued. In this sense, some analysts believe that the new economy remains intact. Some of the gains in productivity growth in the late 1990s will be sustained: ICT investment in the earlier years continues to drive changes in business organization and behaviour, taking years to fully develop; meanwhile, a large proportion of businesses have yet to introduce state-of-the-art ICT techniques.

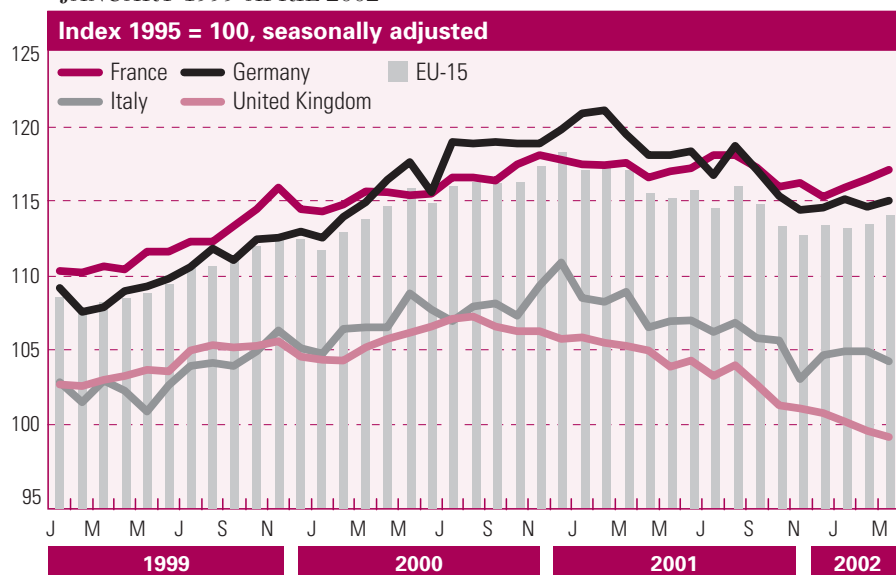
Some uncertainties pose risks for a relapse of the region, or a “double dip”: these include a continued slide in equity prices accompanied by a sizeable correction in real estate markets, and much higher oil prices. On the other hand, a resurgence of the global trend in ICT innovation may lead to a stronger growth than projected. However, the most worrying risk is that the widening external deficit of the United States may portend another cyclical downturn for the global economy; the larger the imbalance grows, the more abrupt the adjustment could be in the future.³

Western Europe: cautious optimism

Since the beginning of 2002, the macroeconomic outlook in Western Europe has evolved from one of pessimism to one of cautious optimism, generated by fairly uniform indications from survey evidence that economic recovery is under way. However, this evidence has yet to be translated into outcomes. Industrial production was very volatile in the early part of 2002 and showed signs of an upturn, but was not spread evenly across sectors, or countries (see figure III.3). Preliminary results for first quarter GDP show positive but very subdued growth. Overall, there is still a risk that the recovery will not be robust or could even falter. Two major areas of concern are consumer spending and the possibility of more restrictive fiscal and monetary policies than assumed.

³ For example, see *World Economic and Social Survey, 2001* (United Nations publication, Sales No. E.01.II.C.1), box I.1.

Figure III.3.
INDUSTRIAL PRODUCTION, EXCLUDING CONSTRUCTION,
JANUARY 1999-APRIL 2002



Source: OECD Main Economic Indicators.

Despite these caveats, and despite the perspective of a synchronized downturn, the European cycle has been slightly behind that of the United States, by as much as a quarter, exemplified by the fact that all of the major economies in Europe had zero or negative growth in the fourth quarter while in the United States this was a feature of the third quarter (see figure III.1), and so it is not surprising that evidence of an upturn has lagged as well. The early indications are for a stabilization and then a gradual acceleration in the first half of 2002, and a more significant acceleration in the second half of the year. The underlying driving forces are expected to be an increase in world demand which would boost exports, stimulate manufacturing and generate a rebound in investment. Inventory destocking should come to an end during the first half of 2002, with some moderate restocking expected in the second half of the year as demand picks up. Consumption expenditure, while slower than in 2001, is expected to maintain its positive support to demand. In the members of the European Union (EU-15), growth of 1½ per cent is envisaged for 2002 after 1.6 per cent in 2001, with the acceleration in the second half of the year more fully reflected in the forecast for growth of 2¾ per cent in 2003.

The substantial decline in economic growth in Western Europe in 2001 was driven largely by a decline in domestic demand, which had been the main underlying force in the strong growth experienced over the previous several years. In the euro zone, domestic demand contributed nearly 3 percentage points to GDP growth in 2000 but just 1 percentage point in 2001. In contrast, the contribution to growth from net exports was unchanged between the two years, despite the tremendous drop in exports over the year.⁴ Export growth in Western Europe fell from 11.0 per cent in 2000 to 2.1 per cent in 2001, but imports registered an equally substantial decline, from a rate of growth of 9.2 per cent in 2000 to 1.6 per cent in 2001 (see table A.13). The slowing of domestic demand and its effect on imports were the key ingredients in the overall slowdown, but this masks to some extent the impact of external shocks on the various categories of domestic demand. In particular, the early parts of the slowdown can be traced to the effects of higher oil prices (amplified by the weakness of the euro against the dollar) and the collapse in equity prices, as well as to the increasingly contractionary monetary policy, which had powerful and long-lasting effects on consumption and investment. Later, the tremendous decline in export demand had strong negative impacts on investment and inventories. Some countries were more susceptible to these shocks. Germany, in particular, displayed the sharpest slowdown within the region and, owing to the size of its economy and its role within the region, amplified these effects.

The real driving force behind the slowdown was the decline in fixed capital investment and the substantial destocking of inventories over the year. The decline in export demand led quickly to depressed investment spending, particularly in those countries whose manufacturing sectors are heavily dependent on foreign sales. Investment was also negatively impacted by significant declines in profits, both actual and expected; costs increased as energy prices rose, and demand declined as both external and internal conditions weakened. In addition, company balance sheets deteriorated from the fall in stock prices, which made it harder and/or more costly to raise funds. This was particularly true in the ICT sector, which registered tremendous declines in asset values, and was aggravated by the large debts incurred in financing the third-generation mobile telephone

⁴ See European Central Bank, *Annual Report, 2001* (Frankfurt am Main, Germany, 2002), p. 39.

licences (UMTS). Finally, there was greater uncertainty over future demand prospects, especially after the 11 September attacks. The deterioration in demand, both current, as evidenced in declining capacity utilization throughout the year, and future, led to substantial inventory destocking; in the euro zone, this subtracted 0.5 per cent from GDP in 2001. As demand revives, profits improve, and the full effects of the low interest rates take hold, both fixed capital and inventory investment are expected to rebound, and pick up some momentum towards the end of 2002. However, investment expenditure is not expected to be a major source of growth in the outlook. The revival of exports is expected to be very gradual over the period and problems in the ICT sector will take time to unwind.

Private consumption was a major support to demand over the year but the deceleration, which had started in the second half of 2000, continued. The first quarter of 2001 saw some improvement, stemming from the stimulus provided by reductions in taxes in a number of countries at the end of 2000 and the beginning of 2001, but the rest of the year saw a substantial weakening, as incomes, wealth and confidence all deteriorated. Real disposable income was negatively affected by steadily increasing inflation (from increases in energy and food prices) and the deteriorating situation in labour markets (with both a rise in unemployment in many countries and increased uncertainty about the outlook for future employment trends). Wealth declined with the fall in equity prices over the previous two years. Finally, the less favourable outlook in labour markets impacted on consumer confidence and savings behaviour. At the end of 2000, consumer confidence was still at record highs, but over the course of 2001 it declined substantially, reaching a low at the end of the year (see figure III.2). However, confidence dipped only just below its long-term average and has steadily improved since the beginning of 2002. Consumption expenditure is still expected to bolster growth in 2002, but at a more subdued pace. Declining inflation, moderate wage gains, and some limited tax cuts should boost incomes. Saving rates should stabilize and then decline as confidence continues to improve, especially given the resumption of the downward trend in unemployment envisaged towards the end of 2002.

One of the keys to the slowdown in Western Europe was the weak performance of **Germany**, one of only two countries in the region to suffer a recession, with negative rates of growth in both the third and fourth quarters⁵ (see table III.1). The main reason was the weakness of domestic demand, with meagre growth in private consumption coupled with a sharp decline in investment. The German economy is one of the most manufacturing-intensive economies in Western Europe and the sector is highly export-oriented, so that investment in equipment was strongly affected by the collapse of exports. In addition, investment in the construction sector still suffers from the overcapacity generated during the post-reunification boom. Growth is expected to pick up as external demand improves, but will be held back by the difficulties in the construction sector and weak private consumption.

France suffered a negative rate of growth in the fourth quarter of 2001, but it fared better during the rest of the year as robust domestic demand cushioned the blows of the negative external shocks. Consumption was the main support, and was bolstered by tax cuts and the continuing strength of employment, which boosted both incomes and confidence. Employment growth has been strong in

⁵ Austria was the other economy to suffer a recession.

Table III.1.
MAJOR INDUSTRIALIZED COUNTRIES: QUARTERLY INDICATORS, 2000-2001

	2000 quarter				2001 quarter			
	I	II	III	IV	I	II	III	IV
Growth of gross domestic product^a (percentage change in seasonally adjusted data from preceding quarter)								
Canada	5.1	4.7	4.9	2.6	1.1	0.9	-0.6	2.0
France	2.6	2.9	3.6	5.3	1.3	-0.2	2.5	-1.8
Germany	4.1	4.9	1.2	0.8	1.6	-0.1	-0.8	-1.2
Italy	4.1	1.1	1.9	3.3	2.7	0.0	0.8	-0.8
Japan	8.2	3.1	-2.9	1.1	4.1	-4.9	-2.2	-4.9
United Kingdom	1.8	3.2	3.5	2.4	2.8	2.1	1.7	0.0
United States	2.3	5.7	1.3	1.9	1.3	0.3	-1.3	1.7
Major developed economies	4.1	4.3	0.7	2.0	2.2	-1.0	-0.9	-0.8
Euro zone	3.6	3.6	1.6	2.8	2.0	0.4	0.4	-1.2
Unemployment rate^b (percentage of total labour force)								
Canada	6.8	6.7	6.9	6.9	6.9	7.0	7.2	7.7
France	10.2	9.7	9.3	9.2	8.6	8.6	8.6	8.8
Germany	8.1	8.0	7.8	7.7	7.8	7.8	7.9	8.0
Italy	11.0	10.6	10.3	10.0	9.7	9.5	9.4	9.2
Japan	4.8	4.7	4.6	4.8	4.7	4.9	5.1	5.4
United Kingdom	5.8	5.6	5.4	5.3	5.0	4.9	5.0	5.1
United States	4.1	4.0	4.0	4.0	4.2	4.5	4.8	5.6
Major developed economies	5.9	5.8	5.6	5.6	5.6	5.8	6.0	6.4
Euro zone	9.3	9.0	8.8	8.6	8.4	8.3	8.3	8.4
Growth of consumer prices^c (percentage change from preceding quarter)								
Canada	2.2	3.5	3.9	2.7	0.9	6.9	0.3	-3.5
France	2.3	2.3	1.3	1.7	-0.1	5.3	0.4	0.3
Germany	3.5	1.5	3.4	0.9	4.3	4.1	0.6	-1.7
Italy	2.5	2.9	2.4	2.9	3.4	3.5	1.4	1.3
Japan	-2.5	0.9	-0.9	-0.5	-1.2	-0.3	-1.1	-1.5
United Kingdom	1.6	7.7	0.6	2.5	-0.5	5.1	0.2	-0.5
United States	4.0	4.3	3.2	2.2	3.9	4.2	0.5	-1.1
Major developed economies	1.9	3.1	1.9	1.4	2.0	3.2	0.1	-1.1
Euro zone	2.7	1.9	4.2	2.3	1.9	5.7	0.4	1.1

Source: UN/DESA, based on data of IMF, *International Financial Statistics*; Organisation for Economic Cooperation and Development (OECD); and national authorities.

^a Expressed at annual rate (total is weighted average with weights being annual GDP valued at 1995 prices and exchange rates).

^b Seasonally adjusted data as standardized by OECD.

^c Expressed at annual rate.

the past three years, owing in part to a number of active labour-market policies, including the adoption of the 35-hour workweek. However, the slowdown in economic activity led to an increase in unemployment at the end of 2001, which continued in the first quarter of 2002. Despite this, consumption is expected to remain a source of support as further tax reductions come into effect in 2002-2003, so that growth is expected to maintain some momentum.

Italy also suffered a decline in GDP growth in the fourth quarter of 2001, as the weakening export performance fed into the manufacturing sector and slowed investment. However, in Italy, unlike Germany, investment growth remained positive for the year as a whole and while consumption weakened it also continued to support growth, owing in part to the favourable employment situation. In the outlook, an upturn in investment is expected with the revival of exports, and should be boosted by fiscal incentives that are linked to new investments.

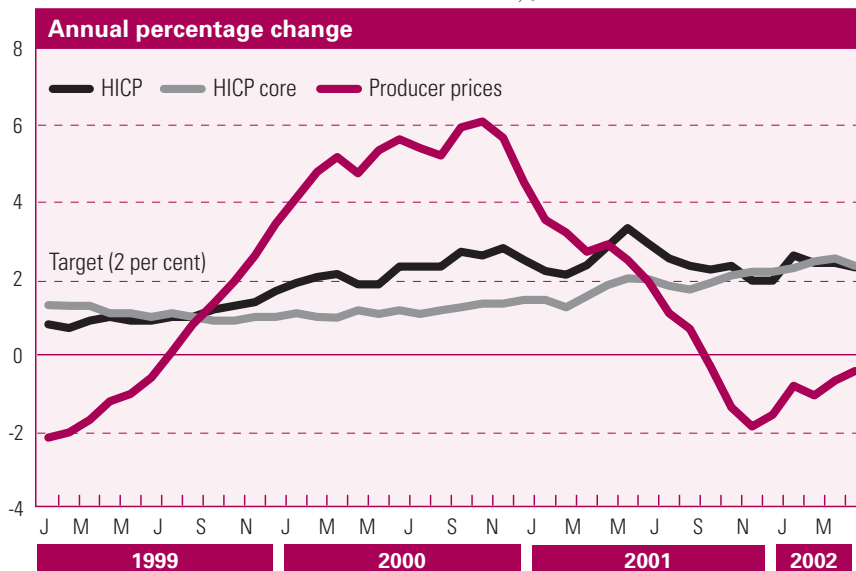
The **United Kingdom of Great Britain and Northern Ireland** escaped outright contraction but experienced no growth in the fourth quarter of 2001, for the first time in almost a decade. Exports declined sharply and the manufacturing sector was badly hit. Investment in equipment registered an absolute decline. However, the strength in the housing market provided a strong support, first through its impact on investment in construction which, while slowing, still retained strength, and second through strong house prices which, by boosting household wealth, supported private consumption. The recovery is expected to be fairly robust. Government consumption is expected to provide a strong impetus, while government investment is expected to offset the slow recovery anticipated in private investment. The housing sector is expected to maintain its strength so that consumption expenditure, while slowing, should still provide significant support, and investment in construction should remain robust.

The improving situation in labour markets, which had seen unemployment in the EU-15 decrease from 11.1 per cent in 1994 to 7.7 per cent in 2001, came to an end during the latter year (see table A.7). The first quarter of 2002 saw a minor increase at the aggregate level, but there were significant differences across countries. In France and Germany, unemployment rose appreciably during the quarter, as it did in some of the smaller economies in the region, but it continued to decline in Denmark and Italy. Owing to the cyclically lagging nature of unemployment, and the envisaged slow acceleration of activity over the course of 2002, the return to a downward path is not anticipated until the second half of the year, with the annual average expected to be 8.0 per cent in 2002, with a minor improvement in 2003.

Despite the near-recessionary environment at the end of 2001 and the very tentative stabilizing of activity in the first quarter of 2002, inflation, as measured by the Harmonized Index of Consumer Prices (HICP), has remained above 2 per cent, which is the level the European Central Bank (ECB) has established as an upper bound to inflation for the euro zone (see figure III.4). Expectations of a rapid deceleration to below this level have receded because of oil price rises in the early months of 2002 and continuing feed-through effects from past inflationary impulses.

Inflation accelerated during the first half of 2001, with the HICP for the euro zone rising to a peak of 3.4 per cent in May, while core inflation, which excludes energy, food, alcohol and tobacco, rose to 2.1 per cent. Continued pass-through of the oil price rise in 2000, and strong increases in food prices

Figure III.4.
EURO ZONE: SELECTED PRICE INDICES, JANUARY 1999-APRIL 2002



Source: OECD Main Economic Indicators.

in 2001, from bad spring weather and livestock diseases, were the main causes. As these impulses receded, overall HICP inflation slowed to 2.0 per cent by December of that year, but feed-through effects continued to dominate core inflation, which rose further.

Inflation rose again in early 2002 as a result of rises in food prices, indirect tax increases, base effects, and also the changeover from national currencies to euro notes and coins.⁶ Since these were mostly one-off effects, they were of no great concern, but the rebound in oil prices and the degree of pass-through of previous impulses, which has put continued upward pressure on core inflation, are of concern. The rebound in energy prices is already raising industrial producer prices. Core inflation continued to rise through February but has been fairly stable since, indicating that the pass-through may have come to an end. However, tensions have also risen in labour markets, with warning strikes held in both Italy and Germany, and pay settlements in resolution of the latter that have led to uncertainties regarding future rounds of wage bargaining. Despite this, the slow nature of the recovery together with the assumption of no further increases in oil prices implies that there should be further dissipation of the inflationary impulses from the past supply shocks, so HICP inflation as well as core inflation should fall below 2 per cent by the end of 2002 and remain below 2 per cent during 2003.

On the aggregate level, fiscal policy was mildly expansionary in 2001. In addition to the support offered by automatic stabilizers, tax cuts introduced in many countries at the end of 2000 and the beginning of 2001 were not completely offset by spending restraint. This led to a small decline in the cyclically adjusted primary balance in 2001 as compared with 2000.⁷ Given the severe constraints faced by many countries in complying with the Stability and Growth Pact, policy is expected to be at its most broadly neutral in 2002 and 2003, while in some particular cases policy may have to become restrictive.

⁶ The Statistical Office of the European Communities (Eurostat) estimated that, of the 0.5 per cent increase in HICP inflation recorded in January 2002, the changeover added somewhere between 0.0 and 0.16 percentage points. See Eurostat news release No. 58/2002 (16 May 2002).

⁷ The concept of cyclically adjusted primary balance is designed to measure the amount of discretionary net spending, after the effects of the cycle and interest payments have been netted out. Figures for EU are presented in *Public Finances in EMU – 2002: European Economy, No. 3/2002* Luxembourg, European Commission, 2002, p. 8.

Over the past decade, the overriding consideration in the fiscal arena has been the drive to achieve fiscal consolidation, originally as a qualification for entry into the European Economic and Monetary Union (EMU) and subsequently as embodied in the Stability and Growth Pact. This process has seen the deficit in the euro zone fall monotonically from 5.7 per cent of GDP in 1993 to 0.8 per cent in 2000. However, 2001 saw the first reversal, with the deficit rising to 1.3 per cent of GDP; for the EU-15, the deficit went from 0.2 in 2000 to 0.7 per cent in 2001.

Nine of the EU-15 countries experienced a deterioration in their fiscal positions during the year, the exceptions being Austria, Denmark, Greece, Italy, Spain and Sweden.⁸ However, some of this improvement could be attributed to one-off measures or other temporary budgetary manoeuvres. Despite the difficult environment, nine EU-15 countries achieved balance or surplus, while six were in deficit. Of the latter, Germany, France, Italy, and Portugal continued to have large fiscal deficits, ranging from 1.4 to 2.7 per cent of GDP.

Most countries within the euro zone failed to meet the Stability and Growth Pact budget targets contained in their Stability Programmes submitted at the end of 2000 and beginning of 2001. The four countries with the largest deficits missed their budget targets by a substantial margin—Germany and Portugal by more than 1 percentage point. In the second half of 2001, Italy had to reconfirm its commitment to achieving the budget targets outlined in its Stability Programme, while in January 2002, Germany and Portugal narrowly averted formal warnings after agreeing to revised Stability Programmes, which maintained the original target date of 2004 for achieving balance.

The implication of this difficult fiscal situation, especially among the large countries, is that there will be tremendous pressure for further consolidation over the next two years. This will occur in conjunction with continuing pressures for tax reform, such as lowering marginal tax rates. Thus, the period from 2002 through 2004 will see very little room for manoeuvre. In the event of any shortfall in anticipated growth, even the operation of automatic stabilizers could breach the 3 per cent limit in some countries.

The changing phase of the economic cycle has led to a clear change in the bias of monetary policy. The question at the end of 2001 whether policy was sufficiently expansionary (and thus whether further easing could be expected) has given way to questions of the timing and speed of return to a more neutral policy. As is usual at such a turning point, the policy choices are complicated by a number of finely balanced issues.

During 2001, ECB lowered short-term interest rates significantly, making two 25 bps cuts, one in May and another in September, and then two 50 bps cuts after 11 September, in September and November, bringing the minimum bid rate to 3.25 per cent. In terms of real rates, with expected inflation about 2 per cent, this level of the short-term interest rate can be characterized as stimulatory.

Given the anticipated recovery, the current policy decision requires choosing a path back to a more neutral stance that balances the risks of a further acceleration of inflation against the possibility of stifling the emerging rebound in growth. On the one hand, the lack of hard evidence of the anticipated rebound, together with the danger that the recovery could falter, argues for no change in policy over the next few quarters. At the same time, inflation continues to be at or above the ECB upper limit of 2 per cent, which could argue for an earlier policy response.

⁸ The proceeds from the government auctions of licences for the third-generation mobile phone services (UMTS) are excluded.

Reflecting these concerns, the forecast assumes a gradual tightening of monetary policy across Western Europe, with some exceptions, with timing and strength depending on local conditions. It is assumed that ECB will hold rates at current levels through the third quarter of this year, and then begin a gradual tightening, with a 25 bps increase in the fourth quarter of 2002 and another 75 bps increase over the course of 2003. In Sweden, the first policy tightening has already occurred. The next central bank to tighten will most likely be that of the United Kingdom, given its more robust growth profile; it is assumed that the Bank of England will tighten by 50 bps in the second half of 2002, and by another 75 bps in 2003.

The beginning of 2002 marked the introduction of euro notes and coins into public circulation, and the changeover went smoothly. While the currency has made some gains against the United States dollar since April 2002, it has only just returned to the levels registered at the beginning of 2000. During this period, there have been a number of occasions for optimism when an appreciation of the euro was thought to have started, only to be followed by a rapid reversal. The euro deteriorated substantially in the second quarter of 2001, reaching a low of \$0.85 in June, but rebounded in July and August. Immediately after 11 September, the euro climbed against the dollar substantially, and there was a sense that a change in sentiment had begun, including a questioning of the safe-haven characteristic of the dollar. However, within days, the euro had given back the gains and in the ensuing weeks it was subject to renewed downward pressures as indicators showed a worsening of economic activity in Western Europe. During the first quarter of 2002, the currency remained weak, oscillating within a narrow trading range, but the second quarter has seen a period of sustained appreciation of the euro against the dollar and, again, another possible change in sentiment.

Since the introduction of the euro, the principal driving force for sustained euro weakness and dollar strength has been the perception of superior returns to investments in the United States. Other “fundamentals”, in particular the ever-increasing United States current-account deficit, have not seemed to be relevant. However, inasmuch as the financing of this deficit requires significant net inflows into the United States every year, the recent doubts over future profits of United States firms, and even the past overstatement of profits, have brought this issue to the forefront. However, a significantly better growth performance in Europe vis-à-vis the United States is not forecast for the period 2002-2003, so that, while some moderate appreciation of the euro is expected, no major movement is envisaged in the outlook. Nevertheless, the risk of a major realignment in currencies remains.

There are a number of other downside risks that could potentially endanger the recovery. The first is an issue of timing. Both fiscal and monetary policy are being pushed in a direction that could slow growth. If the recovery takes hold and strengthens, it would be appropriate for policy to revert to a neutral stance, but this move is being accelerated by the precarious fiscal situation in most of the major countries on the one hand, and by the persistence of inflation on the other. A second risk lies in the unemployment situation. Much of the improvement in consumer spending in Western Europe in 2000 and early 2001 was rooted in the substantial and sustained improvement in labour markets. The effect of even a small turnaround in unemployment could have a large impact. Finally the situation in Germany is still a matter of concern, as it has been the weakest of the major regional economies, and its recovery will be a crucial part of the overall regional recovery.

Developed Asia and the Pacific: structural difficulties remain in Japan

After a year of recession—the third in the past 10 years—the economy of **Japan** is not expected to achieve any tangible recovery in 2002 (see table A.2). While a rebound in exports is expected to provide a cyclical lift to the economy, particularly to its depressed industrial sector, a number of structural problems continue to impede a recovery in domestic demand. Despite some progress in tackling these structural problems, such as banking sector reform and corporate financial restructuring, the remaining tasks are formidable, particularly the disposal of the large amount of non-performing loans (NPLs). Meanwhile, the room for manoeuvre in macroeconomic policies is still limited, as policy makers face a quandary in managing conflicting targets. Another decline of GDP by 1 per cent is expected for 2002, adding to the contraction of 0.5 per cent in the previous year. A mild recovery is forecast for the second half of 2002, with a further improvement in 2003.

The already weak domestic economy was aggravated by a sharp decline in external demand, leading to a contraction in 2001. Merchandise exports, in volume terms, dropped by 10.3 per cent (see table A.13), as global demand for capital goods and ICT-related products tumbled. With a decline in real imports of 4.3 per cent, the net contribution of the external sector to overall GDP growth was noticeably negative in 2001. There was also a turning point for the structure of the external balance of Japan in 2001. While the surplus in the trade account registered the largest drop in a decade (almost \$50 billion) (see table A.20), factor income from abroad surpassed trade income for the first time in history, as Japanese companies continue to establish manufacturing capacity in foreign economies, such as China and other developing countries. With this trend continuing, the contribution of merchandise exports to GDP growth will become less important in the future. There was a noticeable recovery in Japan's exports in the first quarter of 2002, pulled by a revival of economic activity in the United States and a few other Asian economies. The extent of the export recovery for the year as a whole is nevertheless expected to be modest.

The rebound in exports led to a turnaround in industrial production in early 2002, which had been depressed severely in the previous year, and it has also halted the worsening of business sentiment. A broad upturn in business investment, however, is not foreseen in 2002. Owing to the persistent excess in production capacity and lingering uncertainties regarding domestic demand, business capital spending continued to decline in the first quarter of 2002. An improvement in corporate profits and in the broad financial conditions facing firms will hold the key for the recovery in business investment, but the near-term outlook for these two areas remains grim. As indicated by the *Tankan* business survey in early 2002, corporate profits are not expected to improve until late 2002, and firms view the lending attitude of financial institutions as unfavourable. As a result, business fixed investment is expected to decline by 5 per cent in 2002, after having experienced no growth in the previous year.

The household sector remains weak, as employment and income conditions continue to deteriorate. After reaching an all-time high of 5.4 per cent at the end of 2001 (see table III.1), the unemployment rate moderated slightly in the first quarter of 2002. The marginal decline, however, was mostly technical—reflecting the withdrawal of more discouraged unemployed workers from job searching, rather than an improvement in employment. The number of involuntarily

dismissed workers has continued to increase, and the ratio of job offers to applicants remains on a gradual downward trend. At the same time, no improvement is expected in the wages and compensation of employees.

Along with weak domestic demand, a deflationary trend has persisted in Japan for three years, and is expected to continue. While the depreciation of the yen in early 2002 and a rebound in the international prices of many commodities, particularly oil, have led to a temporary firmness in the overall price indices, a widening gap between potential output and effective demand, and a decline in wages, continue to exert downward pressure on prices in the medium run. The deflationary spiral remains a major policy concern.

The efficacy of macroeconomic policies in Japan has been under debate. Various policy measures adopted in the past have failed to revitalize the economy, which has suffered from a combination of structural problems and a series of external cyclical shocks in the past decade. Some arguments have emphasized the peculiarities of the Japanese economy, suggesting that the rules and logic of Western economies may not be applicable to Japan. However, others attribute the inefficacy to policy errors, or a lack of firmness and consistency in implementing those policies.⁹ After all, the experience of Japan has shown, first, that macroeconomic policies that are designed for counter-cyclical purposes have limited effects in resolving structural problems and, second, that some structural problems can block some of the channels through which macroeconomic policy measures are transmitted to the real sectors of an economy.

Fiscal policy in Japan has been austere since the beginning of fiscal year 2001, which marked a significant redirection in the focus of fiscal policy, away from traditional stimulus spending and towards structural reforms.¹⁰ As a result, a large decline in government investment spending during the course of 2001 compounded the overall economic plight. Government investment spending in real terms declined by 4 per cent in 2001, and a continued reduction is expected over the next two years. With a cap of 30 trillion yen imposed on the issuance of government bonds, and falling tax revenue due to contracting economic activity, fiscal policy is expected to remain restrictive. The Government announced a long-anticipated set of “anti-deflation” measures at the beginning of fiscal year 2002, focusing on the disposal of bad debt, boosting equity share prices, and stabilizing financial markets. Since no direct measures for stimulating demand were included, the Government is expected to release another supplementary budget during the course of 2002, but it will be small. With the government deficit running at nearly 8 per cent of GDP (excluding social security), government debt continues to mount, and net debt has reached 90 per cent of GDP. Fiscal consolidation remains more challenging than ever.

Monetary policy in Japan continues to be stimulatory, although monetary easing has not succeeded in reversing deflation. Various unorthodox measures were taken during 2001. These included shifting the target of monetary policy from the overnight interest rate to the Bank of Japan (BoJ) liquidity balance on money market operations, using the consumer price index (CPI) as the guideline for monetary easing but without a formal inflation-targeting framework, and increasing outright purchases by the BoJ of long-term government bonds to ensure a smooth supply of liquidity. After the shock of the 11 September attacks, the BoJ provided more liquidity by substantially increasing the Bank’s outstanding balance and reducing the discount rate to virtually zero. Over the

⁹ For a detailed discussion, see K. Kuttner and A. Posen, “The Great Recession: Lessons for Macroeconomic Policy from Japan”, *Brookings Papers on Economic Activity* (Washington, D.C.), No. 2 (2001).

¹⁰ For details, see *World Economic and Social Survey, 2001* (United Nations publication, Sales No. E.01.II.C.1), p. 79.

course of 2001, the BoJ raised the target of the outstanding balance to 10-15 trillion yen from the original 4 trillion. In March 2002, the BoJ increased the target to 27 trillion yen to accommodate the seasonal rise in liquidity demand, mainly due to increased government payments at the end of the fiscal year. The target is expected to return to 15 trillion yen.

A key issue for monetary policy in Japan is the decoupling of the base money (M0) from the broad money supply (M2); the increased base money has had little impact on business finances. When M0 increased by 30 per cent in 2001, M2 rose only by 3.7 per cent. As commercial banks are mired in NPLs, they are unable, or unwilling, to increase lending despite the additional reserves, breaking a crucial link for the transmission of monetary policy.

Some analysts have advocated a devaluation of the yen as an option for reflation of the economy. The yen depreciated noticeably during 2001 and again in the first quarter of 2002, leading to some concern in neighbouring economies. The weakening yen has often been considered to have favourable effects on Japanese manufactures and adverse effects on non-manufactures. However, it has been shown that, with the structural changes in Japan over the past two decades, the positive effects are declining while the negative effects are increasing. The expected improvement in corporate profits from the depreciation of the yen may be much smaller, and its inflationary pressure may also be limited.

The other two developed economies in the region, **Australia** and **New Zealand**, fared well in 2001, bucking the trend of the global slowdown. Both economies are facing some cyclical constraint in the short term.

Growth of GDP in Australia accelerated in each quarter of 2001, with an increase of 5.2 per cent in the fourth quarter bolstered by a booming housing market and a weak currency. Home building jumped by 25.4 per cent, thanks to a government subsidy of 14,000 Australian dollars (A\$) for first-time home buyers. The economy also benefited from other policy stimuli: the Government cut taxes, and the Central Bank trimmed interest rates six times in 2001. The boom in housing construction is expected to wane, putting downward pressure on the economy, but a revival in other business sectors could provide more support. Meanwhile, a rebound in commodity prices is expected to narrow the trade deficit. GDP is expected to grow by about 2¾ per cent in 2002 (see table A.2).

A surge in residential investment has also been a driving factor for the economy of New Zealand. Employment growth has been strong, and unemployment is close to its lowest level in more than a decade (see table A.7). The economy, however, is estimated to be operating near full capacity, and the headline inflation rate has been near the upper bound of the inflation target range for more than a year. A monetary tightening cycle has started, as the Reserve Bank was the first among the central banks of developed economies to raise interest rates in March 2002. Nevertheless, monetary conditions remain accommodative. On the other hand, fiscal policy is expected to be slightly restrictive. The current account has improved significantly in recent years: the deficit dropped from a peak of 7 per cent of GDP in 1999 to 3 per cent by the end of 2001, mainly from a sharp rise in the merchandise balance as a result of increasingly favourable terms of trade; these have, however, weakened recently. After growing by 2½ per cent in 2001, GDP is expected to increase by 3 per cent in 2002-2003.

ECONOMIES IN TRANSITION

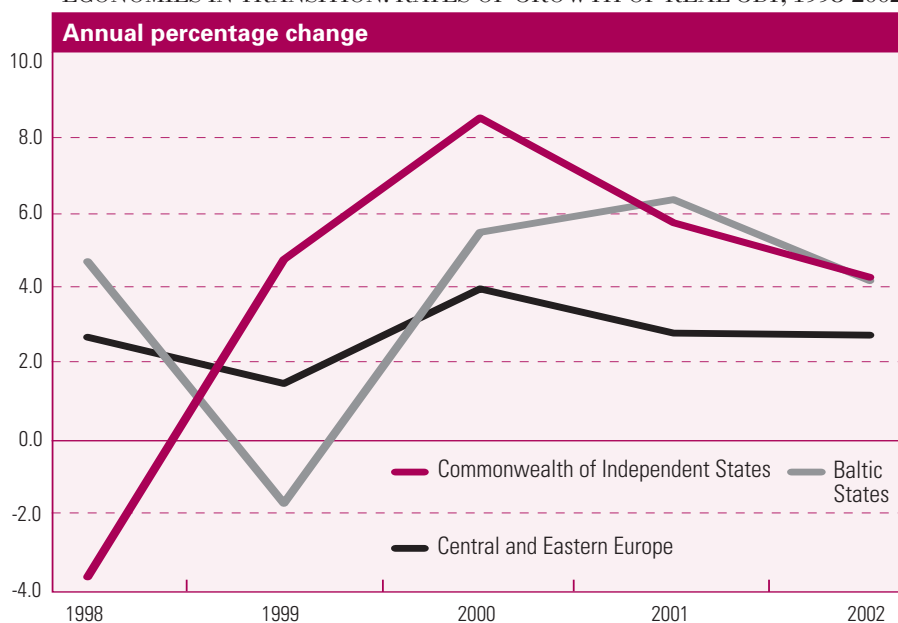
Economic growth in the transition economies slowed from the record 6.3 per cent in 2000 to 4.4 per cent in 2001 (see figure III.5). All countries, with the exception of the former Yugoslav Republic of Macedonia, achieved positive growth for the year. In 2002, growth is expected to decelerate to 3½ per cent, with the performance of Eastern Europe being constrained by the weakness foreseen for EU and with the Commonwealth of Independent States (CIS) region’s being affected by the lower energy prices.

In spite of the global slowdown, Eastern Europe maintained strong exports in 2001 and became one of the most favoured destinations for foreign direct investment (FDI). These successes can be attributed to the structural reforms of recent years and to the modernization of the economies, itself supported by large inflows of export-oriented foreign investment. Meanwhile, growth in the CIS region was driven mostly by continued economic recovery in the Russian Federation, which benefited from the strong energy prices of the past two years, policy reform and improved domestic demand. The Russian recovery supported export growth in other CIS countries and the three Baltic States. At the same time, strengthened domestic demand in these countries provided additional support to their growth.

Central and Eastern Europe: diminished dynamism

Following an exceptionally strong performance in 2000, growth in Central and Eastern Europe decelerated to 2.7 per cent in 2001, mainly because of the weakening of economic activity in the region’s major trading partner—EU. Nevertheless, exports from a number of countries exhibited double-digit growth and the slowdown was less pronounced than in many developing regions. Some economies, such as the Czech Republic, Romania and Slovakia, expanded faster than in 2000. In 2002,

Figure III.5.
ECONOMIES IN TRANSITION: RATES OF GROWTH OF REAL GDP, 1998-2002



growth in the region is expected to slip to about 2½ per cent, before rebounding to some 4 per cent in 2003, as the global economic environment improves.

The Central and Eastern European countries were able to shelter themselves from the economic downturn in 2001 largely because their exports were not immediately or extensively exposed to the sectors hit hardest by the economic downturn in EU. Central and Eastern European countries had both diversified their export products and expanded their export markets within EU and were thus able to benefit from trade in products and with countries with stronger import demand. The most important factor, however, was the increase, as a result of foreign investment and economic reforms, of the value added of Eastern European products and their “quality competitiveness”, despite the gradual erosion of their “price competitiveness”. This contributed to their easier access to and stronger penetration of the EU market.

In addition to resilient exports, production in many of these economies in 2001 was boosted by a pickup in domestic demand, both in consumption and in investment. This is partially explained by the high export revenues of 2000, but also by expansionary fiscal policies, prompted in part by the parliamentary elections that are taking place in a number of these States in 2002. In particular, strong public spending was an important contribution to economic growth in Hungary. More generally, stronger underlying economic conditions resulting from previous reforms provided some degree of independence from the EU business cycles in many countries. While most of the region's economies remain strongly export-oriented, expansion of the domestic market for domestic output is clearly visible, especially in the case of services.

While the Central and Eastern European countries initially managed to withstand the cyclical downturn of 2001, an improvement in the level of activity in EU in the near term is necessary for a sustainable rebound in Central and Eastern Europe. Economic growth in most of the region had stagnated by the end of 2001 and, with business activity in the major economies of EU remaining weak in early 2002, preliminary data for the first quarter of 2002 indicate sluggish exports and industrial production.

On the expectation that EU growth will improve during 2002 and with a further boost expected to come from their own increased domestic spending, the Central and Eastern European economies are forecast to return to higher growth in the second half of the year. The region is also expected to benefit from an increase in trade with the CIS countries, particularly the Russian Federation, which is exhibiting high growth. On the other hand, if the poorer prospects for the exports of the region persist, sustaining the economic expansion will become more dependent on domestic demand and macroeconomic policies.

FDI inflows, including into greenfield operations, continued in 2001 and contributed to the growth of fixed investment. Investment grew strongly in the Czech Republic and Slovakia, where most new capital formation is attributed to FDI, but fell in Poland, where sluggish privatization, high interest rates and a weak business environment acted as a disincentive to corporate investment. The investment outlook for the region for 2002 remains sensitive to the economic situation in EU, as well as to international investor sentiment. Nevertheless, FDI for both follow-up investment and greenfield operations is expected to continue, particularly in the light of prospective EU membership. Moreover, economic weakness in EU may encourage some companies to relocate production to Central and Eastern Europe as a cost-cutting measure. Also,

high budget deficits may require some Central and Eastern European Governments to proceed with further privatization in 2002, attracting FDI. At the same time, banking sector reforms in many countries will have been completed and domestic investment should be facilitated by the increased borrowing possibilities.

Poland, the biggest regional economy, was an exception to the sound performance of most of the Central and Eastern European countries in 2001 (see tables III.2 and A.3). Its GDP grew by only about 1 per cent, the slowest rate since the early 1990s, and investment dropped by almost 10 per cent. Since Poland is a less open economy than the other Central and Eastern European countries, this stagnation can be only partially attributed to the weakness of the external sector; rather, it reflects structural problems and policy actions.

To a large extent, the situation in Poland is a consequence of tight monetary policy aimed at correcting the macroeconomic imbalances of 1998-1999. Even after a series of interest rate cuts totalling 1,000 bps in 2001 and early 2002, real interest rates remain high (since inflation has dropped significantly) and suppress both consumption and investment spending. The need for tight monetary policy is partially the result of loose fiscal policy, since the high fiscal deficit reduces the scope for monetary loosening. At the same time, many sec-

Table III.2.
ECONOMIES IN TRANSITION: QUARTERLY INDICATORS, 2000-2001

	2000 quarter				2001 quarter			
	I	II	III	IV	I	II	III	IV
	Rate of growth of gross domestic product^a							
Belarus	6.6	2.2	6.7	7.3	2.4	5.1	4.5	4.0
Czech Republic	3.3	3.1	2.8	3.9	3.6	3.5	3.3	2.7
Hungary	6.6	5.7	4.6	4.2	4.4	4.0	3.7	3.3
Kazakhstan	9.6	11.9	11.1	6.9	11.2	16.6	13.2	11.8
Poland	5.9	5.0	3.1	2.4	2.3	0.9	0.8	0.2
Romania	1.2	2.8	1.4	1.8	4.3	5.1	5.7	5.3
Russian Federation	11.0	9.0	9.9	6.6	4.8	5.3	5.8	4.3
Ukraine	5.7	4.3	6.3	6.6	7.8	10.8	10.7	9.0
	Growth of consumer prices^a							
Belarus	227.4	209.7	195.7	168.9	83.3	76.4	68.2	61.4
Czech Republic	3.6	3.7	3.8	3.9	4.2	4.6	4.9	4.7
Hungary	10.0	9.6	9.7	9.9	10.4	10.5	9.9	9.2
Kazakhstan	20.4	17.0	14.5	13.4	9.1	9.4	9.0	8.5
Poland	10.4	10.3	10.5	10.2	6.8	6.7	6.1	5.5
Romania	53.8	48.8	47.4	45.7	40.1	38.4	36.0	34.5
Russian Federation	25.4	22.5	21.2	20.8	22.3	23.4	22.6	21.6
Ukraine	25.1	26.3	28.0	28.2	19.4	16.9	14.1	12.0

Source: ECE.

^a Percentage change from the corresponding period of the preceding year.

tors of the economy exhibit poor corporate governance and supply-side problems owing to the delay in reforms. These factors will prevent the Polish economy from expanding at its full potential in 2002, with suppressed exports and weak domestic demand acting as a drag on growth.

In January 2002, the Government adopted a medium-term economic programme, aiming to return to a higher growth rate by 2005. Although details were lacking as of the end of April 2002, the programme envisages increased infrastructure spending and the creation of a better business environment, as well as the stabilization of public finances. However, the projected budget deficit of 5 per cent of GDP in 2002 will leave little room for such provisions of the programme as tax exemptions and subsidies.

In spite of the weak external environment, the performance of Bulgaria and Romania remained strong in 2001, with the latter recording one of the highest growth rates in the region after some years of poor performance. These economies performed well despite the drop in Turkish import demand; there was large investment spending in Bulgaria and an increase in industrial output, as well as an exceptionally good harvest, in Romania. In cooperation with the World Bank, the International Monetary Fund (IMF) and EU, the Governments of both countries are pursuing policies to improve the business environment and the financial system and to proceed with further privatization; both are also benefiting from IMF standby loans approved in 2001.

Many other countries of South-eastern Europe still rely heavily on external financial assistance. FDI inflows into these economies, much needed for their modernization, are deterred by the higher risks associated with the subregion and the fragmented character of its markets. Bilateral trade agreements among these countries, as well as the prospect of asymmetric trade preferences granted by EU to a number of them, are expected to have a favourable effect.

In Albania, industrial output was disrupted by energy shortages in 2001. At the same time, inter-ethnic tension in the former Yugoslav Republic of Macedonia adversely affected the economy, hampering industrial production and causing GDP to fall by 4.6 per cent. At an international donors' conference in March 2002, substantial assistance, conditional on stability and reforms, was promised.

The industrial sector in Yugoslavia continued to stagnate in 2001, owing to supply-side problems. On the positive side, some improvements were registered in the services, transport and banking sectors, and a more transparent tax system was implemented. In the short term, the country depends heavily on official assistance and on the rescheduling of its external debt. An agreement was reached in November 2001 with the Paris Club of official creditors, but final agreement with IMF on a standby loan and discussions with the London Club of commercial creditors were pending as of April 2002.

Inflation in Central and Eastern Europe dropped in 2001 (see table A.9), owing to the moderation of international oil prices and the slower nominal depreciation of the currencies, as well as to weaker economic activity in some States. A good harvest resulted in lower food prices in a number of countries, while increases in administered prices and continuing relative price adjustments contributed to inflation in some cases. In the Czech Republic, strong domestic demand exerted inflationary pressure and the inflation target was met after many years of undershooting. In contrast, in Poland, after many years of overshooting the target, it was undershot in 2001, as weak domestic demand had a disinfla-

tionary effect. In Hungary, which has also adopted a direct inflation-targeting strategy, continued control over electricity prices helped to meet the target. Comparatively high rates of inflation were registered in Romania and Yugoslavia (in the latter owing to the deregulation of administered prices).

Further disinflation in the region is expected in 2002, helped by lower oil prices and stronger exchange rates, as well as slow real wage growth. There is, however, some risk of a rise in energy prices and of fiscal slippage, as well as of one-off shocks from higher utility prices. Excessive capital inflows into the region may also prove to be inflationary. In Romania, which has one of the highest inflation rates in the region, the Government has adopted a programme of gradual disinflation, and tighter fiscal and monetary policies aim at lowering inflation to about 24 per cent in 2002.

In the weaker external environment, Central and Eastern European countries look for policy measures that can stimulate economic activity without causing budgets and current accounts to deteriorate and inflation to reignite. One of the instruments used for this purpose is monetary policy. The room for policy action is limited, however, as is the impact of such actions on the real sector.

In 2001, monetary policy generally was loosened, most notably in Poland. From the beginning of 2002, major central banks of the region undertook a series of interest rate cuts, taking advantage of low inflation. The impact of lower interest rates in many cases feeds into the economies through a more competitive external sector, rather than through increased domestic spending and investment. Further monetary easing in 2002 could aggravate the continuing fiscal-monetary dilemma in most of the States and is not expected to be strong. Concerns about macroeconomic stability and meeting EU accession targets will leave little room for manoeuvre, and there are already signs of reversal in Hungary.

On the other hand, anti-cyclical fiscal expansion, encouraged by upcoming parliamentary elections in some cases, remained popular in Central and Eastern European countries in 2001, and budget deficits, structural by nature, remain one of the most vulnerable points of these economies. Budgets in 2001 were affected by lower tax revenues throughout the region and, in some countries, by high bank restructuring costs. Although loose fiscal policy was often financed by non-inflationary means (such as privatization receipts), it still poses a threat to macroeconomic stability, delaying expenditure reforms and consolidation of off-budget spending. To attain fiscal consolidation, extensive reforms of social welfare programmes, in particular, are needed. Budget deficits in 2002 are expected to remain high, at about 3-5 per cent of GDP in most States, especially given the optimistic assumptions of GDP growth on which the budgets are based and the significant spending associated with the preparations for membership of EU and, in some cases, the North Atlantic Treaty Organization (NATO).

The employment situation in the region remains difficult (see table A.7). While a mild improvement was registered in some countries in 2001, in particular owing to an increase in greenfield manufacturing operations, high rates of unemployment remain a serious problem for Bulgaria, Poland, Slovakia and most of the successor States of the Socialist Federal Republic of Yugoslavia, particularly for younger people and especially in the rural areas. The reasons encompass continuing restructuring of many sectors of the economies, weakened foreign demand and increased labour productivity in the industrial sector. The short-term outlook is not encouraging, although pre-election fiscal expansion in some

States, particularly implementation of public infrastructure projects in Hungary, will have some short-term beneficial effect on employment. On the other hand, further reforms of the labour market are likely to aggravate unemployment in the short run but should have positive effects over the medium term.

There were no significant improvements in the current-account deficits of most Central and Eastern European countries in 2001, although lower oil prices and stronger real exchange rates alleviated them somewhat (see table A.21). Towards the end of the year, exports dropped, while import demand remained strong, fuelled by domestic consumption and investment spending. Only in Poland was there a significant reduction of the current-account deficit, and a further decrease is expected in 2002, as weak domestic demand will restrain import growth. Some improvement was also registered in Hungary, explained by a better trade balance and high tourism revenues. Generally, a further increase in current-account deficits is expected throughout the region in 2002, as exports will remain weak but imports will be buoyant. However, many of the additional imports will be machinery, accompanying further inflows of FDI; the latter will continue to finance a large part of the current-account deficits.

The EU applicant countries are approaching the final stages in their negotiations with EU. At the same time, the negotiations are entering the most difficult phase—the chapters of the EU *acquis communautaire* (the body of treaty obligations and legislation to which all member States must adhere) on agriculture, regional policy and budget. EU at its Laeken (Belgium) Summit in December 2001 committed itself to completion of the accession negotiations in 2002 and the simultaneous admission of up to 10 new members as early as 2004. This is an ambitious timetable, given the number of unresolved problems.

The main policy challenges for most Central and Eastern European States in the current environment are to sustain high rates of growth, maintain macro-economic stability, preserve the competitiveness of exports and make some inroads into the high levels of unemployment. Public finances, including the partial privatization of social security funds, also should be addressed. For most of South-eastern Europe, the task additionally includes structural reforms and further privatization, as well as strengthening the regulatory framework and the financial system. In Yugoslavia, however, more far-reaching reforms are still required.

Although they have proved relatively immune in 2001, the openness of the Central and Eastern European economies makes them vulnerable to external shocks, with the result that the most serious short-term risk for the region is the possibility of a prolonged slowdown in EU. Their economic fundamentals are much stronger than previously, but both export performance and investment inflows remain crucial.

Commonwealth of Independent States: from laggard to leader

Following its best annual economic performance since transition started, the CIS achieved another year of strong (almost 6 per cent) growth in 2001 (see table A.3). All countries grew at rates exceeding 4 per cent, with nine of them achieving higher growth than in 2000. The region performed better than anticipated as a result of unexpected resiliency with respect to the global slowdown and to weakening energy prices. Despite the continued weak external environment anticipated for 2002, growth in the region is expected to continue at about

4 per cent, with improvements in consumer demand not fully offsetting a further deterioration in export growth. With the exception of energy-related expenditures in the Caspian region, investment growth will be constrained by the slow implementation of reforms, the continuing weakness of the financial sector and further capital flight.

Economic growth across the region slowed in the first quarter of 2002 and GDP growth for the full year is likely to be lower than in 2001 for almost all countries. The Russian Federation and Ukraine are expected to grow at rates of 4 per cent and 5 per cent, respectively, driven primarily by domestic demand. Strong expansion in Azerbaijan and Kazakhstan is forecast as a result of growing investment and increasing export capacities. Turkmenistan, another hydrocarbon exporter, is expected to continue to grow at about 15 per cent, provided the demand for oil and gas from the Russian Federation and Ukraine is sustained.¹¹ The slowest rates of growth are expected for Belarus and Uzbekistan because of their lack of structural reforms, although the military operation and rebuilding in Afghanistan should provide some spillover benefits to Central Asian countries.

The strong growth of the region in 2001 reflected mostly the continued recovery of the Russian Federation, the largest economy of the region and the major export market for most CIS countries.¹² Its strong demand and the real appreciation of the Russian rouble against all other CIS currencies, together with improved trade linkages within the region, initially supported export growth in other CIS countries. In late 2001 and early 2002, in the light of real currency appreciation and weaker prices of oil, strengthening domestic demand has been partially compensating for deteriorating exports. Overall, the contribution of net exports to GDP on average decreased. In the Russian Federation, for instance, exports contracted by 2 per cent in 2001, while imports increased by 22 per cent.

Private consumption increased substantially across the region (by 8.7 per cent, for example, in the Russian Federation) owing to higher real wages and improved consumer confidence. Investment performance, on the other hand, was diverse. Investment growth slowed in the Russian Federation as a result of weaker profits in the industrial sector, themselves a consequence of the less favourable external environment and higher input costs due to the real appreciation of the rouble. Most investment in the Russian Federation continued to be funded from retained earnings because of limited bank financing, and negligible FDI inflows. The highest rates of growth in investment were reported in Azerbaijan, Kazakhstan and Ukraine. In Azerbaijan and Kazakhstan, most investment was accounted for by FDI for large-scale oil and gas projects and this is expected to continue in 2002.

On the supply side, growth in industrial production slowed in 2001 in almost all countries. The deceleration accelerated towards the end of the year and in the first quarter of 2002 and growth in industrial production is likely to remain subdued throughout 2002. Within industry, the contribution of domestically oriented industrial sectors to economic growth has generally increased. In the Russian Federation, food processing and machinery production were the fastest growing industrial sectors in 2001, while paper and wood processing, food processing, machine-building and construction have been increasingly complementing steel production as a source of growth in Ukraine. Nevertheless, in the light of the ongoing appreciation of the region's currencies, the import substi-

¹¹ The country has a long-term supply agreement with Ukraine, but needs to secure one with the Russian Federation, which last year bought only one-fifth of the initially promised amount. However, the country's dependence on these two markets would be reduced if, as is being discussed, a pipeline to Pakistan was built.

¹² On average, about 25 per cent of total CIS exports are directed to the Russian Federation.

tution that followed the Russian crisis of 1998 has been petering out. In some countries, such as the Russian Federation, supply bottlenecks are becoming a constraint owing to insufficient structural reforms. Illustrating the vulnerability of the Kyrgyz economy to its heavy dependence on gold production,¹³ its industrial output fell 12 per cent in the first quarter of 2002 owing to a sharp drop in the production at the Kumtor gold mine.

The agricultural sector performed well in 2001, thanks mostly to favourable weather conditions and, in some countries, to the cumulative effect of reforms, including reduced government involvement in the allocation of inputs and outputs and improved access to credit for producers. Kazakhstan and Ukraine had record grain harvests, but strong growth in agriculture was particularly important for smaller, non-oil producing countries like Armenia, Kyrgyzstan and Tajikistan.

Despite the third consecutive year of positive growth in the region and some improvement in employment, unemployment remains high. In the Russian Federation, recorded unemployment declined to below 9 per cent in 2001 from about 12 per cent in 1999, but this figure is likely to underestimate the true magnitude of the problem. Ukraine and Kazakhstan also reported a significant drop in officially recorded unemployment. In the light of weakening output growth in 2002, however, no further improvement in unemployment in the region is expected in the near future.

Average inflation in the region declined from about 25 to 19 per cent in 2001, mostly owing to a large drop in Belarus and an improvement in Ukraine (see table A.9). In most countries, with the exception of Belarus, Tajikistan and Uzbekistan, inflation remained under 20 per cent. It continued to be relatively high in the Russian Federation, mostly owing to the large export-related foreign currency inflows, which were only partially sterilized. In the past two years, dealing with the rapid growth in the money supply, through Central Bank interventions aimed at absorbing foreign currency inflows, has been the major monetary policy challenge, not only in the Russian Federation but also in other oil-rich countries and in Ukraine. In the Russian Federation, this problem started to ease at the end of 2001, owing to the fall in the external surplus as a result of lower oil prices and extensive foreign debt-servicing.

In general, the improvement in the fiscal position achieved in the previous two years was maintained in 2001, although several countries recorded some deterioration as a result of lower oil prices. The Russian Federation enjoyed a second year with a budget surplus of over 2 per cent of GDP, despite making large payments on its foreign debt. The drop in the Government's revenues from oil exports was compensated for by greatly increased income tax payments. The Government reported that tax revenues had increased by about 50 per cent as a result of the introduction of a new, low-income tax rate.¹⁴

For oil-exporting countries, the fiscal challenge remains to minimize the dependence of government revenues on prices of oil and to ensure that declines in prices do not lead to fiscal (and external) imbalances. Azerbaijan and Kazakhstan now have functioning oil stabilization funds so that, when export earnings are exceptionally high, part of their surpluses is invested for use at times of low earnings.

The large current-account surplus of the region in 2000 decreased in 2001 (see table A.21). The positive balances enjoyed by most energy producers in

¹³ Gold accounts for 40 per cent of the country's industrial production, 90 per cent of which is provided by the Kumtor mine.

¹⁴ According to official sources, this largely reflected the legitimization of the "shadow economy".

¹⁵ In 2001, the imports of Azerbaijan, Kazakhstan and the Russian Federation grew by 22 per cent, 26 per cent and 22 per cent respectively.

2000 turned into deficits in some countries owing to falling energy prices and strong growth in imports.¹⁵ For instance, Kazakhstan's current-account balance moved from a surplus of 4.1 per cent of GDP in 2000 to a 3.6 per cent deficit in 2001. In the Russian Federation, the current-account surplus declined but remained large at about \$36 billion (11 per cent of GDP). Ukraine was also able to maintain its current-account surplus, despite a sharp deterioration in exports in the second half of 2001, following the imposition of a 20 per cent value added tax (VAT) on imported goods by the Russian Federation as of July as well as the steel tariffs imposed by the United States in October. In some of the non oil producing countries, current-account balances improved because of the drop in the cost of fuel imports, continued strong demand for their exports and improved intra-CIS trade linkages. As imports continue to increase in response to robust domestic demand and continued currency appreciation, current-account balances are likely to deteriorate further in 2002.

External debt-servicing is a major strain on the finances of some of the highly indebted countries in the region and an important component of their fiscal deficits. However, there has been some progress in debt restructuring. Kyrgyzstan, for example, rescheduled its Paris Club debt in April 2002. In April 2002, IMF, the World Bank, the Asian Development Bank (ADB) and the European Bank for Reconstruction and Development (EBRD) announced the "CIS-7 Initiative to Reduce Poverty, Promote Growth and Sustainable Debt Levels in seven CIS countries" which will involve Armenia, Azerbaijan, Georgia, Kyrgyzstan, the Republic of Moldova, Tajikistan and Uzbekistan.

Foreign investors' perceptions of the region and of the Russian Federation in particular changed in 2001 and early 2002. Improved external debt-servicing, increasing foreign reserves and an acceleration in structural reforms, coupled with a weakening in other emerging markets, led to a decline of 600 bps in the yield on the Russian Federation's 30-year international bond during 2001. After discussions about the possibility of defaulting on its debt early in 2001, the country was able not only to make regular payments in a timely manner, but also to pay about \$3 billion to IMF ahead of schedule. It has also restructured its debt with Germany.¹⁶ The peak of foreign debt payments, scheduled for 2003, now seems more manageable. This improved international financial standing was corroborated when several agencies upgraded the Russian Federation's credit rating in early 2002. Ukraine and Kazakhstan, the second and third largest economies of the region, also enjoyed a series of upgrades by international rating agencies in 2001 and early 2002. Spreads on Kazakhstan's Eurobonds have fallen and the country was recently granted market economy status by the United States.

Structural reforms accelerated substantially in the Russian Federation in 2001. They focused on improving the investment environment, specifically through tax reforms, the introduction of a Labour Code, business deregulation, and strengthening of property rights. The introduction of a 13 per cent flat rate of personal income tax (the lowest rate in Europe) and the lowering of the corporate tax rate by 10 percentage points were particularly notable. Russian reforms are likely to slow in 2002 and 2003 in the light of the parliamentary and presidential elections (in 2003 and 2004, respectively), in part because the current reform agenda includes socially sensitive areas like deregulation of rents in municipal housing, as well as reform of social security and the pension system. Banking reform also continues to lag and to impede the country's tran-

¹⁶ The debt, originally estimated at \$6.4 billion, was restructured into payments of 500 million euros (\$440.1 million) over three years.

sition to a market economy that encompasses a functioning financial system. The privatization of large State-owned banks is politically sensitive and not likely to take place before 2004. Similarly, much-needed reforms of natural monopolies involve many vested interests and are not likely to see substantial progress in 2002.

There continues to be a need for further reform elsewhere in the region. In Ukraine, as well as in the Russian Federation, private ownership of land is now allowed by law. Although the reformist block was successful in the recent Parliamentary election, further substantial progress in reforms seems unlikely in 2002 owing to continued political turmoil. In other CIS countries, despite relative macroeconomic stability, including reduced fiscal deficits, a great deal of structural reform is still needed. Lack of restructuring is damaging the prospects of the slowest reformers, such as Belarus and Uzbekistan.

Baltic countries: robust recovery

The Baltic economies' recovery from the 1999 recession caused by the Russian crisis continued and the region grew by over 6 per cent in 2001. The effect of weaker external demand from EU was partially offset by growing domestic demand and relatively strong demand from CIS. In 2002, growth is expected to decelerate to about 4 per cent (see table A.3). Both private consumption and investment are expected to grow in 2002, but are unlikely to fully offset the anticipated drop in exports.

Particularly important in 2001 was the robust recovery in Lithuania (see table A.3), which is the largest of the three economies and used to lag behind the other two. That its growth was driven by a 20 per cent increase in exports was partially due to the redirection of some of its exports to CIS and Eastern European markets but this was also a consequence of the fact that its leading export is refined oil products, demand for which was relatively insensitive to the global slowdown. In Estonia and Latvia, strong domestic demand drove growth and partially offset the fall in exports; this decline was particularly steep in Estonia, owing to its strong trade links with Finland and Sweden, both of which performed poorly in 2001. Stable and low interest rates, continued restructuring and consolidation of the banking sector, rising wages¹⁷ and, in Estonia, the improved employment situation supported growth in private consumption and investment in these two countries. In Lithuania, the growth in domestic demand, especially in private consumption, remained subdued because of high unemployment and a 1 per cent fall in real wages in 2001.

On the supply side, industrial production was the major source of growth in Lithuania, largely because stable oil supplies from the Russian Federation enabled the Mazeikiiai refinery to operate without interruptions for the first time since 1999. Growth in Estonia and Latvia was broadly based, but the strongest contributions came from the service sector, in particular transport and communications, retail trade and real estate. Transport revenues were mostly related to the transit of Russian oil, but these will decline in 2002 because the Russian imposition of rail freight tariffs on transporting via foreign ports is causing exporters to favour Russian ports and shipping terminals and, with the opening of the new oil terminal in Primorsk,¹⁸ to ship via the Gulf of Finland.

¹⁷ In 2001, nominal wages increased by 11 per cent in Estonia and by 9 per cent in Latvia.

¹⁸ Only the first terminal of the two planned is open. It will allow the transportation of 12 million tons of oil annually. The second terminal will increase the export capacity of the port up to 30 million tons of oil per year.

Employment outcomes in 2001 varied among the three economies (see table A.7). In Lithuania, the unemployment rate increased to 12.9 per cent, mostly owing to restructuring in the agricultural sector. Conversely, unemployment in Estonia declined for the first time in four years, while in Latvia it remained stable. With ongoing restructuring and more moderate growth, no substantial improvement in the employment situation is expected in 2002.

Average inflation in the region inched up slightly in 2001 (see table A.9). The moderate upward trend is expected to continue in 2002 as the effect of scheduled increases in utility tariffs and a slight loosening of fiscal policy in Estonia and Latvia, related to upcoming parliamentary and municipal elections respectively, will be only partially offset by lower energy prices and easing domestic demand.

Following dramatic improvements in 2000, there was further consolidation of public finances in 2001. Estonia's budget balance moved from a small deficit in 2000 to a small surplus in 2001, while the deficits in Latvia and Lithuania decreased to below 2 per cent of GDP (having been, in the case of Lithuania, over 8 per cent of GDP following the Russian crisis). Estonia is the most advanced of the three countries in consolidating its public finances, having adopted a law requiring the Government and the Parliament to approve balanced budgets.

The current-account deficit increased to about 8 per cent of GDP in Latvia in 2001, but decreased slightly in Estonia. With a further deterioration in exports and with imports being driven by robust private consumption and an increased need for capital goods due to further restructuring and privatization, no substantial improvement in the region's current-account deficit is expected in 2002. High deficits in these countries are manageable, however, because of their substantial FDI inflows.

All three countries maintain currency board arrangements or a close equivalent. Lithuania switched its peg from the dollar to the euro in February 2002 to reflect its changing trade pattern and the need to adjust to the new exchange-rate mechanism (EMS II). The share of its exports to EU has risen from about one third in the mid-1990s to 60 per cent, so that tying its currency to the euro should make its trade more stable.

EU accession continues to serve as an external policy anchor for these countries. In its November progress report,¹⁹ the European Commission ranked all three countries as leading candidates for accession, possibly as early as 2004. Estonia made an important step towards integrating its financial sector into Western markets in early 2002, when its stock trading system was linked up with that of the Helsinki stock exchange. This is expected to enhance the visibility of Estonian companies and make their shares more liquid. A similar offer has recently been made to the Latvian stock exchange.

DEVELOPING ECONOMIES

The decline in international trade, limited capital inflows and lower commodity prices inflicted a severe toll on economic growth in developing countries in 2001. The average rate of GDP growth for this group of countries slowed to 2 per cent from almost 6 per cent in 2000, resulting in widespread increases in unemployment and underemployment and little headway in most countries in the effort to reduce poverty.

¹⁹ European Commission, *Enlargement Overview Progress Report November 2001*, available at <http://www.europa.eu.int/comm/enlargement/report2001/index.htm>.

The slowdown was particularly severe in East Asia (excluding China), Western Asia and Latin America, but economies with limited integration into the world economy, with sizeable domestic markets or with scope to adopt macroeconomic stimuli performed better than the rest. In East Asia and in some countries in Latin America, the deceleration was brought about by their high exposure to the United States, their export dependence on ICT products or both. In Western Asia and Latin America, there were additional economic difficulties during the year, which led to a significant contraction in the GDP of some of their larger economies. The financial crises in Argentina and Turkey added to the uncertainty for developing countries in the international economic environment. While Turkey received the support of the international community and the multilateral financial institutions, Argentina, unable to roll over its large external debt, defaulted. Financial contagion from the Argentine crisis, however, was limited. In contrast with the Asian crisis in 1997, the Argentine crisis did not create widespread turbulence in international capital markets. Nonetheless, a negative impact on neighbouring countries and other economic partners began to unfold as 2002 progressed. Meanwhile, Africa sustained its 2000 economic performance in 2001 largely because of favourable domestic factors that offset the negative impact of the adverse international environment on the region's economy. Nonetheless, growth remained anaemic in the region.

The modest recovery anticipated in developed market economies and the lacklustre outlook for world trade, commodity prices and capital flows will inhibit economic recovery in the developing countries in 2002. GDP for the group is forecast to increase by only 3¼ per cent, implying only a limited improvement in the well-being of the average citizen.

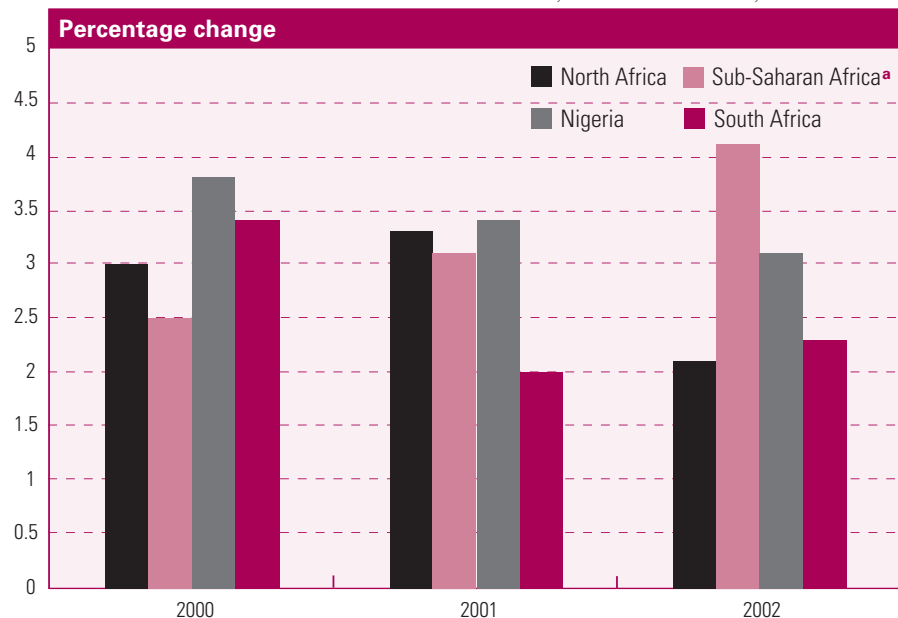
Africa: slow growth persists

Africa's GDP growth remained almost unchanged—2.9 per cent in 2001 compared with 3 per cent in 2000. This represented an increase in per capita GDP of less than 1 per cent, significantly less than required to achieve a meaningful reduction in poverty levels. A slowdown in GDP growth to 2¾ per cent is expected to occur in 2002, followed by strong acceleration to 4¼ per cent in 2003.

GDP growth improved in both Northern Africa and sub-Saharan Africa (excluding Nigeria and South Africa) in 2001 but fell slightly in Nigeria and fell sharply in South Africa (see fig. III.6). Despite the difficulties, 10 African countries, 9 in sub-Saharan Africa, achieved growth of per capita GDP in excess of 3 per cent in 2001 (see table I.2). Only four countries—Gabon, the Democratic Republic of the Congo, Côte d'Ivoire and Zimbabwe—suffered economic contraction. In South Africa, GDP growth slowed largely as a result of the contraction of external demand in the second half of the year, lower gold and commodity prices, a steep depreciation of the rand and accelerated outflows of short-term portfolio capital. The last-mentioned factor reflected fears of spillovers from the civil unrest in Zimbabwe.

The external economic climate became more unfavourable for African economies in 2001. The global economic slowdown led to a contraction in the demand for African exports and export revenues declined even further owing to

Figure III.6.
AFRICA: ANNUAL GROWTH OF REAL GDP, BY SUBREGION, 2000-2002



Source: UN/DESA.

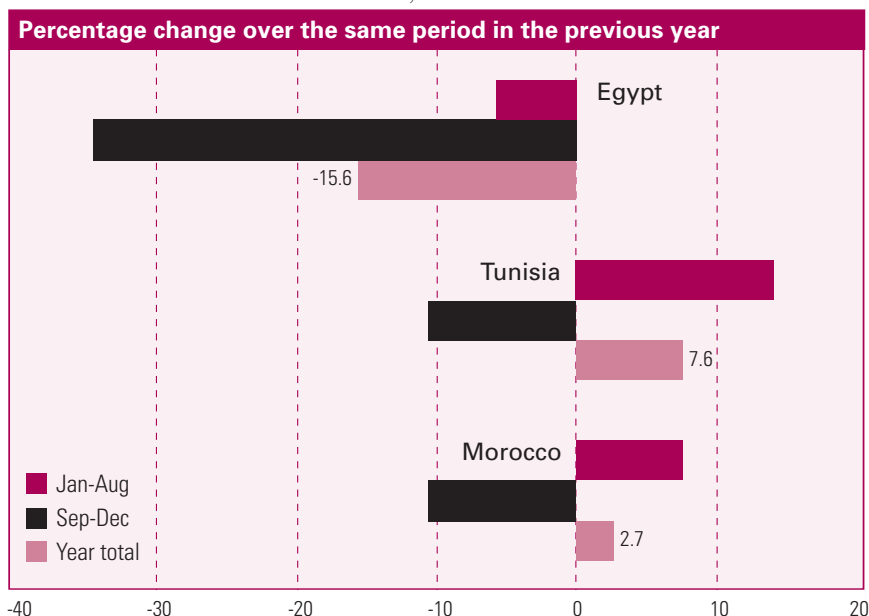
^a Excluding South Africa and Nigeria.

lower commodity prices (see chap. II). Nonetheless, production and exports of textiles and apparels increased significantly in countries that had the capacity to benefit from improved access to the United States market under provisions of the African Growth and Opportunity Act (AGOA). Investment and jobs also increased in almost all the countries that took advantage of this new facility. The Kenyan authorities, for instance, reported an increase of 50,000 jobs related to production and trade of AGOA-eligible products, while in Lesotho, AGOA-related investment amounted to four times the amount of official development assistance (ODA) to the country.

Contrasting with this positive contribution, the economic impact of the 11 September terrorist attacks in the United States compounded the negative effects of the global economic slowdown, and the gains in economic growth realized in the first half of 2001 were reversed in the second half of the year. External demand contracted further and foreign exchange earnings in some countries fell sharply in the immediate aftermath of the attacks, leading to renewed balance-of-payments difficulties. The overall negative input of the attacks on global capital markets reduced investor appetite for African projects, slowing the process of economic diversification in many countries.

One of the clearest impacts of the attacks and of the economic downturn was on the main tourism destinations of Northern Africa: Egypt, Morocco and Tunisia all experienced a sharp drop in arrivals after the attacks. On the other hand, Tunisia, and to a lesser extent Morocco, recorded net growth in tourism arrivals for 2001 as a whole. Egypt, however, was more severely affected. The decline in visitor arrivals, which had been evident even before the attacks, accelerated during the last months of 2001 (see fig. III.7). For the year, Egypt suffered a decline of almost 16 per cent in the number of

Figure III.7.
SELECTED NORTH AFRICAN COUNTRIES:
NUMBER OF TOURIST ARRIVALS, 2001



Source: World Tourism Organization.

Note: Tunisia's average reflects the period January-November 2001.

arrivals, with negative consequences for its current-account balance, exchange rate and overall growth. Uncertainty in the Middle East, combined with lower revenues from the Suez Canal, depressed labour remittances and tight monetary policy, suggests that the Egyptian economy may take some time to recover.

On balance, GDP growth in 2001 was largely attributable to favourable domestic factors. Agricultural output increased owing to favourable weather and the absence or reduction of conflict. Manufacturing output rose, particularly in countries where agro-industries constitute a significant proportion of the activity. Moderate growth in incomes and domestic demand also led to increases in the output of consumer goods in several countries.

Moderating political instability or cessation of violence in several countries, notably Angola, the Central African Republic, the Congo, Côte d'Ivoire, the Democratic Republic of the Congo, Eritrea, Ethiopia, Guinea and Sierra Leone, contributed positively to economic performance and improved prospects for investment and support by international financial institutions. Against this trend, however, the economic difficulties in Zimbabwe deepened in 2001 owing to persistent social and political tensions related to the implementation of a controversial land redistribution policy. Controversy over elections, which were regarded as flawed by some international observers, compounded the socio-political conflict.

With the exception of some countries, including such oil exporters as Egypt, the Libyan Arab Jamahiriya and Nigeria, inflation was largely kept under control in most African countries in 2001 through tight monetary and fiscal policies, increased domestic food supplies and lower oil prices. Nevertheless, the average

²⁰ The rand depreciated by 33.8 per cent against the United States dollar from December 2000 to December 2001.

²¹ These are the Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone. They constitute all of the non-Communauté financière africaine (CFA) members of the Economic Community of West African States (ECOWAS), except Cape Verde.

²² See *World Economic and Social Survey, 2001* (United Nations publication, Sales No. E.01.II.C.1), chap. II, annex, sect., entitled "The Impact of ECOWAS integration on regional trade"; and also Paul Masson and Catherine Pattillo, "Monetary union in West Africa (ECOWAS)", *IMF Occasional Paper*, No. 204 (Washington, D. C., International Monetary Fund, February 2001).

²³ UNCTAD, *Trade and Development Report, 2002* (United Nations publication, Sales No. E.02.II.D.2), table 1.5.

rate of inflation for Africa rose from 5.4 per cent in 2000 to 7 per cent in 2001, mainly because of high oil prices at the beginning of the year (see table A.10). Against the regional trend, double-digit inflation rates persisted in Angola, the Democratic Republic of the Congo, Ghana, the Libyan Arab Jamahiriya, Malawi, Nigeria, Sierra Leone, Zambia and Zimbabwe. The inflation-targeting policy introduced by South Africa in February 2000 was considered successful during the early part of 2001 but was undermined in the latter half of the year and in early 2002 by a steep depreciation of the rand²⁰, rising import and production prices, higher wage rates and sharp increases in food prices.

Economic and social policies in sub-Saharan African countries have been increasingly tailored to attain the medium-to-long-run objective of significant reductions in extreme poverty by the year 2015. Several countries have tabled Poverty Reduction Strategy Papers (PRSPs) with IMF and the World Bank. Countries have also taken steps to increase integration by harmonizing their macroeconomic policies. For example, policies in the Gambia, Ghana, Guinea, Liberia and Sierra Leone reflected their Governments' commitment to limiting inflation and budget deficits. The proposed creation of the West African Monetary Zone (WAMZ) by January 2003 has provided external incentives for several African States to follow policies aimed at moderating inflation and promoting growth. The convergence criteria for the WAMZ compels the six signatories²¹ to limit inflation and budget deficits, while setting parameters for central bank financing and the maintenance of external reserves. By January 2004, WAMZ is scheduled to merge with the current West African Economic and Monetary Union. Consequently, States in this group have also been pressured to adopt similarly policies in preparation for convergence.²²

With few exceptions, short-term policy measures throughout the region in 2001 were generally oriented towards stable money supply growth, fiscal prudence and low budget deficits, and low inflation. Other policies aimed at increasing domestic and foreign investment and improving export competitiveness. Lower oil revenues in 2002 indicate the need for moderation in public spending in oil-exporting countries. The South African authorities, on the other hand, announced a mildly expansionary budget for fiscal year 2002/03, with provisions for increases in public expenditures over the next three years concentrated on infrastructure development and social services for the poor. South Africa's greatest economic challenge lies in creating the policy environment needed to tackle the high unemployment level, which, by official estimates, is currently over 30 per cent.

There were also widespread expressions of commitment to non-economic objectives, such as the promotion of good governance and reduction of public sector corruption and mismanagement, in the reform policies of many African countries. This convergence of views among African leaders and policy makers was reflected prominently in declarations contained in the New Partnership for Africa's Development (NEPAD), which sets out a comprehensive framework for Africa's social and economic growth, and development in the twenty-first century (see box III.1).

Financial flows to Africa showed only a marginal net improvements in 2001, mainly owing to official assistance (in the form of debt relief) rather than private capital flows. Net private direct investment into Africa fell by almost 50 per cent in 2001, while net portfolio investment improved only slightly.²³

Over the past two decades, there have been a number of comprehensive programmes for Africa's development that were adopted by African Governments^a and two that were agreed jointly by African Governments and their international development partners^b. The modest results of these past programmes and initiatives have been attributed to factors related to both sides, notably the lack of political commitment at the highest levels of government in African countries; the absence of African leadership and ownership of the programmes; the poor governance environment in some countries and its negative consequences for implementation; the failure of African Governments and donors to use the programmes as frameworks for, respectively, economic policy and assistance to Africa; the absence of credible monitoring of the commitments of both African and donor countries; the lack of a forum for a sustained dialogue between African countries and the donor community; and the limited efforts by donors to honour key commitments.

In the light of these experiences and in an effort to launch Africa on a path of sustainable growth and development at the beginning of the new millennium, African leaders adopted at their Summit in Lusaka, Zambia, in July 2001, the New African Initiative (NAI), which was subsequently named the New Partnership for Africa's Development (NEPAD) at a meeting of Heads of State on 23 October 2001, in Abuja, Nigeria. NEPAD is a comprehensive, integrated framework for Africa's development. It articulates the vision for Africa's future, outlines the strategy for achieving the vision and lays out a programme of action focused on key priorities. Its main long-term objective is to "eradicate poverty in Africa and place African countries, both individually and collectively, on the path of sustainable growth and development and thus halt the marginalization of Africa in the globalization process" (para. 62). Another long-term objective is to promote the role of women in all activities. Its major goal is to achieve and sustain an average rate of growth of gross domestic product (GDP) of over 7 per cent per annum for the next 15 years. It also embraces a commitment to meet the millennium development goals^c in Africa by 2015.

The guiding principles of NEPAD are African ownership, leadership and accountability. These principles both shaped the design of NEPAD and determined its governance structure. NEPAD is collectively owned by all the member States of the African Union (AU)^d and African leaders will guide the NEPAD process; they are accountable for the success of the programme to their own people and, through a Peer Review Mechanism, to each other.

The Assembly of AU Heads of State and Government is at the apex of the NEPAD governance structure and provides the overall policy framework. The next level is the Heads of State Implementation Committee (HSIC) which reports to the Assembly. The membership of the Committee has been increased from 16 to 20; its role is to determine policies; define priorities; and monitor the work of the Steering Committee. The latter, whose members are appointed by the Heads of State of the five Initiating States,^e has responsibilities for following up on the implementation of the Programme of Action; overseeing the NEPAD secretariat; approving the terms of reference for specific projects and programmes; undertaking, in consultation with African countries, negotiations with Africa's development partners on projects and programmes; and reporting to HSIC.

NEPAD focuses on selected sectoral priorities. The Initial Plan of Action lists the sectoral priorities as including education, health, regional infrastructure, agriculture, market access and environment. It also outlines measures for mobilizing and utilizing resources, namely, improving domestic savings, improving the quality of public resource management, enhancing capital flows, encouraging capital repatriation and improving the performance of Africa in global trade.

Box III.1

THE NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT (NEPAD)

^a These included the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa (see A/S-11/14, annex I) (1980); Africa's Priority Programme for Economic Recovery, 1986-1990 (A/40/666, annex I, declaration AHG/Decl. 1 (XXI), annex) (1985); the Abuja Treaty Establishing the African Economic Community (A/46/651, annex) (1991); and the Cairo Agenda for Action (A/50/647, annex II, resolution AHG/Res. 236 (XXXI), annex) (1995).

^b The United Nations Programme of Action for African Economic Recovery and Development 1986-1990 (General Assembly resolution S-13/2, annex) (1986) and the United Nations New Agenda for the Development of Africa in the 1990s (Assembly resolution 46/151, annex, sect. II) (1991), which were adopted by the Assembly as compacts between Africa and the international community.

^c See United Nations Millennium Declaration (General Assembly resolution 55/2, 8 September 2000).

^d The African Union replaced the Organization of African Unity (OAU) as of 8 July 2002.

^e Algeria, Egypt, Nigeria, Senegal and South Africa.

Box III.1 (continued)

The cost of implementing NEPAD is estimated at \$64 billion a year. Part of this is expected to come from increased domestic resource mobilization, including improvements in public revenue collection systems. However, the expectation is that “the bulk of the needed resources will have to be obtained from outside the continent” (para. 147). The mobilization of additional external financial resources will focus on debt reduction and official development assistance (ODA) in the short term; in the longer term, as improved governance makes Africa attractive to private investment, attention will shift to private capital flows.

A key feature of NEPAD is the importance that it attaches to developing core standards and codes in areas of political, economic and corporate governance, as essential elements for sustained growth and development. NEPAD embodies standards and codes that aim to promote sound macroeconomic and public financial management, to ensure accountability, and to protect the integrity of domestic monetary and financial systems. A major feature is the establishment of the African Peer Review Mechanism. This will be African-owned and -managed and will enhance African ownership of its development agenda through a system of independent, transparent self-assessments that will ensure that the policies of African countries are based on current knowledge and best practices. Furthermore, to facilitate the effective implementation of the standards and codes, NEPAD leaders have committed to undertaking targeted capacity-building initiatives to strengthen public administration, parliamentary oversight, participatory decision-making, and judicial systems, while also combating corruption.

That it has made a determined effort to apply the lessons from past experiences augurs well for NEPAD. The fact that it was conceived by heads of State has provided high-level political leadership, commitment and ownership. The establishment of the HSIC and the Steering Committee responds to the need for effective monitoring of implementation. The standards and codes outlined in the Declaration on Democracy, Political, Economic and Corporate Governance and the African Peer Review Mechanism should improve governance and strengthen member States’ commitment to NEPAD.

Nevertheless, there are several challenges to the successful implementation of NEPAD. The first is building and strengthening the capacity of African countries to implement the programme. National capacity is an important precondition of ownership and requires both a critical mass of experts to plan, manage and deliver the desired outcomes and an institutional framework to support implementation and carry out agreed tasks. A related challenge is to translate NEPAD priorities into policies and programmes at the regional, subregional and country levels. This requires commitment as well as the capacity to implement. Benchmarks and targets will need to be set in each of the priority sectors so that progress can be monitored at the national level.

Funding is a further major challenge and involves at least three issues. As indicated above, the resource requirements are considerable, with a high dependence on external assistance. The central principle of African ownership has to be reflected in a commensurate financial contribution: the degree to which African Governments themselves finance projects and programmes will be key to the success of NEPAD. At the same time, donors will also have to demonstrate tangible recognition of the principle of ownership by reducing the conditions that they have traditionally attached to their assistance, while at the same time ensuring the resources they provide are adequate. The Plan of Action for Africa, adopted by the leaders of the G-8 industrialized countries at their meeting in Kananaskis, Canada, in June 2002, sends a positive signal concerning the kind of support that Africa’s development partners need to provide so as to ensure that all remain engaged in the process of Africa’s development.

However, by December 2001, 22 African countries were receiving debt-servicing relief from IMF and the World Bank under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative (see chap. II). Participation in the initiative has resulted in substantial reductions—in some cases well over 50 per cent—in the net present value of countries' debt. Mali, Senegal and the Niger are among several other African countries expected to reach the "completion point" in the HIPC framework and qualify for debt relief before the end of 2003. Paris Club rescheduling and other debt reduction assistance have also contributed to easing the debt burdens of other countries in the region.

A further slowdown in GDP growth is forecast for 2002 (see table A.4), but the medium-term outlook is more positive. Growth is expected to improve in 2003, when an average rate of 5 per cent is forecast for sub-Saharan Africa. With the notable exceptions in Eastern and Southern Africa outlined below, the favourable outlook primarily reflects domestic factors such as continuing increases in agricultural output across the region, sustained activity in oil-exporting countries and more stable political conditions in several countries that have recently experienced conflict or civil unrest. The speed and strength of recovery from the global economic slowdown, particularly in EU, the region's main trading partner, will also have an impact.

Prospects for the oil-exporting countries in Africa are mixed following two years of expanded spending financed by increased oil revenues. Lower oil prices, reduced Organization of the Petroleum Exporting Countries (OPEC) quotas and less favourable foreign investor sentiment are likely to dampen growth in the larger of these countries. In Northern African oil-exporting countries, lower oil revenues in 2002, combined with increasing unemployment, uncertain growth in the region's primary export markets, potential instability due to domestic factors and possible spillover effects from the Middle East conflict, could dampen otherwise favourable growth prospects. The smaller oil-exporting countries not bound by OPEC quotas are expected to fare better. Increased oil output and exports are expected to sustain economic growth in Angola and the Sudan, while the latter will also benefit from increased production of refined petroleum products and the elimination of such imports.

Improvements in the global economy are expected to restore South Africa's growth momentum in the medium term. Similarly, economic growth will accelerate in most other oil-importing countries, primarily reflecting increased agricultural output and other favourable domestic factors. The decline in oil prices and a modest recovery in the prices of some key commodities, such as cocoa and cotton (see chap. II), should relax the import constraint in several of these countries. Conversely, Zimbabwe's isolation from the international lending institutions and international capital markets, the imposition of targeted sanctions by EU and the United States, and a one-year suspension from the Commonwealth are expected to result in a third consecutive year of economic contraction.

Within this overall favourable forecast, there are potential difficulties in several countries. Among them, Africa's vulnerability to the vagaries of the weather may yet again become an important factor in the economic performance of some countries in 2002. Drought and crop failures in southern Africa in the 2001/02 crop year will result in severe food shortages and the threat of hunger and famine in Malawi, Zambia and Zimbabwe in the second half of 2002. Shortages are also expected in areas of Lesotho, Mozambique and Swaziland.

Several United Nations agencies estimate that the result will be the worst food-security situation since the severe drought in 1992.

Political factors, and in particular upcoming elections, may also have negative economic effects. In Nigeria, for example, the 2003 election has already begun to play a disruptive role in economic policy, leading to the passage of an expansionary budget, and an opting out of the IMF programme of reform. Nigeria is not unique in this regard, and economic policy may be subject to election pressures in several countries.

East Asia: signs of recovery amid incomplete reforms

After two years of rapid recovery, growth in East Asia (excluding China) slowed sharply to 1.3 per cent in 2001 (see table A.4). The deceleration was primarily due to the plunge in exports caused by the rapid slowdown in the United States, the recession in Japan,²⁴ the protracted slump in the global ICT market and the 11 September terrorist attacks. The contraction in ICT exports was particularly sharp and led an overall slowdown in exports, reflecting the region's heavy exposure to ICT exports to the United States and its extensive regional processing links. Lower exports were accompanied by a contraction of imports, which reflected weakening domestic demand, the high import content of exports by the region and a lower oil import bill.

Hong Kong Special Administrative Region (SAR) of China, Malaysia, Singapore and Taiwan Province of China²⁵ experienced a sharp reversal in the rate of GDP growth; the Republic of Korea and the Philippines held up better largely because of their more diversified economic base, robust private consumption and favourable agricultural production. Indonesia and Thailand, which also have a broader export base, suffered a less acute slowdown (see table III.3).

The 11 September terrorist attacks exacerbated the decline in exports, hitting air transportation and tourism exports particularly hard. By the fourth quarter of 2001, signs of bottoming out emerged in several economies. In the absence of exogenous shocks, aggregate real GDP growth in the region is forecast to recover to 4½ per cent in 2002 and to accelerate to 5¼ per cent in 2003.

Domestic demand weakened sharply during 2001 owing to slowing exports and deteriorating market sentiment. In Indonesia, the Philippines and Thailand, political uncertainties also had a negative impact on growth early in the year. Across the region, private investment slowed down faster than private consumption owing to excess capacity, falling profits and poor lending conditions. Increased unemployment and negative wealth effects constrained private consumption. However, in some countries, consumption was supported by improved rural incomes (Indonesia and the Philippines) or policy stimuli and increased availability of credit to households (the Republic of Korea and Thailand). In other economies, stimulative measures, while supporting domestic demand to an extent, were unable to fully offset the external deflationary shocks.

On the supply side, the weakening external and domestic demand led to a sharp slowdown in both the industrial and service sectors in 2001. The contraction in the ICT sector was the sharpest and led the slowdown in the industrial sector. The growth of the service sector, particularly air transportation and tourism, also slowed but remained positive. The performance of the agricultur-

²⁴ The share of the United States and Japan in the region's total exports well exceeds 30 per cent. A significant part of it is ICT-related.

²⁵ ICT-related goods account for 30-70 per cent of these countries' exports.

Table III.3.

MAJOR DEVELOPING COUNTRIES: QUARTERLY INDICATORS, 2000-2001

	2000 quarter				2001 quarter			
	I	II	III	IV	I	II	III	IV
	Rate of growth of gross domestic product^a							
Argentina	0.5	0.2	-0.5	-2.1	-2.1	-0.5	-4.9	-10.7
Brazil	5.1	4.4	4.3	3.8	4.3	2.1	0.5	-0.7
Chile	5.5	6.0	5.6	4.5	3.0	3.8	2.7	1.7
China	8.1	8.2	8.2	8.0	8.1	7.9	7.6	6.6
Colombia	1.8	3.1	3.4	2.9	1.7	1.6	1.0	1.7
Ecuador	-2.2	2.0	3.6	6.0	7.8	5.9	5.3	3.7
Hong Kong SAR ^b	14.1	10.7	10.7	7.0	2.2	0.8	-0.4	-1.6
India	6.0	6.1	6.2	5.0	3.8	4.4	5.3	6.3
Indonesia	4.2	5.2	4.4	5.2	3.2	3.5	3.6	4.1
Israel	7.6	7.3	8.0	3.2	1.9	-0.7	-4.1	-3.4
Korea, Republic of	12.6	10.2	10.0	5.0	4.2	2.9	1.9	3.7
Malaysia	11.7	8.0	7.6	6.3	3.1	0.5	-1.2	-0.5
Mexico	7.7	7.6	7.3	5.1	2.0	0.1	-1.5	-1.6
Philippines	3.5	3.2	4.7	4.0	3.2	3.2	2.9	3.8
Singapore	9.8	8.4	10.3	11.0	4.7	-0.9	-5.6	-6.6
South Africa	3.3	3.5	3.4	3.2	2.8	2.5	1.9	1.7
Taiwan Province of China	7.9	5.1	6.7	3.8	0.9	-2.4	-4.2	-2.7
Thailand	5.3	6.4	2.9	3.2	1.8	1.9	1.5	2.1
Turkey	5.6	6.9	7.8	8.6	-2.1	-8.9	-7.1	-10.4
Venezuela	1.1	2.7	3.4	5.6	3.8	2.9	2.8	0.0
	Growth of consumer prices^a							
Argentina	-1.3	-1.1	-0.8	-0.6	-1.4	-0.1	-1.1	-1.6
Brazil	7.9	6.6	7.6	6.2	6.2	7.1	6.6	7.5
Chile	3.2	3.6	4.0	4.6	4.0	3.6	3.6	3.0
China	0.1	0.1	0.3	0.9	1.4	0.5	-1.0	-1.0
Colombia	9.0	10.6	9.4	8.9	8.6	8.3	8.9	8.9
Ecuador	83.2	96.5	104.8	97.3	67.6	39.6	28.9	24.1
Hong Kong SAR ^b	-5.0	-4.5	-2.9	-2.5	-2.0	-1.4	-1.1	-2.0
India	3.7	5.3	4.1	3.0	2.9	2.7	4.7	4.0
Indonesia	-0.6	1.1	5.7	8.8	9.3	11.1	12.8	12.6
Israel	1.5	2.0	1.0	0.0	0.3	0.9	1.7	1.7
Korea, Republic of	1.5	1.4	3.2	2.9	4.2	5.5	4.3	3.2
Malaysia	1.6	1.4	1.5	1.7	1.5	1.6	1.4	1.2
Mexico	10.5	9.5	9.0	8.9	7.5	6.9	6.0	5.2
Philippines	3.0	3.9	4.5	5.9	6.8	6.6	6.4	4.7
Singapore	1.1	0.8	1.5	2.0	1.7	1.7	0.8	-0.2
South Africa	2.8	4.9	6.6	7.0	7.3	7.5	7.2	7.3
Taiwan Province of China	0.9	1.4	1.1	1.5	0.6	0.0	0.0	-0.6
Thailand	0.8	1.6	2.1	1.6	1.4	2.5	1.7	1.1
Turkey	68.8	61.7	52.7	42.3	35.6	52.3	58.6	67.5
Venezuela	18.2	17.1	15.6	14.2	12.6	12.4	12.7	12.4

Sources: IMF, *International Financial Statistics*; and national authorities.

^a Percentage change over the same quarter of previous year.

^b Special Administrative Region of China.

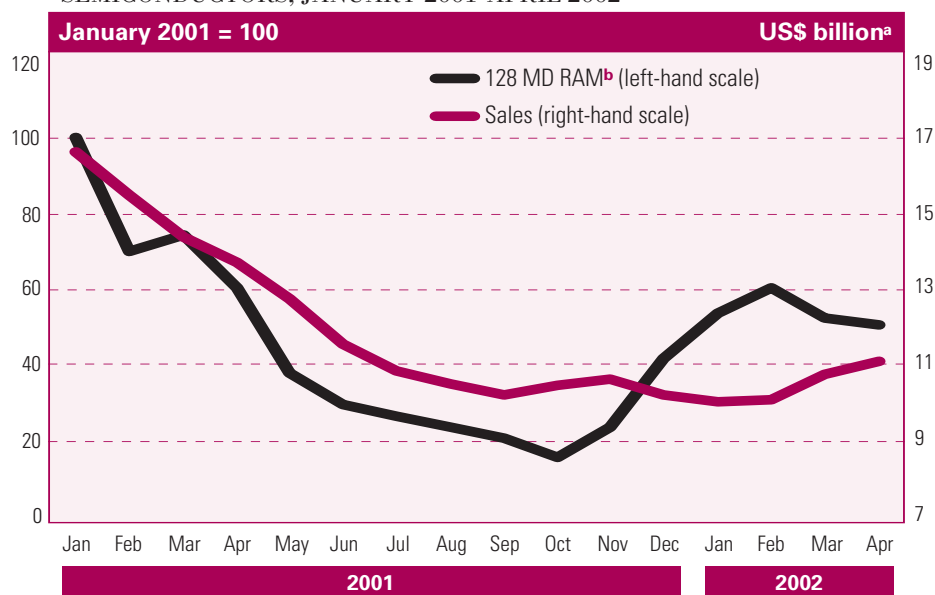
al sector was mixed across countries. There was sound growth in agricultural output in Indonesia and the Philippines, while in Taiwan Province of China the sector contracted for the second consecutive year.

The near-term prospects for East Asia have improved and a moderate recovery is expected in 2002. The shocks from the 11 September attacks have faded and signs of an upturn in many economies emerged by April 2002. The recovery, albeit subject to uncertainties, is expected to broaden and strengthen steadily through 2003 as exports rise and domestic private investment picks up.

The main factors driving this recovery are domestic policy stimuli, the upturn in the United States, the stabilizing global ICT market and lower oil prices. Policy stimuli have played an important role in supporting domestic demand but the strengthening of exports, especially ICT products, is expected to assume the leading role in solidifying the recovery. The countries that are major exporters of ICT products to the United States, including Malaysia, the Republic of Korea, Singapore and Taiwan Province of China, are expected to lead the recovery. Additionally, China's entry into the World Trade Organization, combined with the rebound in other major developed economies, will also contribute to the region's exports in the short term (see box II.1).

The prices and sales of some ICT goods recovered in early 2002 (see figure III.8) and are expected to firm in the near term. The anticipated modest recovery in non-oil primary commodities should also help to support these countries' export earnings. Increased exports and improving confidence will provide additional momentum to a gradual rebound in private domestic demand and production during 2002. Because of existing excess capacity, private investment is expected to lag behind private consumption initially, but it is likely to pick up during the second half of 2002.

Figure III.8.
EXPORT PRICE AND WORLDWIDE SALES OF
SEMICONDUCTORS, JANUARY 2001-APRIL 2002



Sources: Korea Development Institute (KDI), Republic of Korea; and Semiconductor Industry Association.

^a Figures are three-month moving averages.
^b Multibank Dynamic Random Access Memory.

The unemployment rate rose in most economies of the region during 2001, mainly owing to the slump in the manufacturing sector. In Taiwan Province of China, the unemployment rate rose to 5.4 per cent in January 2002 from 3.3 per cent in December 2000 and in Hong Kong SAR, after a fall in 2000, it increased to 6.8 per cent in February 2002. In these two economies, besides cyclical factors, the continuing relocation of manufacturing facilities to China has been a factor contributing to the increase in unemployment.

For most countries, inflation was benign in 2001, largely reflecting the slack in their economies, soft oil prices and intensified competition. Indonesia and the Philippines were exceptions. In Indonesia, inflation surged to an annual average of 12.6 per cent in 2001 owing to increases in fuel prices and utility rates and the low value of the rupiah (see table A.10). Further increases in administered prices and floods in early 2002 are forecast to keep inflation relatively high in 2002 and early 2003. Thereafter, inflation is expected to fall gradually as the effects of these one-off factors wane and the rupiah strengthens. Annual inflation in the Philippines, after peaking at almost 7 per cent in mid-2001, fell rapidly to about 3.5 per cent in February 2002, reflecting weak demand, lower prices of oil and food, and a stabilized peso. Elsewhere, the outlook for inflation is generally favourable, as excess capacity and unemployment will continue to weigh on prices for a while.

In an attempt to cushion the negative impact of lower exports, economic policy in the region turned more pro-growth during 2001. Monetary policy became more accommodative in most economies, except Indonesia which experienced high inflation and pressure on its currency. Benign inflation, the sharp reduction in United States interest rates and stable exchange rates allowed a gradual reduction in domestic interest rates. The reduction was particularly sharp in the Philippines as, given its fiscal situation, the country could use only monetary policy to support domestic demand. The policy interest rate was reduced by more than 800 bps beginning in late 2000.²⁶

As the recovery advances, however, countries are expected to gradually shift their policy stance to neutral. The Bank of Korea, for instance, raised interest rates in May 2002. The move aimed at pre-empting the danger of bubbles in non-productive sectors, particularly real estate, given excess liquidity. Conversely, Indonesia is expected to lower its interest rates gradually as inflation moderates.

Fiscal policy in the region was expansionary in 2001 and is expected to remain so until a solid recovery is secured. By August 2001, most economies, except Indonesia and the Philippines, had introduced fiscal stimuli to boost domestic demand. After 11 September, several economies adopted additional measures, such as increased spending on infrastructure and social programmes and tax incentives. A number of economies, including the Republic of Korea and Malaysia, which had experienced delays in actual spending, speeded up the implementation of their budgets. In view of the continuing weakness in the economy, further stimulative measures (such as expanding investment projects and tax cuts) were introduced in the budgets for 2002 in some countries. The fiscal balance deteriorated in most economies in 2001 owing to increased spending and lower revenues as a result of the cyclical downturn.

In contrast with other economies, Indonesia and the Philippines, in view of their large public debts²⁷ and their commitment to IMF-agreed fiscal

²⁶ ESCAP, *Economic and Social Survey of Asia and the Pacific, 2002* (United Nations publication, Sales No. E.02.II.F.25), chap. II, sects. entitled "South-East Asia" and "East and North-East Asia".

²⁷ Public debts in Indonesia and the Philippines accounted for about 100 per cent and 70 per cent of GDP as of late 2000, respectively, figures that were significantly higher than those for most other economies in the region.

²⁸ See Indonesia, Letter of Intent, 9 April 2002 (<http://www.imf.org/external/np/loi/2002/idn/01/index.htm>).

deficit targets, adopted restrictive fiscal policies in 2001.²⁸ Indonesia reduced its fuel subsidy and scaled back development spending and is expected to meet its deficit target for fiscal year 2001/02. Its agreement to an IMF-supported programme of reform led to the disbursement of a further loan tranche of about \$380 million and the generous rescheduling of its Paris Club debt of \$5.4 billion maturing in 2002 and beyond. This, together with other external assistance, will ease the country's tight financial constraints. The Philippines has made some progress in consolidating its fiscal deficit by more aggressive tax collection and tightening spending. It is committed to balancing its budget by 2006.

Fiscal stimulus will continue to support domestic demand in economies other than Indonesia and the Philippines. As the recovery takes root, most economies are expected to give greater attention to sustainability and economic growth in the medium-to-long term.

Since the Asian crisis, several countries have been implementing financial and corporate reforms whose benefits were evidenced in their resilience with respect to external shocks in 2001. Restructuring, however, is not yet completed because of resistance and other difficulties. Implementation continues to be uneven across countries and sectors. It is more advanced in the Republic of Korea and Malaysia, for instance, than in Indonesia and Thailand. Problems remain in the financial sector of many countries and there were signs of weakness during 2001, with an increase in NPLs and a limited supply of credit by banks.

In the Philippines, for instance, the ratio of NPLs to total debt in the banking system rose to 17.3 per cent in December 2001 from 16 per cent in January 2001. In Indonesia and Thailand, banks' NPL ratios fell to 12 per cent and 10 per cent by early 2002, from 18.8 per cent and 18 per cent at the end of 2000, respectively. The decline in banks' NPL ratios in these countries, however, reflected mainly the transfer of problem loans from banks to their respective asset management corporations (AMCs). If NPLs held by AMCs were added to the NPLs still held by banks, the overall NPL ratio would be much higher. Except for the Republic of Korea and Malaysia, only a fraction of the transferred NPLs to AMCs were disposed of.²⁹

Progress with corporate restructuring continued to lag behind reforms of the financial sector. Most economies adopted an out-of-court, voluntary workout framework, which proved to be time-consuming. Resistance from creditors and other interest groups, asset valuation problems, and weaknesses in judicial systems have hampered implementation. Furthermore, the cyclical slowdown in 2001 increased pressure against shedding excess labour and closing non-viable firms. Many firms are still burdened by large unresolved debts. Those still to be restructured are the most difficult cases. Progress so far has been concentrated on corporate debt settlement, whereas operational restructuring (such as management change, staff reductions and the closure of non-viable firms) has not progressed much. Additionally, the region still needs to strengthen financial supervision and regulation further, to accelerate operational restructuring and to improve the legal framework and corporate governance. A number of economies still have significant weakness in their banking and corporate systems, which makes them vulnerable to external shocks and poses a risk to the sustainability of their recovery.

²⁹ In Indonesia, the Indonesian Bank Restructuring Agency (IBRA) was able to dispose of only 6 per cent of transferred NPLs by September 2001.

China: facing the challenges ahead

Confronted with the global slowdown in 2001, China continued its policy stimuli to strengthen domestic demand and offset the adverse external shock. GDP growth moderated from 8 per cent in 2000 to 7.3 per cent in 2001 (see table A.4). Macroeconomic policies are expected to remain pro-growth in 2002, while additional measures have been adopted to address structural and social problems. Despite a number of uncertainties and challenges, GDP growth is expected to remain in the range of 7-8 per cent in 2002-2003.

In contrast with collapsed or sluggish investment in many other economies, fixed investment in China, spurred by such measures as direct government spending, contributed about 80 per cent of GDP growth in 2001.³⁰ The growth of total fixed investment accelerated from 9 per cent in 2000 to about 13 per cent in 2001, but investment growth in the non-State sector lagged noticeably behind that in the State sector. Accession to the World Trade Organization, the staging of the Olympic Games in 2008 and the acceleration in the development of the inner-land areas in the west of China are expected to sustain robust growth of investment in the coming years. Nevertheless, weak investment by the non-State sector and possible speculative bubbles in residential investment are among the policy concerns.

Consumption grew by about 9 per cent in 2001. It was supported by low interest rates, the expansion of consumer loans, a new tax on interest earnings on deposits, increased wages for civil servants, the extension of public holidays, and extended social security coverage.³¹ Consumer spending is expected to continue to grow at a similar pace in future but a few potential weaknesses remain. Among the latter, rural residents, who account for more than 60 per cent of the total population, have seen their disposable income grow more slowly than that of their urban counterparts, causing the income gap to widen further. Additionally, both the large surplus in the rural labour force and the urban lay-offs resulting from the restructuring of the State-owned enterprises (SOEs) are exerting pressure on labour markets.

The global slowdown caused the growth of China's exports and imports to decelerate sharply. Conversely, foreign capital inflows rose by about 15 per cent in 2001, with FDI totalling \$47 billion. Foreign reserves continued to rise and reached more than \$200 billion by year-end. China's trade sector is expected to revive as the global economy gradually recovers. Nonetheless, a further decline in the trade surplus is likely owing to the anticipated increase in imports as tariffs come down.

The appreciation of the United States dollar and the devaluation of the Japanese yen (see table A.12) exerted pressure on the Chinese yuan, which has been pegged to the dollar at a stable rate since 1994. The exchange rate of the yuan vis-à-vis the dollar, however, is expected to remain at its current parity. It is unlikely that China will either resort to a devaluation of the currency as a policy measure to counter the weaknesses in the economy, or adopt a free-floating regime in the near future.

The Central Bank has been reducing interest rates gradually since the Asian financial crisis. Monetary policy in early 2002 was stimulatory, at least in nominal terms. In real terms, however, interest rates remain high since inflation is close to zero: the CPI has fluctuated in a very narrow range around zero for the last four years. Monetary policy is expected to be accommodative in the out-

³⁰ Public investment has been financed by long-term bond issues totalling more than \$60 billion in the period 1998-2001.

³¹ Cars and housing are the two new areas where consumer spending is booming, partly benefiting from a drop in the prices of cars as a result of lower tariffs in compliance with the accession to the World Trade Organization.

look. With inflation not an issue, the challenge for policy makers is to continue their efforts to reform the financial sector so that the effects of monetary easing are fully channelled into the real sectors of the economy.

The government budget for 2002 indicates another issuance of 150 billion yuan (about \$18 billion) of long-term government bonds for infrastructure investment, but the total public debt remains under 20 per cent of GDP. The new budget also includes a larger fiscal deficit (about 3 per cent of GDP), but tax collection has been growing faster than spending so that, measured by fiscal “impulse”, fiscal policy may be considered restrictive. Therefore, some proposals call for tax reductions as an alternative policy to induce more private investment and consumption. Lower tax rates could be accompanied by revenue-enhancing measures so that both the public deficit and the public debt remain at sustainable levels.

Further initiatives are expected in coming years as China increasingly opens its economy to international competition. While its accession to the World Trade Organization is expected to benefit both China and the global economy, the challenges policy makers face, particularly in the agricultural and financial sectors, are considerable. The reform of the financial and social sectors will remain crucial but will be difficult to implement. There is a need to address the large amount of NPLs and to improve the efficiency of the allocation of financial resources. Meanwhile, enhancing social safety nets and containing the widening inequality in the country will be pivotal for securing social and political stability.

South Asia: unrelenting fiscal imbalances

GDP growth in South Asia slowed from 5 per cent in 2000 to 4.6 per cent in 2001 but performance was diverse across countries. Real GDP in Sri Lanka contracted by 1.3 per cent, while, in India, it grew by about 5 per cent thanks to a good harvest. As in other developing regions, the main drag on the region’s growth was the sharp deceleration of exports but domestic factors also contributed to slower growth. However, increasing signs of improvement in both external and domestic sectors have emerged. Barring exogenous shocks, aggregate real GDP growth in the region is expected to recover to 5½ per cent in 2002 (see table A.4).

Exports from most countries in the region decelerated rapidly in 2001, but the fact that the negative effect on growth, though tangible, was less than in East Asia reflects South Asia’s lower dependence on exports.³² Nonetheless, in some countries, including Bangladesh, Nepal and Sri Lanka, supply-side disruptions, such as political unrest and internal conflict, also slowed growth. The 11 September attacks and the subsequent military action in Afghanistan, in particular, had adverse impacts on exports of the region, particularly those of Pakistan. The terrorist attacks discouraged air travel, raised the risk premium on shipping and caused the cancellation of export orders.

Domestic demand weakened in most of these countries during 2001, with private investment decelerating more sharply than private consumption. Constrained by their high public debt burdens, South Asian countries had limited scope for fiscal stimuli to offset the downward pressures on growth. On the supply side, weakening exports, sluggish domestic demand, civil unrest and other problems led to a slowdown in the growth of industrial output in most countries, particularly in export-oriented manufacturing industries. The perfor-

³² The share of exports in GDP in South Asian countries ranged from 10 to 40 per cent and is considerably lower than in East Asian economies, where the figures ranged from 40 to 150 per cent.

mance of agriculture, an important sector for the region, was uneven. Nepal and Sri Lanka suffered poor agricultural output owing to adverse weather conditions, while Bangladesh and India reaped good harvests. Meanwhile, the service sector slowed down in most countries, except in India where financial and business services were robust. Tourism-related industries, particularly in Nepal and Sri Lanka, were hit by domestic unrest and the 11 September attacks.

Growth is expected to rebound moderately in 2002 in line with the improving external environment and better climatic conditions. A moderate rebound in exports and rising agricultural production, combined with expansionary policies, will support domestic demand in 2002, although individual country performances are expected to continue to diverge. Growth in India, Pakistan and Sri Lanka is expected to accelerate; the lifting of sanctions, policy stimuli, increased foreign assistance and preferential trade treatment will provide additional support to growth in the first two economies. At the same time, renewed tensions between the same two countries add a considerable degree of uncertainty to their prospects. On the other hand, growth will slide further in Bangladesh and Nepal. Political uncertainty and increased competition in garment exports (see chap. II) will constrain growth in Bangladesh, while deteriorating security and the lagged effects of an irregular monsoon will adversely affect growth in Nepal. Fiscal stimuli, constrained by the poor fiscal position in both countries, will not be able to offset these negative factors.

Agricultural production in most countries, except Nepal, is expected to be favourable in 2002. The resulting increase in rural income, together with the upturn in exports, will bolster the industrial and service sectors. In India, in particular, rising rural consumption due to good harvests during the second half of 2001, the expected upturn in exports, increasing spending on infrastructure projects and favourable oil prices will help its industry to recover.

Inflation in most of these countries was benign in 2001, reflecting weak domestic demand, lower oil prices and stable food prices (see table A.10). Monetary policy was accommodative in most countries. India, Pakistan and Sri Lanka, in particular, reversed their policy during 2001 and lowered key interest rates to boost domestic demand. In Sri Lanka, the overnight repo rate was reduced by a total of 700 bps during the year. However, the need to finance the fiscal deficit in the domestic market will constrain the country's ability to lower interest rates further. In the other countries of the region, an accommodative monetary policy is likely to be maintained for a while.

Fiscal policy continued to be expansionary in the region in 2001. Despite the urgent need for fiscal consolidation, government expenditures expanded, largely owing to increased pressures for fiscal spending as the economy decelerated and, in a number of countries including Nepal and Sri Lanka, owing to increased security spending. Nonetheless, revenue shortfall was the main reason for the widened fiscal deficits in most countries. Sluggish economic growth and lower imports led to a decline in fiscal revenues but structural factors, including a narrow tax base and inefficient revenue collection, also contributed. Finally, progress in privatization was poor.

In India, the central government revenue fell below target while expenditures were dominated by outlays such as interest payments, subsidies to public firms, salaries and pensions, which are difficult to reduce. India is expected to introduce additional measures both to revive revenue and to control expenditure. Political support for reforms, however, appears limited. Additionally, if

the conflict in Kashmir escalates, increased military expenditures would compound the fiscal difficulties.

In contrast, Pakistan, complying with IMF targets, continued to make progress in fiscal consolidation. The fiscal deficit in Pakistan narrowed to 5.3 per cent of GDP in fiscal year 2000/01 from 6.5 per cent in the previous year, mainly through cuts in development spending. The country also broadened its tax base and improved its tax management. Recent relief packages alleviated the country's external constraints. Following the successful completion of the 10-month \$596 million standby arrangement in September 2001, IMF approved an additional three-year loan of \$1.3 billion under the Poverty Reduction and Growth Facility (PRGF) in January 2002.³³ Pakistan's debt to the Paris Club was rescheduled in December 2001. The country also received additional relief from the United States and other donors.

³³ IMF, Press Release No. 01/51 of 7 December 2001.

Western Asia: from recession to weak recovery

For Western Asia, 2001 was a disappointing year in many respects. Turkey—the largest economy in the region—faced severe financial and currency crises, which led to a major drop in output and higher unemployment. The violence of the Israeli-Palestinian conflict continued unabated and intensified during the year; as a result, growth in Israel contracted while the Palestinian economy collapsed. Among the oil-exporting countries, oil production was cut as oil prices declined (see chap. II). As a result, the region's GDP contracted by 1.2 per cent in 2001—the worst performance in 10 years—after growth of 6.3 per cent in 2000 (see table A.4).

In several oil-exporting countries, gas output as well as oil production fell. Production in related industries, such as petrochemicals, also declined. Tighter fiscal policies brought about by lower oil revenues depressed consumer and investment demand. Exports declined. Saudi Arabia saw a marked deceleration in growth but it remained positive in 2001. Conversely, GDP growth accelerated in Oman, owing to expansion in the gas sector, and in Qatar, where the production of non-oil hydrocarbons, particularly fertilizers, increased.

Net fuel importers all either decelerated or experienced an abrupt contraction in GDP in 2001. Lebanon was an exception, as the economy experienced a mild recovery after two years of recession. GDP in Israel contracted by 0.6 per cent in 2001. In addition to the lives lost, increased violence devastated the Israeli economy and output slumped in all sectors. Manufacturing production also fell because of the drop in the worldwide demand for ICT products, which contributed to a pronounced downturn in the output of high-tech industries. The closures of the Palestinian territories negatively affected such labour-intensive industries as construction and agriculture.

The Palestinian economy suffered a major setback in 2001. The human toll was high, physical infrastructure, housing and other assets were destroyed and the number of displaced persons rose. Increased violence and the closures of the territories had dramatic consequences for the Palestinian economy. Output dropped sharply in agriculture, construction, manufacturing, and the hotel and restaurant and tourism sectors. The loss of employment and incomes was devastating. Prior to the intifada, some 130,000 Palestinians from the territories had worked inside Israel and earned a total of some \$3.5 million per day. The lost wages for this group is estimated at about \$1 billion in 2001.³⁴

³⁴ *Survey of Economic and Social Developments in the ESCWA Region, 2000-2001* (United Nations publication, Sales No. E.01.II.L.4) box 5 entitled "The impact of confrontation on the Palestinian economy".

Turkey went into deep economic recession in 2001 as its GDP contracted by 8 per cent. Domestic demand fell by about 15 per cent because of the collapse of business and consumer confidence and declining bank lending. Exports also fell owing to the global trade slowdown. On the supply side, the decline was broad-based. Agricultural production dropped, mostly owing to drought. Industrial output slumped as consumption, investment and external demand plummeted. Construction output declined sharply owing to the acute credit shortage.

With the Israeli-Palestinian conflict escalating, oil production declining and the crises in consumer and investment confidence intensifying, the growth prospects for the region in 2002 are bleak. The region's GDP is expected to grow by less than 2 per cent, which is insufficient to reverse the decline in per capita income and contribute to employment creation.

Lower oil revenue resulting from production restraints and lower oil prices will adversely affect the growth prospects, public finances and current-account balances of the oil-exporting countries in the region. Output growth is expected to decelerate in most of these countries in 2002.

Among the net fuel importers, Turkey is expected to recover, while the other countries in this subgroup are expected to repeat their modest performance of 2002. Signs that industrial production was picking up in Turkey were visible in early 2002 and growth for the year will be driven by domestic demand, mostly private and public consumption. Government and private investment are forecast to grow only marginally. Israel should benefit from the recovery in the ICT sector and in the United States economy but the Israeli-Palestinian conflict, if it persists, will continue to constrain growth.

The employment situation deteriorated across Western Asia in 2001. Weak economic growth, together with tight fiscal policy, worsened labour-market conditions in most oil-exporting countries. These economies, which also import labour, have been confronted with rising unemployment, particularly among youths. During 2001, the unemployment rate increased to over 10 per cent in the Syrian Arab Republic, although it declined in the Islamic Republic of Iran to 13 per cent from 14 per cent in 2000. In the remaining oil-exporting countries (excluding Iraq), the unemployment rate was estimated at about 5 per cent of the labour force in 2001. Authorities in some labour-importing countries have intensified efforts to replace expatriate workers with nationals. The Government of Saudi Arabia, for instance, decreed that, in every establishment employing 20 or more workers, nationals should account for at least 25 per cent of the total labour contingent. Prior to September 2000, the acceptable minimum was 5 per cent.

The deepening of the economic recession has had a negative impact on the labour market in Israel. Unemployment, which was already rising at the end of 2000, worsened and averaged 10.2 per cent in 2001, restraining the rise in nominal wages. Because of the closure of the Palestinian territories, unemployment in the West Bank and Gaza Strip climbed from 11 per cent during the period January-September 2000 to about 40 per cent between October 2000 and January 2001.

Average annual inflation continued to fall in the region in 2001, despite Turkey's lack of progress in bringing inflation down (see table A.10). In the net fuel exporters, the effective appreciation of currencies (see table A.12) helped to lower the cost of imported goods, while fiscal consolidation helped to reduce inflation. Inflation remained high, however (60 per cent), in Iraq in 2001. The Islamic Republic of Iran is the only other oil-exporting country in the region struggling with double-digit inflation; although there was progress, its inflation

was still about 12 per cent in 2001. Inflation remained low in all net fuel importing countries, except Turkey and Yemen. The devaluation of the lira, coupled with increases in administered prices, led to a rise in inflation in Turkey in 2001, and inflation also picked up in Israel in early 2002 owing to the depreciation of the currency.

Fiscal policies were tight in oil-exporting countries. Lower oil revenues led to the continuation of fiscal consolidation in most of these countries. Although government spending (particularly on defence and security) increased slightly, capital expenditures on infrastructure and industrial projects were cut. Non-oil revenue barely grew owing to the inability of most of these countries to introduce such measures as personal taxes and VATs. The cut in import duties and corporate tax rates to stimulate foreign investment reduced fiscal revenues. Other measures that could relieve pressures on government finances, such as the withdrawal of heavy subsidies for water and electricity, were contemplated for some time but never implemented as they proved to be highly unpopular. Nevertheless, some countries raised the prices and user fees for public services and utilities in 2001. Excluding Kuwait and Qatar, the fiscal deficit of all oil-exporting countries increased, reaching 7 per cent of GDP in such countries as Bahrain and the United Arab Emirates. As in the past, budget deficits were financed through domestic borrowing and the use of these countries' substantial reserves.

With limited alternatives to decreasing non-oil revenue, the reduced oil revenues anticipated in 2002 will put the budgets of these countries under strain. This has prompted most countries to adopt fiscal consolidation for 2002. The reduction of current spending, however, remains politically sensitive. Capital expenditures on development projects are therefore set to decline and fiscal deficits are expected to widen in 2002. The financing of those deficits, however, should not be a problem.

The fiscal situation in many oil-importing countries deteriorated during 2001 largely owing to lower revenues brought about by the decline in economic activity, on the one hand, and increased expenditures, on the other hand. Turkey faced a heavy debt-service burden, while Israel increased its expenditures on defence. The military campaign will continue to pressure Israeli public finances, but further fiscal consolidation in Turkey in 2002 aims at increasing the public sector primary surplus. In the territories under the jurisdiction of the Palestinian Authority, government revenues collapsed as the violence escalated. Since the intifada, the Palestinian Authority has been unable to secure access to the VAT revenues that Israel collects on its behalf.

Monetary easing, aimed at boosting domestic demand and also at reducing the cost of borrowing for the government, prevailed in most oil-exporting countries in 2001. Because most of these countries peg their currency to the United States dollar, cuts in domestic interest rates followed those in the United States, but the positive interest rate differential remained.

With weak economic activity and stable inflationary expectations, monetary policy was loosened in Israel throughout 2001, but interest rates were increased in early 2002 as inflation accelerated owing to the depreciation of the currency. Monetary policy in Turkey also was eased in 2001. Two cuts in interest rates helped in providing liquidity to ailing banks and also reducing the cost of servicing the public debt. Following the abolition of the crawling-peg exchange-rate regime, monetary policy was shifted from exchange-rate targeting to formal inflation-targeting. For most of 2001, base money was the nominal anchor for the disinflation effort.

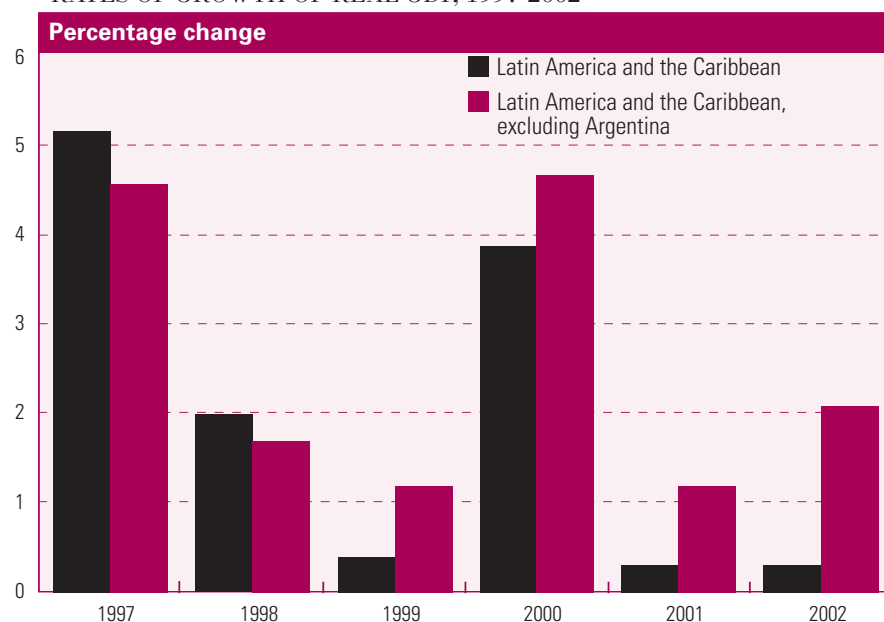
Latin America: external vulnerabilities exposed once again

Economic growth decelerated sharply in Latin America and the Caribbean in 2001, interrupting the recovery that had started a year before. Because of the region's extensive external interactions, the external shocks of 2001 were rapidly transmitted to the domestic sector, leading to weak internal demand. Private consumption was stagnant while fixed investment remained depressed. The limited scope for policy makers to adopt counter-cyclical measures compounded the region's difficulties and exacerbated the poor economic performance. GDP grew by only 0.3 per cent in 2001.

Excluding Argentina, which has been growing below the regional average since 1999, the forecast is for regional GDP to grow by about 2 per cent in 2002, from 1.2 per cent in 2001. Forecasts for Argentina are subject to considerable uncertainty regarding the response to the country's economic crisis (see box III.2). If Argentina is included in the regional average, GDP is expected to grow by only $\frac{1}{4}$ per cent in 2002 (see figure III.9). Growth in 2002, however, will largely depend on the strength of the United States recovery and its benefits for the region's exports and export prices. Owing to their close economic ties to the United States, Mexico and Central America stand to benefit most rapidly from the upswing in the United States, notably through the expansion of exports of manufactures. For the region as a whole, the recovery is expected to gather momentum in 2003 as growth accelerates in the United States and other countries start to catch up.

The slowdown in 2001 was widespread throughout the region and intensified as the year progressed (see table III.3), in part because the sharp contraction in United States import demand depressed export earnings. The nature of this development varied across subregions: in Mexico, Central America and the Caribbean, it primarily took the form of a lower volume of exports of manufactures, whereas in South America lower export prices aggravated the deterioration in terms of trade. Additionally, the terrorist attacks of September 2001

Figure III.9.
LATIN AMERICA AND THE CARIBBEAN: ANNUAL
RATES OF GROWTH OF REAL GDP, 1997-2002



Source: UN/DESA.

Box III.2

THE CRISIS IN ARGENTINA

^a The convertibility law allowed for up to 10 per cent of international reserves to be held in government bonds denominated in foreign currency, valued at market prices.

^b Although the country experienced deflation during the period 1999-2001, real wages in manufacturing did not fall. See ECLAC, *Preliminary Overview of the Economies of Latin America and the Caribbean* (United Nations publication, Sales No. E.01.II.G.182), tables A-4 and A-6.

The rigidity of the currency board, unsustainable fiscal deficits and various external shocks have been identified as the major causes of the crisis in Argentina, although views vary widely on the relative importance of each and on which triggered the crisis.

Argentina's "convertibility law" established a currency board system that aimed at imposing fiscal discipline and ending hyperinflation in the country. Under the currency board regime, the peso was pegged to the United States dollar at par and had to be fully backed up by foreign currency assets held by the Central Bank, making it impossible for the Government to finance a public deficit by printing money without a corresponding increase in foreign exchange reserves.^a In a currency board regime, changes in the base money are driven exclusively by changes in the balance of payments and in net foreign reserves. The Government can issue bonds to cover a fiscal deficit, but this does not add new money to the system, which can come only through the currency board mechanism. The policy was considered a success in that it had brought annual inflation down from 4,900 per cent in 1989 to 1.6 per cent in 1995 and, with the benefit of a stabilized economy and large inflows of private capital, resulted in high growth until 1998.

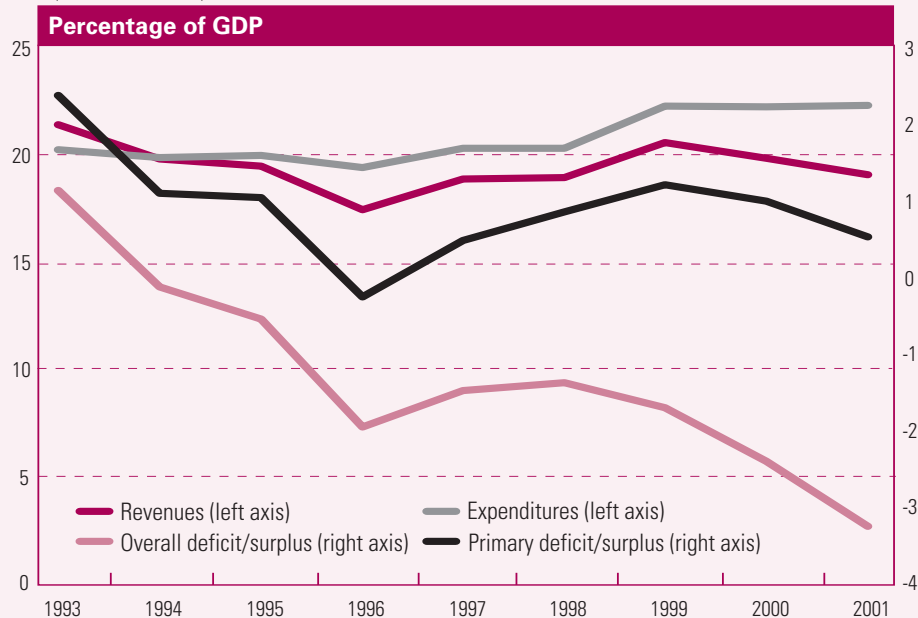
With the currency board, Argentine policy makers gained credibility but lost the freedom to adjust either monetary policy or the exchange rate in response to the needs of the domestic economy or to counter external shocks. Adjustments to the external shocks that the country suffered after 1995 took the form mostly of a loss of output and of employment. Although some prices fell, they did not fall fast enough to provide Argentina with the adjustment needed to overcome these negative external shocks.^b

The public accounts were one source of difficulty for the currency board system. During the period 1994-1999, the Government had annual public sector deficits of about \$4 billion-\$5 billion (about 1.5 per cent of GDP). These were financed initially by privatization proceeds and later by the issuance of bonds, particularly in international capital markets. Since there was ample global liquidity at that time, financial markets (both domestic and international) were willing to extend credit to the Government, because of the confidence provided by the currency board itself, because of the relatively high returns offered and because fiscal indicators remained within ranges considered acceptable by the international community (see below). As a result, the limits that the currency board was expected to impose on fiscal discipline were easily exceeded. External debt mushroomed from \$72.4 billion in 1993 to \$139.8 billion in 2001 and interest payments absorbed more than 35 per cent of the country's exports in 2001. By the time Argentina declared a moratorium on its sovereign debt in December 2001, government debt (domestic and external) stood at some \$141 billion, more than 50 per cent of GDP.

Throughout the whole period, except for 1995, Argentina recorded a surplus in its primary budget, that is to say, excluding interest payments (see box figure I), and despite the deterioration in the financial position of the social security system. The social security balance recorded a modest surplus in 1993, but turned increasingly negative from 1994, putting additional pressure on the country's public accounts. Excluding the servicing of the public debt, real expenditures by the national Government increased by less than 6 per cent over the entire period 1991-2001.

The servicing of the public debt severely compromised public finances. As interest rates surged, in part owing to contagion and in part owing to uncertainties regarding the future of the currency board, particularly after mid-1999, the cost of servicing the public debt increased to 5.3 per cent of GDP in 2001 from 1.75 per cent in 1994. Largely as a result, the budget deficit expanded to \$7 billion-\$8 billion in

Figure I.
ARGENTINA: NATIONAL NON-FINANCIAL PUBLIC SECTOR ACCOUNTS
(CASH BASIS), 1993-2001



Box III.2 (continued)

Source: República Argentina, Ministerio de Economía.

1999-2001 (about 2.75 per cent of GDP). An additional difficulty for the central Government was the lack of fiscal discipline of the provincial governments whose expenditures (excluding debt service) increased by some 65 per cent, in real terms, over the period 1991-2001. In 2001 pesos, this corresponds to an increase from 21.5 billion pesos in 1991 to 35.4 billion pesos in 2001.

Fiscal revenues did not increase fast enough, with only modest gains in enhancing tax collection. Tax evasion, a chronic problem in the country, persisted. Moreover, fiscal revenues were compromised by the recession that took hold in 1999, creating a vicious cycle: with the economy failing to grow fast enough to generate sufficient fiscal revenues, additional fiscal austerity measures were taken; those, in turn, weakened domestic demand further, compromising economic growth.^c

The sustainability of both public and external debt depends on many factors, including both the current situation and the prospects for the economy. For example, a total public debt of less than 60 per cent of GDP and a budget deficit below 3 per cent of GDP^d may be considered sustainable for some economies if GDP grows by at least 3 per cent and interest rates do not exceed 5 per cent. This was not the case for Argentina, whose GDP had been contracting since 1999 and where interest rates had been consistently high, surpassing 40 per cent towards the end of 2001 as an indication of international markets' lack of confidence in the Government's policies. In such conditions, maintaining a primary surplus of about 1 per cent of GDP could do little to re-establish equilibrium besides signalling the Government's good intentions in attempting to achieve fiscal discipline. While the Government did not have control over interest rates, other policy actions could have short-circuited the process at an early stage.

Negative external shocks contributed to the crisis as well. The first was the appreciation of the United States dollar which, because of the currency-board peg, led to a continuous appreciation of the peso vis-à-vis other currencies (see table

^c See *World Economic and Social Survey, 2001* (United Nations publication, Sales No. E.01.II.C.1), Chap. III, sect. entitled "The crisis in Argentina: recession persists".

^d These are some of the criteria imposed on European Union countries as conditions for membership in the European Economic and Monetary Union. For an analysis on this issue, see *World Economic and Social Survey, 1997* (United Nations publication, Sales No. E.97.C.II.1 and corrigenda), box V.2 entitled "The economic logic of the Maastricht budget criteria".

Box III.2 (continued)

e This fall reflects the specific basket of commodities exported by Argentina.

f Hong Kong SAR has had a successful currency board regime. In contrast to Argentina, it has maintained a surplus in its current account and has international reserves that are well above what is required to support its aggregate monetary supply.

g Contrary to expectations, the currency board also failed to bring interest rates in Argentina to levels close to those observed in the United States (see *World Economic and Social Survey, 2000* (United Nations publication, Sales No. E.00.II.C.1), box III.4 entitled "Rethinking exchange-rate regimes in Latin America").

h On 7 September 2001, the Executive Board of the International Monetary Fund (IMF) approved an increase to about \$21.6 billion of standby credit initially approved in March 2000 and already augmented in January 2001 (see IMF Press Release No. 01/37 of 7 September 2001, available at <http://www.imf.org>).

A.12). Initially, the appreciation of the peso was due to the inflation differential between Argentina and the United States. However, later on, as Argentine inflation converged towards—and was even lower than—that of the United States, the United States dollar gained strength in relation to major currencies, causing the appreciation of the peso to continue. It is argued that this undermined the competitiveness of Argentina's exports. Nonetheless, Argentina's volume of exports increased at an annual rate of 7.5 per cent over the period 1991-2001—about the same rate as that of the average growth of world trade. Despite the contraction in 1999, owing to the depreciation of the Brazilian currency and lower import demand by Brazil (Argentina's main trade partner), exports quickly recovered in 2000, in line with the average growth of global trade. Export revenues, however, did not grow as fast owing to lower world prices for the country's major export products: about 25 per cent of the country's exports are primary commodities whose prices fell by 27 per cent during the period 1998-2001. ^e Agro-industrial products contribute another 30 per cent of the country's total exports of goods and prices of these products fell by 23 per cent during the same period. Additionally, faster export growth has been undermined in recent years by lower external demand, initially due to the Asian and Russian crises, subsequently to the Brazilian currency crisis and, more recently, to the sharp slowdown of the world economy.

Meanwhile, imports kept increasing, in part because of the shift in the relative prices of tradable and non-tradable goods brought about by the overvalued peso. Trade liberalization also played a role in increasing imports. In real terms, imports grew at an annual average rate of 17.8 per cent during the period 1991-2001, with the volume of imports of consumer goods growing, on average, at 26.7 per cent per year. Accordingly, and except for 1996, the country was able to generate a trade surplus only when in an economic recession (see box figure II and table A.4). The deteriorating trade balance, coupled with large interest payments on external debt, meant that the country depended increasingly on net capital inflows to balance its external accounts and maintain the fixed exchange rate. ^f This, in turn, meant rising external indebtedness and increasing debt-servicing obligations—ultimately an unsustainable situation.

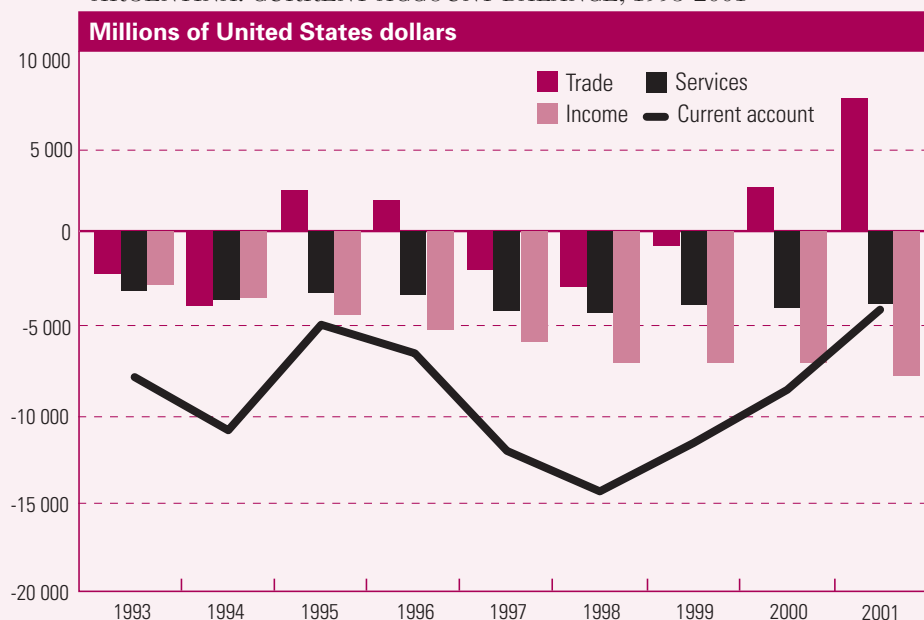
The external shocks had an adverse impact on the Argentine economy, with the currency board on the verge of collapse on a number of occasions. The system was unable to prevent contagion from crises elsewhere as the spreads for Argentine sovereign bonds shot up after the Asian, Russian and Brazilian crises. ^g Nonetheless, financial inflows continued, initially through direct investment, then through increased indebtedness and subsequently through official support by the multilateral financial institutions. Gradually, however, both domestic and international private investors reassessed their positions as the global economy decelerated and confidence in Argentina's policies declined. ^h When the country was unable to meet conditions agreed with the International Monetary Fund (IMF), disbursement was suspended, external support was no longer available and the currency board collapsed.

In mid-2002, six months after the debt moratorium, Argentina remains in the midst of an economic crisis, with a number of critical issues needing to be confronted:

- The large devaluation of the peso (trading at 3.5 to the United States dollar in late May) worsened the country's external debt problem, with some analysts estimating that the debt-to-GDP ratio may have reached 100 per cent, making debt restructuring even more complex. To alleviate the burden of debt on public

Box III.2 (continued)

Figure II.
ARGENTINA: CURRENT-ACCOUNT BALANCE, 1993-2001



Source: República Argentina, Ministerio de Economía.

finances in a reasonable time, debt restructuring will need to include a reduction in the net present value of original claims.

- The *corralito* (the freeze on bank deposit withdrawals), while necessary to avoid the collapse of the banking system, has imposed severe liquidity constraints on the economy and, if sustained, will continue to restrict economic activities. Its dismantling, however, has also to take into account the potential pressures on the exchange rate and, consequently, on inflation.ⁱ
- With the dissolution of the currency board, and the “pesification” of the economy, the country needs to define a new anchor, that is to say, a key nominal economic parameter to serve as a target for its monetary policy, and to define a new monetary framework to keep inflation under control.
- Unemployment has been on the rise, reaching 24 per cent of the urban labour force in May 2002 according to some estimates, while a quarter of households in the metropolitan area of Buenos Aires were estimated to be living in poverty.^j Economic conditions have continued to deteriorate sharply, with complex social and political consequences that will have to be addressed in parallel with the economic measures.
- With its stock of human and physical resources, Argentina’s economy has great potential but, following four years of recession, restoring growth and confidence in the economy is a major challenge. Domestic demand is curtailed by unemployment, the deposit freeze and the overall lack of finance. Exports are a possible source of growth in the short run but, because they are only a small share of GDP, they may not provide enough stimulus for the economy as a whole. Macroeconomic policy will have to be carefully designed in order to promote growth while, at the same time, restoring order to and confidence in the economy.

ⁱ In June 2002, the Government established a programme under which deposits would be converted into long-term government bonds—on a voluntary basis—as a means to return deposits to the public without compromising the health of the banking system. Uncertainties, however, remain. IMF, for instance, has suggested that such conversion should be carried out on a compulsory basis.

^j On social conditions in Argentina see *Panorama Social de América Latina* (United Nations publication, Sales No. S.01.II.G.141).

reduced tourism inflows and income, particularly in the Caribbean and Central America, where many countries are heavily dependent on this sector. Despite some signs of recovery, tourism receipts are likely to remain subdued in 2002.

Developments in international financial markets had a negative impact on the region as well. The global slowdown, the substantial correction of stock market values in the United States and the increasing difficulties in Argentina, culminating in a debt default by that country, led to higher risk premiums and lower net private capital flows, including FDI.

The Argentine crisis, however, had been largely anticipated. As a result, while financial contagion after the declaration of a moratorium was limited, there had been some contagion before the crisis broke. For instance, Brazil and Chile suffered significant currency depreciations in the second half of 2001 and Brazil also saw its risk premium increase temporarily. Nonetheless, a “decoupling” of most countries’ external financing conditions from those of Argentina was apparent at the end of 2001 and the beginning of 2002. In the last quarter of 2001, foreign exchange markets in both Brazil and Chile stabilized. Other signs of decoupling were evident as well. In parallel with the evolving crisis in Argentina, the major credit-risk rating agencies indicated that they felt that Mexico had become more attractive as a destination for capital flows, as reflected in its upgrade to investment status. Furthermore, many countries continued to secure access to international bond markets in 2001 even as the Argentine crisis evolved. Nonetheless, external financing has remained costly for most countries in the region.

There was a significant worsening of economic conditions in the three largest economies in 2001. In Mexico, GDP contracted for the first time since the “tequila crisis” in 1995 owing to its close links with the United States economy and to restrictive macroeconomic policies, particularly on the fiscal front. Argentina spiralled downward into an unprecedented economic, political and social crisis, whereas Brazil recorded a significant slowdown in activity (see table A.4).

Throughout 2001, the Argentine Government faced growing difficulties in servicing its large external debt, in spite of a large restructuring in June. By the third quarter, the country could no longer access financial markets as the risk premium skyrocketed (see figure II.7). Unable to meet the targets agreed with IMF, the country saw itself cut off from multilateral finance as well. It declared a moratorium on external debt service at the end of 2001 and abandoned its currency board arrangement. The peso was floated and depreciated by 67 per cent against the United States dollar during the first four months of 2002.

Argentina faces a delicate and complex situation. Its banking system is on the brink of collapse; it is unable to honour the public’s demands for the withdrawal of deposits; and additional losses have arisen owing to the conversion of dollar assets and liabilities into pesos at different exchange rates. With the payments system in disarray, industrial production, private consumption and tax revenues have continued to dwindle, while domestic prices have reflected the strong depreciation. Argentina’s economy contracted by 4.5 per cent in 2001 and is expected to shrink further in 2002. A clear policy framework, particularly the redefinition of the fiscal relationship between the different levels of Government, and clarification of the functions of the Central Bank, as well as fresh financial aid and an overhaul of the banking system, remain essential for stabilization and recovery.

Despite its initial limited contagion through financial markets, the Argentine crisis is likely to have a negative impact on the country’s neighbours through other channels, particularly trade and FDI. Uruguay is forecast to have its fourth

consecutive year of negative growth in 2002. Brazil will be exposed to lower-priced Argentine products, lower tourist arrivals and import demand from Argentina and reduced profitability of Brazilian firms operating in Argentina. Total trade flows within the Southern Cone Common Market (MERCOSUR) are estimated to have contracted by about 10 per cent in 2001, after expanding 16 per cent a year on average during the 1990s. Within the trade bloc, the exports of Brazil to other partners were those most affected.³⁵

Other countries having trade and commercial links with Argentina may face similar adverse impacts. Spanish companies with a large exposure to Argentina, for instance, had heavy losses and these were reflected in those companies' equity prices in the Madrid stock exchange. Additionally, countries competing with Argentina in international markets may lose market shares and foreign exchange earnings owing to the increased competitiveness of Argentine products.

The economic slowdown in Brazil in 2001 was due not only to the weak external environment, but also to an energy crisis, which forced the country to ration energy consumption, and restrictive macroeconomic policies. Both the energy crisis and those policies constrained output growth. Despite signs of a moderate recovery in early 2002, notably a pickup in industrial production and improved consumer confidence, the persistence of high interest rates, along with the uncertainties associated with the elections to be held at the end of the year, will weigh on the strength of the recovery. Nevertheless, growth is expected to improve moderately in 2002, based on stronger internal demand, the end of the energy shortages, and a positive contribution from net exports due to a more competitive exchange rate.

With the exception of Ecuador, GDP growth was sluggish in the Andean countries in 2001. Domestic demand remained weak in early 2002 and is anticipated to stay so for the rest of the year. In Colombia, internal conflict has been holding back economic recovery and represents a serious downside risk for growth. In Ecuador, the solid performance in 2001 is not likely to be repeated in 2002, owing to the loss in external competitiveness and persistent problems in the banking sector. Peruvian GDP stagnated in 2001, but the economy has started to recover, supported by more stable political and macroeconomic conditions and large investment in the mining sector. Despite expansion in the natural gas and oil sectors, the Bolivian economy stagnated in 2001 owing to weak external and internal demand. Growth is expected to pick up in the second half of 2002 as external demand improves.

The region's open urban unemployment rate had stagnated in 2001 at 8.4 per cent³⁶ and no improvements were visible in early 2002. In some countries, unemployment rates are twice the region's average. The latest official data indicate that unemployment in Argentina was 18.3 per cent of the workforce in October 2001 and this will have become significantly higher, as the crisis has intensified. In Venezuela, slight advances in 2001 came to a halt as the country decelerated markedly at the beginning of 2002, while in Mexico, job losses in the export manufacturing sector have been substantial. High unemployment remains a major cause of sluggish internal demand throughout the region, particularly in countries such as Chile, Colombia and Uruguay.

Average annual inflation in the region continued to decrease in 2001 (see table A.10), with weak internal demand and lack of pressures in labour markets being key factors. Inflation reached 7.7 per cent in Brazil by year-end, overshooting the official target by 3.7 percentage points. In addition to adjustments in administered prices, the depreciation of the real was a major factor underlying this outcome.

³⁵ See Inter-American Development Bank, Periodic Note entitled *Integration and Trade in the Americas: A Preliminary Estimate of 2001 Trade* (Washington, D. C., December 2001).

³⁶ See ECLAC, *Preliminary Overview of the Economies of Latin America and the Caribbean, 2001* (United Nations publication, Sales No. E.01.II.G.182), table A-5..

In early 2002, new sources of inflationary pressure emerged. In Argentina, the CPI increased by about 21 per cent in the first four months of 2002 owing to the collapse of the peso. In Venezuela, the depreciation of the bolivar in February 2002 risks pushing inflation beyond its already high level: during the first four months of 2002, consumer prices increased over 8 per cent, compared with a figure of 12.5 per cent in the whole of 2001.

Monetary policy among Latin American countries varied in 2001. In a large group of countries, such as Chile, Colombia and Peru, the monetary stance was geared to supporting the recovery of internal demand and economic activity. Conversely, monetary policy was strongly tightened in Brazil. Despite slight reductions at the beginning of 2002, the benchmark interest rate remained at 18.5 per cent by May owing to concerns over remaining pressures on the currency and their impact on domestic inflation. Policy is expected to remain tight for most of 2002, and then to be eased if there is additional progress with inflation. The elections in 2002 and associated uncertainties also suggest continued caution on the monetary front.

In Mexico, despite progress with inflation, the Central Bank maintained a cautious approach during 2001 and the beginning of 2002. In Argentina, the years of deflation are over, but considerable uncertainty remains. The currency board, although dismantled, is yet to be replaced with a new monetary policy framework. Elsewhere in the region, monetary policy is expected to stay accommodative in 2002, though less so in Mexico, where the Central Bank remains sensitive to developments in labour markets and potential exchange-rate volatility that could have an impact on domestic prices.

Governments in the region generally tried to maintain fiscal discipline, with the result that fiscal policies have tended to be more pro-cyclical than counter-cyclical. In Mexico, for example, there were successive budget cuts throughout 2001 and early 2002 owing to lower fiscal revenues brought about by lower oil prices and the economic slowdown. The fiscal impact of lower oil revenues has also been substantial in Venezuela: oil revenues—about 50 per cent of all public revenues—fell substantially during the second half of 2001 as production was cut and oil prices fell. The Government cut expenditures aggressively in order to control the fiscal deficit, which nevertheless reached 4.3 per cent of GDP in 2001, against the target ceiling of 3 per cent. In Brazil, the Government has struggled to maintain the targeted primary surplus in the face of growing interest payments owing to the depreciation of the real and higher interest rates. Conversely, in Chile, the Government's commitment to maintaining a structural surplus of 1 per cent of GDP has allowed for a more stabilizing role of the public sector throughout the slowdown.³⁷

Fiscal policies are expected to remain cautious throughout 2002. With growth of tax revenues anticipated to be weak and in the absence of major advances in tax reforms throughout the region, the room for fiscal expansion to support the recovery remains very limited in most countries, particularly Ecuador and Peru, where fiscal deficit targets have been adopted under IMF-supported programmes. In Brazil, high interest rates and a potential for exchange-rate volatility in the run-up to the elections are likely to adversely affect the public accounts, prompting the Government to reinforce its commitment to a substantial primary surplus. In Mexico, a prudent fiscal policy is likely to be maintained in 2002. In contrast, public expenditure in Chile is expected to continue to provide an impulse to aggregate demand in 2002.

³⁷ The structural balance indicator is defined by the Government as a measure of the fiscal balance that excludes the effect of cyclical components on the revenue side, such as revenues from copper exports and some tax components. Therefore, in years of below-trend growth, the structural deficit rule allows for a moderately expansive fiscal policy, with the opposite taking place in years of above-trend economic activity.

PART TWO

PRIVATE-PUBLIC
INTERACTION
IN ACHIEVING
SOCIETY'S GOALS

O VERVIEW

Part two of the *World Economic and Social Survey, 2002* analyses new thinking on and experiences of public-private interaction in achieving society's goals. It explains how the role of the State is itself changing to ensure that the private sector brings the fullest possible benefits to society.

Societies have many goals—to ensure the well-being of its present citizens and a better future for the next generation in terms of good health, housing, education, and prosperity, justice for all, the extension of personal freedom, and the maintenance of domestic and external peace. Governments are held accountable if the people or the electorate considers that they are failing to make adequate progress in advancing society's overall goals. However, while society expects the government to assist in the achievement of these goals, it has not entrusted to government the full power to take any steps that it wishes to accomplish them.

Such extensive power could conflict with the expansion of the personal freedom of citizens—to determine how to build up their own capabilities, how to spend their own income, how to pursue happiness in their own way, and how to earn a living, including by setting up a business. The extension of personal freedom is also viewed either as a goal in itself or as a key element in achieving society's goals. The government, though, has a major role in ensuring that there are opportunities for all, that the benefits of development are equitably distributed, that those affected adversely by factors outside their control such as job loss or illness are protected and that conflicts among the different interest groups within society are justly resolved. Fulfilling these tasks does not necessarily mean a larger or even more intrusive role for the government, but rather a continual refining of the role of the State. This is especially relevant at the present time which is marked by the realization that the private sector can make a major contribution to the achievement of society's goals but that government has an important role in enabling this sector to realize its full potential.

There has been considerable movement in all countries to expand the role of the private sector in the provision of goods and services. As described in the *World Public Sector Report*, “recent experience has shown that people often benefit when the State is not involved in the production of goods and, generally, the provision of non-social services. Greater competition brings down prices and enhances the choice to consumers.”¹ In reducing the role of the State in the production of goods and non-social services, Governments are responding to a perception that citizens, as consumers, should have a greater choice regarding what is produced and that the profit motive and accompanying hard budget constraints can work to expand the quality and quantity of goods and services available to citizens.

¹ *World Public Sector Report: Globalization and the State, 2001* (United Nations publication, Sales No. E.01.II.H.2), p. 65.

The private sector's role in the economy is expanding in many ways. One is through the privatization of State-owned enterprises (SOEs) producing goods and non-public services. In the provision of public services, the private sector is also playing a greater role—in the construction and running of infrastructure such as power stations, in the supply of such services as cleaning and laundry in hospitals, and in the running of schools and airports.

This expansion of the role of the private sector does not mean just that it produces a larger share of a fixed bundle of goods and services and that the State produces a smaller share. The consequences of this expansion are more profound. A comparison of the health and welfare of the citizens of countries that are historically similar but were under different social systems—for example, the two German States before unification, or many European economies in transition before their transition and at the present time—shows the extent to which private sector involvement in economic activity has large consequences. A system in which, within the limits of the law, citizens can freely choose what goods and services they want and private companies, both domestic and foreign, can attempt to make a profit from supplying them is very different from one where the State takes these decisions.

Where the State makes decisions that, in a competitive market environment, would be left to a myriad of individual economic actors, the total volume supplied is likely to be smaller. On the whole, State-run enterprises tend to use greater amounts of inputs to produce the same output as privately run concerns. This constitutes a waste of society's resources. However, State involvement in the production of goods and services is not just a matter of efficiency in the production of a particular good. The composition of what is supplied is likely to be different from what individual economic actors would provide. On the whole, individual actors are more sensitive to what consumers demand and so avoid the mismatch between demand and supply characterizing the former centrally planned economies which constituted an inefficient outcome on a national scale. Whether or not the private sector is involved is one determinant of the speed and direction of the development of new goods and services. In many countries, after the privatization of the telecommunications sector, the quantity and quality of services changed. The provision of mobile phones, in particular, expanded rapidly. Moreover, whereas the State might have financed some of the research and development (R&D) that led to a particular invention, its subsequent development and refinement by the private sector could lead to new and hardly imagined uses, as in the case of the Internet.

In the present competitive and globalizing world economy, it is increasingly difficult for the State to anticipate future demands for goods and services and thus plan for their production. Moreover, too great a degree of State control over economic decision-making during a long period is incompatible with democracy and fundamental freedoms.² The advent of democracy in the economies in transition was invariably accompanied by a rapid expansion of the private sector as electorates felt that the role of the State should not include intervening in decisions as to how individuals decided to spend their income and, in general, what particular desires they wished to see satisfied.

However, the expansion of the role of the private sector in the provision of goods and services does not necessarily mean a contraction in the overall role of the State: the role of the State in assuring, either directly, or indirectly by

² "Capitalism is a necessary condition of democracy ... There has been no country with a democratic political sphere, past or present, whose economy was not dominated by private ownership and market coordination. However, private ownership and markets are not sufficient to produce democracy" (János Kornai, "What the change of system from socialism to capitalism does and does not do", *Journal of Economic Perspectives*, vol. 14, No. 1 (winter 2000), pp. 35-37).

working with the private sector, minimum levels of nutrition, education and health will remain. Even in countries with a very small public productive sector, the State is involved in the supply of almost all goods. It sets the legal framework whereby property rights, including intellectual property rights, are enforced and claims arising from the use of a product can be judged. It seeks to ensure that the consumer is purchasing a safe product (as in the case of medicines, foodstuffs, automobiles and children's toys). It is also involved in ensuring that the consumer is not cheated.

As more actors are involved and a greater array of goods and services are supplied, overseeing the system becomes more complex. Although the public sector may have less direct participation in the actual production of goods and services, it needs to play a more active role in regulation. The State always had these responsibilities but these are now situated in a different context requiring a highly skilled government, not necessarily a smaller or a larger one, and possibly different regulations rather than necessarily more regulations.

In general, the respective roles of the public and private sectors are constantly being redefined, with citizens seeking justification for the State's direct involvement in economic activity and transparency for the costs of the public sector's provision of a good or service. For instance, in many countries, the public no longer considers that the State is under any obligation to own and operate supposedly strategic industries such as iron and steel. If these industries cannot be operated profitably by the private sector, there is often less of a constituency, outside those working in the industry, for government intervention. Even if the Government does intervene, it is expected to ensure that the costs of its intervention are transparent.

Governments often intervene indirectly in other ways to assist people and industries. They can finance national agricultural research in order to help develop new crops for farmers. In the matter of health care, Governments are expected to take steps to prevent epidemics and to ensure that a poor person is not denied vital medical treatment, but the government's role in building and operating hospitals and in paying medical personnel is being rethought.

There are many different ways in which the private and public sectors can interact. While, as indicated above, there is no one clear-cut determination of what should be undertaken by the public and private sectors, insights into the new relationship between the two can be derived from examining the experiences of different sectors. Interaction can range from full privatization of a productive enterprise to arrangements through which provision of a good or service is set out in the form of a contract between the public and private sectors. Such contracts would be "build-operate-transfer" arrangements for infrastructure, a lease whereby the private sector pays the public sector for the use of one of its assets or a concession whereby, for instance, a private supplier pays for the right to provide a service in a publicly owned facility. In drawing up these contracts, the government should try to ensure the most efficient outcome through competitive bidding. In general, an aim of policy should be the promotion of competition, as well as the construction of a regulatory framework that will protect the interests of consumers.

Other examples of interaction are cooperation between government-run research institutes, universities and private research institutes in areas of socially desirable research, such as agriculture or medicine; arrangements for

privately owned and run hospitals to treat patients on behalf of the State; and the relationship between public authorities and for-profit private universities that ensures that the latter reach the required standards.

Part two of the *Survey* deals with only some of the main interactions, with a view to drawing conclusions that are applicable in similar industries or conditions.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following three chapters look at the issues and trends in those activities where the role of the private sector has scarcely been questioned, but where there is still a major role for the State, while the last two chapters analyse the changes in two sectors, health and education, that have always been viewed as a particular responsibility of the State.

In the past 20 years, many countries have considerably reduced the direct role of the State in economic activity by privatizing SOEs and selling State assets. Privatization can yield long-run benefits to a country. However, privatization is part of the process of constructing a market economy and, for this process to be a success, it should have firm governmental and popular support. Privatization should be a policy willingly embraced by a country rather than one seen as imposed. If the process is “owned”, its success can be expected to be greater.

Privatization is founded on the premise, itself based on both theory and experience, that enterprises in which the private sector, rather than the State, is the residual claimant on the net revenues are more efficient. There is evidence from many different industries that privatization leads to an improvement in an enterprise’s performance. However, the full benefits to the consumer will be realized only in a competitive and well-regulated market-friendly environment. In order to ensure that the privatization process takes place smoothly and that enough private investment is attracted to the former SOEs, the Government should create a favourable investment environment.

The success of privatization cannot be measured by the proceeds that the Government receives from the sale, in part because it might be able to obtain a greater price by selling its assets to a monopolist. Governments have many different objectives when divesting their assets, and, while raising revenue from the direct sale is one, it could be secondary to other objectives such as raising efficiency, increasing consumer benefits, and promoting competition and wider share ownership. Sales of shares of State enterprises to the public can promote the growth of capital markets, and involve the public in the benefits—and the risks—inherent in stock markets.

While there are benefits in creating the ancillary institutions necessary to ensure the success of the privatized enterprises prior to their sale, and while pre-sale investment and restructuring might make the properties more valuable to the private investor, there are also dangers in delaying the sale. This is especially the case when the properties are being operated at a loss and when the state of the enterprise’s equipment is deteriorating: the costs of rehabilitation could reduce the net profits that the future owner might expect from operating it more efficiently. The methods of sale must also be carefully considered, since errors in the design of the sales process can yield smaller revenues. The transfer of currently profitable SOEs can bring the Government future benefits

in the form of tax revenues resulting from their even more profitable operation under private ownership. The one-time revenues from their sale could be used to reduce public debt, but it would be unwise to use them to maintain otherwise unsustainable levels of government expenditure, especially when there are fewer attractive assets to sell in the future.

In some countries, SOEs were used as a vehicle to provide social services, social insurance and social protection. Privatization will then often require the construction of an alternative form of social services. The construction of a social safety net is particularly important in the case of those countries where SOEs could not compete in normal market conditions and where divestment would result in heavy job losses.

Privatization implies a change in the Government's role in promoting R&D. In cases where SOEs had been used to conduct some of the R&D that the Government felt to be desirable, it could separate, before privatization, those parts of the research infrastructure that it would like to see remain in the public sphere. After privatization, it could further encourage its own institutions and universities to conduct R&D. However, privatization can help a nation's R&D effort by fostering the growth of new private companies that can form alliances with other private companies, both domestic and foreign, and collaborate in market-driven R&D.

Chapter V examines the role of the private and public sectors in R&D from the perspective of agriculture. That chapter reviews the performance of agriculture during the past four decades and demonstrates how technology has prevented until now the realization of a Malthusian trap where population would be limited by a shortage in food supply. This has been achieved through a combination of public and private participation in agricultural R&D.

However, with the continuing growth in the world's population, this situation where adequate food supplies exist at a global level cannot be expected to persist unless the momentum of agricultural R&D is maintained. At the present time, a large amount of "second generation" green revolution technology is being tested—in parts of Africa, for example—or waiting to be tested and applied. In addition, biotechnology and genetic engineering can be expected in the future to play a greater role in augmenting food supplies.

Both public and private actors must participate in agricultural research, with the public sector increasingly directing its efforts to areas that are socially worthwhile, but that have not been privately developed. Because much R&D involves serendipity and requires certain "threshold" levels to be effective, a regional approach is often desirable. Such a course makes particular sense in agriculture because of the similar geophysical properties within a region.

The government can also foster private R&D in agriculture by taking steps to boost the commercial viability of the agriculture sector. Yet R&D alone will not suffice to increase agricultural output, nor will it allay hunger where it exists. Other complementary activities and policies—for example, those relating to non-price policies, such as land reform—are also necessary before returns from agricultural R&D can be realized.

The provision of basic services, such as infrastructure and social services, has been seen and is still seen in many countries as an area under the responsibility of the public sector owing to the existence of large positive externalities. Chapter VI deals with electricity, which has long been a government monopoly

in most countries. However, as countries have developed and require a greater, more efficient and less costly supply of utilities, the need to promote competition and financial constraints in the public sector have propelled the shifting of assets in this area towards private hands. Moreover, technological developments have made it easier to “unbundle” the electricity sector, separating the generation of power from its distribution and marketing to the final consumer and allowing different bodies to compete in the provision of these different services. Previously, they had all been undertaken by a State monopoly.

The privatization of electricity has shown that increased competition at the retail level, achieved by offering choices to consumers, has provided incentives to raise operational efficiency, improving the quality of service and ultimately lowering prices. Increased consumer choice also provides an incentive for innovation and the improvement of services by private electricity providers that did not exist under State-owned monopoly systems. Public-private interaction thus involves not only increasing private sector participation in the provision of utility services but also enhancing competition and increasing consumer choice.

The success of efforts to attract private sector investments to public utilities partly depends on the establishment of transparent and reliable contract legislation and regulatory machinery that offers a minimum level of guarantee to private investment. Effective regulation by the government should be primarily aimed at dealing with monopoly power, price discrimination and other market failures, at promoting competition and at ensuring that an adequate supply of electricity is available to all consumers at all times at prices that try to even out the fluctuations caused by short supply, while encouraging the growth of capacity to meet expected future demand.

In view of the factors necessary for the success of electricity privatization, in many developing countries, only a gradual or even partial move towards private sector provision of electricity and other utility services may be feasible. This is because of a series of limitations, such as the small size of their electricity markets, the lack of a developed capital market and regulatory constraints, notably inadequate institutional and human resource capacity.

Chapter VII analyses the role of the private and public sectors in the provision of health services. It demonstrates how the private sector has played a larger role in providing health care in developing countries than in developed and transitional economies: private expenditure on health is about 50 per cent of the total health expenditure in developing countries while its share in developed countries is about one quarter. In developing countries, the private sector plays a large role even in the provision of essential health care, which has traditionally been considered to be most properly undertaken by the public sector.

Incorporating effectively private health services provision into a well-structured national health system, based on the interaction between the public and private sectors, can contribute to improving the health of the population and thus development in general. The need to devote adequate resources to health care at a time of tightened fiscal resources for many governments has been another factor behind the greater interaction between the two sectors. However, the fact that interaction between a country’s health authorities and its private medical providers has often been inadequate has rendered health-related regulations ineffective. Insufficient interaction has led to widespread, unnecessary uses of antibiotics in some developing countries, for example.

The health authority's role in a system where private activities are substantial differs from its role in a State-led system. The role of the authority is to understand the health needs of its population, evaluate the status of its national health system and coordinate the health-care activities of both public and private providers. The authority is further required to monitor and regulate both public and private health-care providers in order to ensure that patients receive proper and safe treatment and that equitable access to medical services is enjoyed by different social groups, including the poor.

The education sector in developing countries continues to struggle on many fronts: to increase enrolment and to improve quality under the constraint of limited resources. Numerous attempts have been made to reduce the cost burden to the State by involving the private sector and by imposing user fees.

Chapter VIII shows, however, that in the case of primary education, except for those few countries with a long history of private schooling, such attempts failed. Rather than assign the financial responsibility for education directly to individuals, private interaction should focus on involving local communities in monitoring resource allocation and the quality of teaching in primary education.

In the case of the secondary level of education, to provide the skills required by the labour market and to attract candidates for this form of education, vocational and technical programmes should be developed in close partnership, including financing, with the private sector.

The chapter finds that private sector participation is rising in all regions in response to increased demand for higher education and a lack of resources in public universities. Innovative financing strategies, including student fees and revenue-generating activities, are reshaping the public higher education system. In general, an economic development strategy that creates demand for educated and skilled workers stimulates private investment in education. This greater private provision of educational services should be accompanied by more efficient regulation and some form of intervention by the government to ensure equitable access and high quality.

Part two describes the process of greater public-private sector interaction in achieving society's varied goals. This process has brought great benefits but also equally great challenges. One challenge is to adjust the role of the State so that the process takes place smoothly and will yield the fullest benefits to present and future citizens.

IV TRANSFERRING OWNERSHIP OF COMMERCIAL ASSETS FROM THE STATE TO THE PRIVATE SECTOR

The past two decades, and especially the 1990s, have witnessed throughout the world an unprecedented expansion of private sector involvement in the production of goods and services that had previously been provided by the public sector. Greater private sector participation in the economy has occurred not only in the management and financing of State-owned enterprises (SOEs), but also as a result of a substantial transfer of State-owned assets to the private sector. This transfer of SOEs has encompassed a broad range of sectors, from extractive and manufacturing industries to transportation, banking and notably public utilities, such as energy, telecommunication and water services.¹ The present chapter analyses this process as it has affected productive industries, rather than public utilities such as electricity, public services such as rail travel, or social services such as health and education.²

Developed countries accounted for the bulk of global privatization proceeds during the 1990s (see figure IV.1), and privatization programmes are beginning to mature in many of them, partly because of their success in disposing of a large number of their more attractive State-owned assets. For example, although privatization in developed countries was led by the telecommunications sector, most telecom assets in those countries have now been transferred to the private sector. Provisional data compiled by the Organisation for Economic Cooperation and Development (OECD) show that privatization proceeds in 2000 fell by 38 per cent in OECD countries.³

Much attention regarding the future transfer of State-owned assets has thus been turning to developing countries, particularly those that have made or are likely to make the most concerted efforts to create the enabling environment for private sector expansion. Proceeds from such transfers have risen considerably in developing countries over the past decade, notably in Latin America. Annual proceeds from the disposal of State assets in developing countries rose from US\$ 13 billion at the beginning of the 1990s to a peak of US\$ 67 billion in 1997, from which they fell to US\$ 44 billion at the end of the decade (see table IV.1). In sub-Saharan Africa, the increase in proceeds was rapid from a small base—from \$74 million in 1990 to \$2,348 million in 1997 and \$1,356 million in 1998.

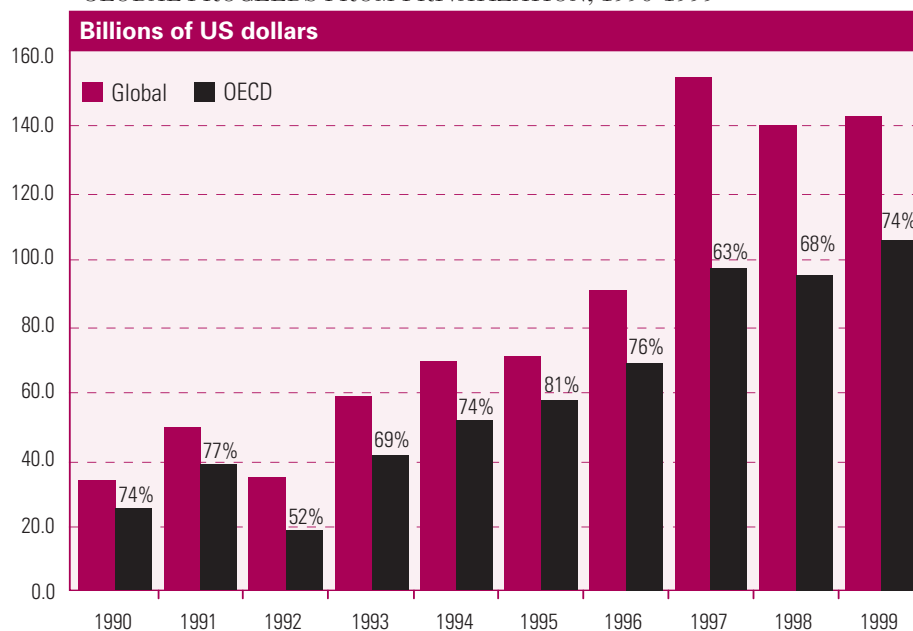
In many countries, such as the Central and Eastern European economies in transition and the former Soviet Union, privatization has resulted in a massive expansion of the role of the private sector. In 1989, almost all enterprises in these countries were State-owned, whereas in mid-2001, in 20 of the 27 countries the share of the private sector in gross domestic product (GDP) was over

¹ During the 1980s and 1990s, "privatization of public enterprises producing goods and services has reduced the role of the State in areas where the private sector has often been shown to be a better alternative". See *World Public Sector Report: Globalization and the State, 2001* (United Nations publication, Sales No. E.01.II.H.2), p. 32.

² The present chapter concerns the privatization of State-owned productive assets, not the privatization of communally or traditionally held assets, such as land.

³ See L. Mahboobi, "Recent privatization trends", *Financial Market Trends*, No. 79 (June 2001), pp. 43-65.

Figure IV.1.
GLOBAL PROCEEDS FROM PRIVATIZATION, 1990-1999



Source: L. Mahboobi, "Recent privatization trends", *Financial Market Trends*, No. 79 (June 2001).

Table IV.1.
RECEIPTS FROM PRIVATIZATION IN DEVELOPING COUNTRIES BY SECTOR, 1990-1999

Millions of US dollars

Year	Primary sector ^a	Manufacturing	Energy ^b	Telecoms	Other infrastructure ^c	Financial services ^d	Other services ^e	Total
1990	799	1 402	627	7 643	2 002	47	138	12 658
1991	1 523	5 558	2 444	5 981	523	7 793	420	24 242
1992	634	7 188	7 652	3 007	1 816	5 263	621	26 181
1993	1 053	7 491	6 903	1 083	2 536	3 411	1 184	23 661
1994	1 953	6 091	4 295	6 069	1 150	1 065	1 088	21 711
1995	1 555	5 787	7 304	3 691	1 026	1 933	606	21 902
1996	1 100	3 546	7 843	3 814	5 093	2 895	1 108	25 399
1997	4 976	7 795	25 935	12 863	6 528	3 445	5 031	66 573
1998	1 150	2 167	11 969	26 619	3 351	3 149	905	49 310
1999	100	3 127	23 530	5 340	784	9 007	2 188	44 076
1990-1999	14 843	50 152	98 502	76 110	24 809	38 008	13 289	315 713

Source: UN/DESA, based on World Bank, *Global Development Finance: Building Coalitions for Effective Development Finance—Analysis and Summary Tables, 2001* (Washington, D.C., IBRD/World Bank, 2001).

- ^a Excluding oil and gas and mostly accounted for by mining.
^b Including electricity, oil and gas.
^c Accounted for mainly by water and transport infrastructure.
^d Accounted for mostly by banking.
^e Including unreported cases in other sectors.

60 per cent.⁴ Some developing countries used to have public sectors of a relative size similar to those of the former centrally planned economies.⁵ Many are seeking to achieve a reduction in State activity in the economy comparable with that taking place in the transition economies.

Such figures are indicative of the changes taking place. An examination of individual industries shows dramatic changes. The example of Ghana's mining industry (see box IV.1) illustrates that privatization is not simply a matter of selling assets. Ghana, as many other developing countries, has been seeking to establish credibility in its policy of privatization. It has aimed to achieve a larger participation of the private sector in economic activity, which not only means divesting State assets, but also enacting legislation to attract new domestic and foreign investment on mutually beneficial terms and establishing a proved record of stability and reliability as an investment location.

For all countries engaged in the process of expanding the role of the private sector, establishing credibility has meant that, although setbacks have been encountered on the way and some enterprises did not perform as well after privatization as had been expected, there has been no consistent attempt by the State to return to the levels of direct control over economic activity that it once exercised.⁶ In the globalized world economy, where foreign direct investment (FDI) flows have increased sharply and the market plays a greater role in investment, Governments are unwilling to take steps that could act as a disincentive to domestic and foreign private investors. An attempt to change radically the terms under which the industry had been privatized or to resume

⁴ European Bank for Reconstruction and Development, *Transition Report 2001* (London, European Bank for Reconstruction and Development, 2001), p. 12.

⁵ In Zambia, for instance, by 1980, 80 per cent of the economy was virtually run by the Government. See Caleb Fundanga and Andrew Mwaba, "Privatization of public enterprises in Zambia: an evaluation of the policies, procedures and experiences", *African Development Bank Group: Economic Research Papers*, No. 35 (1997), p. 7.

⁶ One example of a reversion to State ownership was the Chilean programme of 1975-1983. This privatization programme often involved loans by the State to the companies purchasing the privatized companies. The principal objective was to raise revenues for the State. The financial crisis of 1982-1983 led to widespread bankruptcies, including bank failures, and to many of the newly privatized enterprises' being placed under State control. In 1985-1986, the State succeeded in privatizing these assets, but this time by promoting wider share ownership, including employee share ownership (John Vickers and George Yarrow, "Economic perspectives on privatization", *Journal of Economic Perspectives*, vol. 5, No. 2 (spring 1991), p. 126).

After 1983, Ghana, a country with great mineral potential, started to adopt investor-friendly legislation and in 1986 adopted a new mining code.^a In 1988 it launched a divestiture programme at the national level and subsequently established the Divestiture Implementation Committee. In 1994, it put up for sale 30 per cent of its 55 per cent stake in Ashanti Goldfields Corporation, thereby ceasing to own the majority of the shares.

The results of this process of liberalization and privatization were spectacular. Gold production had declined from 900,000 ounces in 1960 to 232,000 ounces in 1982; diamond production from 2,340,000 carats in 1975 to 683,524 carats in 1982; bauxite production from 407,000 tons in 1974 to 64,700 tons in 1982; and manganese production from 600,000 tons in 1960 to 160,000 tons in 1982. With a change in the mineral regime, investment in the industry expanded—from \$3.17 million in 1983 to \$218.04 million in 1993—and production increased dramatically. Gold production rose to 2.5 million ounces in 1999, diamond production to 822,619 carats in 1998, bauxite production to 341,118 tons in 1998 and manganese production to 384,400 tons in 1998.

Mineral reserves also increased in spite of the increase in output: gold reserves rose from 5.5 million troy ounces in 1983, equivalent to 19 times that year's production, to 48 million troy ounces in 1996, equivalent to 31 times that year's much higher production; and diamond reserves rose from 5.1 million carats in 1983, equivalent to 13 times that year's production, to 23.4 million carats in 1996, equivalent to 33 times that year's production.^b

Box IV.1

THE REVIVAL OF GHANA'S MINERAL INDUSTRY

^a See Fui Tsikata, "The vicissitudes of mineral policy in Ghana", *Resources Policy*, vol. 23, No. 1/2 (1997), for a description of the changes in mining policy in Ghana.

^b Many of the production and reserves figures are from Tsikata, loc. cit., and Samuel Addy, "Ghana: revival of the mineral sector", *Resources Policy*, vol. 24, No. 4 (1998).

Government control of an industry on terms that were not acceptable to its private owners would be seen as such a step. The difficulty in reversing privatization means that ensuring its success has been an important policy objective which, in the case of the economies in transition and developing countries, has been supported by international institutions.

The success of privatization efforts will depend on several factors, such as improved governance and macroeconomic stability, maintenance of relevant laws and stable post-privatization regimes, and investor confidence in emerging markets, together with their continued openness to FDI.⁷

PRIVATIZATION AS PART OF A PROCESS OF MARKETIZATION

Privatization represents a conscious attempt by the State to forge a different relationship with the private sector from that which hitherto existed and, ultimately, one that will lead to greater production and domestic availability of the goods and services of the quality that consumers want. This has been most apparent in the case of the transition economies of Central and Eastern Europe where the array of goods and services produced is today very much different from that which obtained before the transition when SOEs dominated production. Privatization is part of a process not just of disposing of State assets but of relying on the private sector to spur the development of new industries and products. For instance, the privatization of the telecommunications industry meant that the government relied on the private sector to develop the new technologies and supply their products, such as mobile phones, to domestic consumers.

The privatization of industries changes the role of the State. Rather than operate the assets and obtain an income from the net revenues—and not just the taxes—on the output of the industry, it will be entering into what, under the right terms, could be a mutually beneficial relationship with the private operators. Growth in the prosperity of the enterprise will benefit not just the private owners if their post-tax revenues rise, but also the State if its tax revenues increase. Furthermore, if prosperity in the privatized industry leads to the growth of new ancillary industry, the State will further benefit by a more diversified tax base. In a sense, the State has a stake in a wider range of productive activities, from which it would derive tax revenue, without incurring the risks involved in operating a limited number of industries. Privatization is especially justified if it is felt that the risks involved in the particular industries should be borne by the private sector which has every incentive, through the profit motive, to operate the assets efficiently.

One of the first major programmes of privatization was that undertaken in the United Kingdom of Great Britain and Northern Ireland after 1979.⁸ The lessons learned from this experience, both positive and negative, were to influence subsequent privatizations. The Government saw privatization as part of a policy to reverse the decline in the British economy which it attributed to policies pursued, or at least not opposed, by Governments of both parties.⁹ By 1997, the share of SOEs in the British economy had been reduced from 10 per cent (in 1979) to virtually nothing.¹⁰ The goals of the policy were to: (a) promote economic efficiency, (b) provide the opportunity to introduce competition, (c) subject SOEs to market discipline, (d) promote wider share ownership and help

⁷ While privatization in developed countries tends to be dominated by sales of shares in the stock market, foreign direct investment is the largest contributor to privatization proceeds in most developing countries (Mahboobi, loc. cit.).

⁸ The British Government was not the first to undertake privatization. The German Government launched the first large-scale ideologically motivated “denationalization” programme of the post-war era. In 1961, it sold a majority stake in Volkswagen in a public share offering heavily weighted in favour of small investors. As noted in note 6 above, the Government that came to power in Chile in 1973 attempted to privatize companies that the previous Government had nationalized (William L. Megginson and Jeffrey M. Netter, “From State to market: a survey of empirical studies of privatization”, *Journal of Economic Literature*, vol. 39, No. 2 (June 2001), pp. 323-324.

⁹ Friedrich Hayek’s attack on collectivism, planning and statism, particularly in *The Road to Serfdom* (50th anniversary Ed., with an introduction by Milton Friedman) (Chicago, Illinois, University of Chicago Press, 1994), laid much of the intellectual groundwork for the British Government’s policies, including those towards SOEs. Whereas, in 1962, an earlier British Government had established the National Economic Development Council to discuss matters of national economic policy with representatives of interested organizations including the Trades Union Congress, the Confederation of British Industry, nationalized industries, the Bank of England etc., in 1992, the Government downgraded this body and abolished it.

¹⁰ Megginson and Netter, loc. cit., p. 324.

develop the national capital market, (e) reduce government interference in the economy and (f) raise revenue for the State from the proceeds of the sale.

The early privatizations in Chile, Germany and the United Kingdom took place in what were essentially market economies and were intended to remove some of the impediments to the fuller interplay of market forces. In other countries that began privatization, the initial situation, and therefore the motives for privatization, was different. In the transition economies, privatization was part of the process of building a market economy. In some developing countries, privatization was part of a reaction to what had been perceived as the shortcomings of a policy that had relied on SOEs to promote growth; in others, difficulties in obtaining the finance to expand the capacity of SOEs, for example, in the power sector, encouraged the Government to grant an ownership stake to the private sector; in still others, privatization was often part of a programme supported by the international financial institutions.

In the British case, privatization was largely effected by share issues, with the general public being able to purchase shares at the initial public offering (IPO) on terms designed to attract wide interest, thus giving a large number of shareholders a direct stake in the companies involved and making it more difficult for any future Government to take control of the privatized enterprises. However, the successor Government accepted most of the changes effected by the privatization policy, having amended its Party's constitution to remove the reference to public ownership of the means of production.¹¹ As will be seen below, it organized a successful auction of an asset within its control—the air above Great Britain.

The difficulty in reversing a policy of privatization and the fact that it cannot be viewed in isolation, but should rather be seen as part of a policy of marketization, have implications for analysis and policy advice. The need to establish credibility makes it important to “get it right” the first time. Considerable experience has been amassed during the various privatizations in many different countries of the world to help policy makers adopt the most appropriate privatization policies. The varied goals set for privatizations mean that these decisions are never simple. For instance, the goal of raising revenue for the State could perhaps best be achieved by selling a SOE to a foreign company in the same line of business or by retaining the monopoly position of the SOE when transferring it to private ownership, both of which strategies would conflict with the goal of promoting wider share ownership among the domestic population and promoting competition.

The end result of this process of marketization is expected to be a different kind of economy and different socio-economic relations. This was the case with the transition economies where State control of the economy often disintegrated rapidly, not allowing for a measured and considered path to privatization but often giving rise to the takeover of the enterprises by the management of former SOEs. In these countries, privatization can best be seen as only a part—although an essential part—of the transition, and its effects have been hard to separate from the other changes taking place as central planning collapsed and policies intended to create a market economy were adopted.

Privatization was one element in a broader picture of social change. However, it was often adopted as a reaction to what had been perceived as the failures, or inadequacies, in the context of the current globalized world econo-

¹¹ The Labour Party election manifesto of 1997 stated the following: “New Labour offers business a new deal for the future. We will leave intact the main changes of the 1980s in industrial relations and enterprise. We see healthy profits as an essential motor of a dynamic market economy, and believe they depend on quality products, innovative entrepreneurs and skilled employees. We will build a new partnership with business to improve the competitiveness of British industry for the twenty first century, leading to faster growth.”

¹² Friedrich Pollack, "State capitalism: its possibilities and limitations" (1941), quoted in John Waterbury, "The long gestation and brief triumph of import-substituting industrialization", *World Development*, vol. 27, No. 2 (1999), p. 330.

¹³ Measurements of the size of the public corporate sector are beset by methodological difficulties and a lack of reliable and comparable statistics. For a treatment of how to measure the Government sector, see *World Public Sector Report: Globalization and the State, 2001* (United Nations publication, Sales No. E.01.II.H.2).

my, of previous policies, which had themselves been adopted in the expectation of their achieving a high rate of growth or high standard of living for the population. After the Great Depression of the 1930s in the developed countries, some economists there thought that "government control of production and distribution furnishes the means for eliminating the economic causes of depressions, cumulative destructive processes and unemployment of capital and labour ... Economic problems in the old sense no longer exist when the coordination of all economic activities is effected by conscious plan instead of by the natural laws of the market".¹²

Later, the end of colonialism meant that Governments often inherited assets, in particular infrastructure, that had been constructed in the colonial period. They often continued to operate these assets after independence. These newly liberated and other countries, both developed and developing, frequently assumed control of more directly productive assets, often owned by foreign corporations. There was concern that important national objectives could be sacrificed in the interests of overall corporate strategy if the industries were to remain in the hands of multinational corporations. In sum, the argument was that the State's assuming, or at least not relinquishing, control of productive assets would improve the economic situation compared with what it would have otherwise been. Privatization implies a move away from this particular model of development which might have been valid in certain circumstances at an earlier period but is less so in the present competitive and liberalized global economic environment.

Within the market economies, both developed and developing, the divide has not been between "State ownership—big government—big taxes" versus "private enterprise—little government—little taxes". A country can determine to leave decisions as to productive activity in the hands of the private sector with the expectation that this is the best way to generate wealth and taxable income and with the belief that it should not be involved in commercial activities. It could use its taxing powers to redistribute the resulting income and to provide for the social safety net and whatever other services it feels government should be responsible for. Its regulatory powers could be used to ensure that the private sector does not violate society's norms. The share of government total spending in GDP, then, could be large at the same time as the share of public corporations in goods producing output is minuscule, as in the case of Sweden.¹³ While privatization implies a decision by society to obtain the revenues that the Government needs from taxes and not from any net revenues that public corporations might generate, it does not imply that society has made the decision to reduce the role of the State in these other areas.

SOME LESSONS FROM 20 YEARS OF PRIVATIZATION

The period of intense privatization—roughly 20 years—allows some tentative conclusions to be drawn as to what was achieved in economic terms. Such an assessment is fraught with difficulty, as it essentially relies on a counterfactual—a comparison of what happened with what would have happened without privatization.

Promoting economic efficiency and the growth of the private sector

One goal of privatization has been to improve economic efficiency in order that society's limited resources may be used to satisfy, directly or indirectly through trade, the people's demand for goods and services. Theory suggests that the ownership of an enterprise, and especially whether it is in private or public hands, will make a difference to performance (see box IV.2). Privatizing SOEs can also help depoliticize economic decision-making and thus eliminate the accompanying inefficiencies. These inefficiencies can take the form of excess employment, well-above-market wages, special privileges

The economic case for privatization is that a market system where free economic agents operate in competitive conditions and enterprises are subject to hard budget constraints will, in the end, be more efficient and lead to greater wealth than other systems. Under private enterprise, economic agents have incentives to operate efficiently, to increase productivity and to develop new products.

The incentive to operate efficiently comes from the consideration that property rights arrangements help determine economic performance.^a Those who own property have residual claims on the assets. When profits are generated by the efficient use of these assets, the private owners of the property, the residual claimants, see their own wealth increase. Thus, they have an incentive to monitor the behaviour of the managers and employees to ensure that they supply goods that consumers demand in a cost-effective manner. The market for shares acts as a court of last resort and shareholders can oust incumbent managers who are "shirking" or, as many recent examples have shown, have not been acting ethically or in the best interests of the company. Consistent loss-making will eventually lead to bankruptcy.

By contrast, theory indicates that when the "owners" of a State-owned enterprise (SOE) are the general public, these residual claimants have little effective control over the enterprise and little incentive, or often ability, to monitor the behaviour of the managers and employees. They cannot "vote" by buying or selling their stake in the SOE. The cost to the public sector bureaucrat of shirking is low and there is every incentive to acquire perquisites that add to production costs. The threat of bankruptcy hardly applies under soft budget constraints.^b

In theory, SOEs could attempt to compete against private firms, whether domestic or foreign, on a level playing field. However, whenever a difficulty arises, their very status will tend to make them seek a special advantage from the Government in the form of, for instance, special subsidies, tax breaks or preferential purchasing arrangements. This in turn can be expected to subvert the working of the overall economic system, where the key to an enterprise's success will be seen to rely not on its satisfying its customers but rather on its seeking extra favours from the Government. Whereas, if unchecked, both private and public firms can be expected to pursue monopolistic policies and try to eliminate competition in order to boost their earnings, SOEs have the advantage of the direct involvement of the State, which can use its coercive powers to restrain competition.^c This coercive power could be applied to stifling competition, erecting barriers to entry and assuming government control over successful firms in the private sector, further inhibiting the development of an entrepreneurial culture in the economy.

Box IV.2

ECONOMIC ARGUMENTS FOR PRIVATIZATION

^a For a brief description of the economic rationale for privatization, see Steve Hanke, "Privatization", in John Eatwell, Murray Milgate and Peter Newman, *The New Palgrave: A Dictionary of Economics*, vol. 3 (Basingstoke, Hants, United Kingdom, Palgrave Publishers, Ltd., 1998), pp. 976-977.

^b For a description of the main differences between the models where private property and State and quasi-State ownership are dominant, see János Kornai, "What the change of system from socialism to capitalism does and does not mean", *Journal of Economic Perspectives*, vol. 14, No. 1 (winter 2000). For the effects of soft budget constraints in a developing country with private, foreign and State-owned enterprises, see Sumit K. Majumdar, "Slack in the state-owned enterprise: an evaluation of the impact of soft-budget constraints", *International Journal of Industrial Organization*, vol. 16 (1998).

^c Cf. Friedrich A. Hayek, *The Constitution of Liberty* (Chicago, Illinois, University of Chicago Press, 1960), p. 24.

¹⁴ For a recent summary of the debate on the differences between public and private ownership, see Mary Shirley and Patrick Walsh, "Public versus private ownership: the current state of the debate", *Policy Research Working Paper*, No. 2420, World Bank, Development Research Group, Regulation and Competition Policy, August 2000.

for the staff, investment in projects that benefit politicians rather than consumers and distortions arising from skewed pricing schemes.¹⁴ In the present competitive global environment, it is felt that such inefficiencies or non-commercial obligations make it difficult, if not impossible, for SOEs to compete with private sector firms that are free to pursue their commercial objectives and can adjust more quickly to new market conditions. With barriers to trade and investment falling, SOEs cannot be insulated from competition.

Privatization in itself can help promote the growth of the private sector as the existence of a large State productive sector is often inimical to the growth of the private business sector and a competitive environment. In turn, the existence of a vibrant private sector can facilitate the Government's pursuing a strategy of private-public partnerships for the delivery of some of the services that the Government would like to see provided—such as transport links, education and health services. Particularly in the case of foreign corporations entering countries with very limited services, part of their obligations as corporate citizens could be to provide, directly or indirectly, some of the services that are missing, such as education and health to their employees and perhaps even to a wider community. In the long run, this is only feasible if their private operations are successful and profitable.

Another factor behind the increased reliance on the private sector in the present globalized and competitive economy is that many countries, including major economies and jurisdictions, are becoming increasingly critical of a Government's support for its own national enterprises, both SOEs and private firms that enjoy special State support. Firms, both domestic and foreign, seeking to enter these markets can expect a close scrutiny of any State involvement, both direct and indirect, that might give them what these jurisdictions would consider an unfair competitive advantage.

Competition policy can be expected to play an increasingly important role in international discussions. The Ministerial Declaration of the Fourth Ministerial Conference of the World Trade Organization (A/C.2/56/7, annex), held in Doha in November 2001 established that, in the period up to the 2003 Ministerial Conference, the Working Group on the Interaction between Trade and Competition Policy would focus on clarifying: core principles including transparency, non-discrimination and procedural fairness, and provisions on "hard-core" cartels (that is to say, cartels that are formally set up); ways of handling voluntary cooperation on competition policy among World Trade Organization member Governments; and support for progressive reinforcement of competition institutions in developing countries through capacity-building (para. 25).

Promoting competition

Much of the gains from privatization are lost if a public monopoly is replaced by a private monopoly. In a competitive environment, subject to the rule of law and with regulations covering health, safety and environmental issues, the threat of bankruptcy and normal mechanisms of the market would be expected to provide a degree of discipline for firms. Exceptions, such as anti-competitive behaviour and fraud, could be dealt with by the courts. As economic activity is continually evolving, new laws will need to be enacted and case law built up to confront new situations, as has been recently demonstrated by legislation passed as a result of the scandals in the corporate sector in the United States of America.

One of the objectives of privatization in different countries has therefore been to promote competition. This has often been explicit in the Poverty Reduction Strategy Papers (PRSPs) and interim Poverty Reduction Strategy Papers drawn up by Governments which have combined privatization with opening up of the sector in question to competition.¹⁵ The Monterrey Consensus of the International Conference on Financing for Development emphasized the need for encouraging the private sector and for promoting a competitive environment.¹⁶ The Consensus did not specifically mention privatization, but recognized that the “appropriate role of government in market-oriented economies will vary from country to country”.

Competitive forces have not always been introduced at the same time as privatization. Transforming a nationalized monopoly into a privately owned monopoly has by itself often led to increases in the profitability of operations and heavy investments in expanding output, especially if there is a huge unmet demand. This has been the case with some privatizations in the telecommunications sphere where coverage expanded rapidly after privatization, especially where foreign sources of capital and technology were involved.¹⁷ The expansion of telephone service in itself helps to promote economic activity, with the lower-income members of society, for instance, being more easily contactable and therefore in a better position to offer their services and so engage in economic activity.

Yet, even when a temporary monopoly was granted over some parts of the telecommunication network, provisions have been put in place to open up the field to competitors later on. Competitive forces have proved essential to greatly expanding the coverage of traditional services and driving down the costs of both fixed-line and mobile phones in developing countries that have privatized their telecommunications industry. In the case of Peru, for instance, the monopoly over telecommunications granted to a private firm lasted from privatization in June 1994 to August 1998.¹⁸ The authorities gave the following reasons for promoting competition: operators would have an incentive to innovate and offer better services; consumers would be provided with information and alternatives; prices would fall as producers sought to gain markets; and, finally, these benefits would accrue to the consumers without the need for direct intervention by the State.¹⁹

As both competition and innovation could be expected to drive down prices and as there would have been some technical change even if the industry had remained in public hands, it is difficult to estimate the effects of privatization alone in the telecommunications industry. However, from 1993, the year before privatization, to 2001, the number of fixed lines rose from 670,000 to over 2 million, the waiting time for a telephone was reduced from 118 months to 15 days, the cost of a connection fell from \$1,500 to \$156, the network was upgraded with digitalization increasing from 33 to 96 per cent, competition was promoted with the number of concessions rising from 16 to 252 (in February 2002) and employment in the sector increased from 13,000 to 34,000.²⁰ Lower-income households benefited from the advent of mobile phones.²¹ The communications industry attracted the largest share of foreign investment: 25 per cent of the total, compared with 15 per cent for industry, 16 per cent for energy and 17 per cent for mining. Similar results came from privatization in several other countries.

¹⁵ For some excerpts from these papers, see World Development Movement, “Policies to roll-back the State and privatize: Poverty Reduction Strategy Papers investigated”, *Discussion paper; No. 2001/120* (Helsinki), United Nations University, World Institute for Development Economics Research (November 2001), pp. 35-39, tables 5 and 6. In the case of Benin, for example, the commitment was “to pursue economic liberalization by deregulating prices, withdrawing from productive activities (in particular by privatizing public industrial and commercial enterprises) and opening the various sectors of the economy to competition”.

¹⁶ See paragraph 12 of the Monterrey Consensus (*Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002* (United Nations publication, Sales No. E.02.II.A.7), chap. I, resolution 1; annex), which states: “We will pursue appropriate policy and regulatory frameworks at our respective national levels and in a manner consistent with national laws to encourage public and private initiatives, including at the local level, and foster a dynamic and well-functioning business sector ...”; and paragraph 21 which states: “Special efforts are required in such priority areas as economic policy and regulatory frameworks for promoting and protecting investments, including the areas of human resource development, avoidance of double taxation, corporate governance, accounting standards, and the promotion of a competitive environment”. The Monterrey Consensus is reproduced in the annex to chap. II above.

¹⁷ For instance, after Telefónica de España purchased the two Peruvian State-owned telecommunications entities in 1994 and merged them to form Telefónica de Perú. This had a five-year monopoly on lines and local, national and international calls. The number of fixed lines per 100 inhabitants rose from 3 in 1993 to 6.6 in 1997, the average waiting time decreased from 118 months to 45 days, the access cost of a residential line was reduced from \$1,500 to \$272 and the average distance to the closest public phone decreased from 26.7 to 10 kilometres. (Maximo Torero, “The access and welfare impacts of telecommunications technology in Peru”, Zentrum für Entwicklungsforschung (ZEF), *Discussion Papers on Development Policy*, Centre for Development Research, Bonn (June 2000), p. 6.

¹⁸ The monopoly that Telefónica de Perú had on telephone services was set to expire in August 1998, rather than June 1999, as originally foreseen.

¹⁹ See Organismo Supervisor de Inversión Privada en Telecomunicaciones (OSIPTEL), “Libro blanco sobre la Apertura del Mercado de Telecomunicaciones en el Perú” (on OSIPTEL web page (<http://www.osiptel.gob.pe>)).

²⁰ Figures from OSIPTEL (<http://www.osiptel.gob.pe/cifysdat/frames/frintro.html>).

²¹ In Peru, 22 per cent of households in social group C and 10 per cent of households in social group D had a mobile phone in 2000 (*ibid.*).

In the telecommunications industry, it is possible—and, experience shows, desirable—for there to be competition within the country itself. In some industries, however, competition is really between entities in different countries—between, in the case of copper, private producers throughout the world and SOEs such as Codelco in Chile. In the case of such industries, especially in the case of integrated concerns where a treatment plant is shared between mines and where difficulties in one mine can be offset by production increases in another, it is not clear that promoting competition requires breaking up the concern into its constituent parts.

Twenty years of experience with widespread privatization has shown that the theoretical argument for privatization at the level of the firm—and in a competitive environment—is supported by strong empirical evidence. The evidence from many different studies comparing firms under private ownership and those under government ownership is that ownership is a significant determinant of behaviour and that the former are more efficient and profitable than SOEs.²² This conclusion applied to all groups of countries.²³

In markets for public goods or natural monopolies, where competitive considerations are weaker, and which are not examined in this chapter, a case can be made for government ownership. In other markets, the case is weaker, but could, in certain instances, be made. An example would be that of a foreign company that had a limited time-horizon when exploiting a natural resource, minimizing its investment and extracting only the highest-grade material. Under government control and ownership, a longer-term view might be adopted. Alternatively, however, the behaviour of a firm that is under private ownership might be changed by means other than the Government's assuming ownership—by regulation or tax policies, or by adjusting the government policies that may be driving the private firm to take a short-term view.

In general, State ownership or control can be seen as a response to an actual or perceived market failure, and privatization as a response to the failings of government ownership. Yet privatization is itself a government activity and hence subject to government failure. The Government has to take whatever steps it can to ensure that the process of privatization is a success. This implies action on many fronts.

Changing the Government's role in the economy

Privatization has necessarily reduced the Government's role in the economy in that the share of the private sector in production has increased in line with a shrinkage in the public sector. In the industrialized countries, the share of GDP accounted for by SOEs declined from about 8.5 per cent in 1984 to below 5 per cent in 2001. In the low-income countries, the fall was from 16 per cent of GDP in 1980 to about 5 per cent in 2001, and in the middle-income countries (which included the transition economies), the fall was also pronounced.²⁴

The Government's role in the economy cannot, however, be measured by the share of SOEs in output, as government can affect business decisions through the regulatory environment: legal framework regulations, general economic regulations and market regulations.²⁵ The legal framework establishes the broad parameters within which industry must operate, allowing individuals access to

²² Megginson and Netter, loc. cit., pp. 332-336, and especially p. 333, table 1, for a review of the empirical evidence.

²³ "Large privatization programmes have occurred in the recent decades both in developed and in developing countries. The main explanation has been that privatization leads to increased productivity and profitability, a consensus view that a vast empirical literature has confirmed" (Bruno Biais and Enrico Perotti, "Machiavellian privatization", *American Economic Review*, vol. 92, No. 1 (March 2002), p. 240.

²⁴ Megginson and Netter, loc. cit., pp. 327-328.

²⁵ See Frederic L. Pryor, "Quantitative notes on the extent of governmental regulations in various OECD countries", *International Journal of Industrial Organization*, vol. 20 (2002), p. 694.

civil and criminal courts for such matters as defining and enforcing property rights and obtaining protection against fraud and misrepresentation. General economic regulations apply to all firms and would cover such matters as workers' health and welfare, pollution control, antitrust policies and transactions with the rest of the world. Market regulations are specific to the industry and include such matters as regulations on establishing a bank, entering a particular market (for example, opening a restaurant or starting a law firm) and setting a price or a price cap for a product (such as electricity).

Measuring the degree of regulation is a subjective exercise, inasmuch as a set of draconian rules that are not enforced do not represent as high a degree of regulation as a less stringent set that are enforced and that involve high costs of litigation. One way of measuring the degree of regulation is by questioning those who are subject to such regulation—in this case, business people. The results of some studies have been surprising. For instance, among the developed countries, the United States appeared in the middle of a list of countries ranked by an index attempting to measure the extent of general economic regulations, whereas it might be thought that it would have ranked as one of the least regulated countries. However, the business executives surveyed felt that the “adversarial legalism” in the United States system meant that expenditures on lawyers, studies, litigation, insurance and legally imposed delays were considerably larger than in other countries, especially as the regulatory process was fragmented among many governmental authorities.²⁶

A comparison between the degree of regulation and the degree of government ownership of the means of production showed that the two were complements of, and not substitutes for, each other, indicating that both had originated in the political desire of limiting the forces of the market.²⁷ This conclusion encompassed general economic regulations that would apply to all firms. In the developed economies that had privatized productive public assets, there was already considerable regulatory control over economic activities. New regulatory arrangements were often needed for newly privatized public utilities or natural monopolies as described in chapter VI. However, other countries, particularly the transition economies, were not functioning as market economies subject to government regulation: government ownership and control were to some extent expected to substitute for regulation. The move to privatize, as part of the move to a market economy, should, then, necessarily have been accompanied by the construction of a new regulatory framework. In developing countries, a new mining code was often needed to set the parameters within which the privatized firms could operate and provide the security of tenure and other certainties required to attract domestic or foreign investment.

However, particularly in the former Soviet Union, where market institutions had been systematically destroyed over a period of 70 years and where the implosion of the State in the early 1990s took place with surprising rapidity, an orderly and carefully planned process of market-building and privatization was rendered impossible. One tentative lesson to be drawn from developments during this tempestuous period was that bringing in new management was helpful with respect to ensuring post-privatization success and that insider privatization was not so successful.²⁸ Another related finding was that institutions mattered and that change in ownership in itself was not sufficient to improve macroeconomic performance. The gains from privatization came when the

²⁶ *Ibid.*, p. 697.

²⁷ *Ibid.*, p. 705.

²⁸ Megginson and Netter, *loc. cit.*, pp. 361-364.

²⁹ Jeffrey Sachs, Clifford Zinnes and Yair Eilat, "The gains from privatization in transition economies: is 'change of ownership' enough?", Consulting Assistance on Economic Reform II, Discussion paper No. 63, Harvard Institute for International Development (HIID), Harvard University, Cambridge, Massachusetts (2000), p. vi.

³⁰ *Ibid.*, p. 27.

³¹ See, for instance, the discussion between Anders Åslund and Stanley Fischer reported in *IMF Survey*, vol. 31, No. 3 (11 February 2002), pp. 42-43.

³² See V. Bhaskar, Bishnupriya Gupta and Mushtaq Khan, "Privatization, yardstick competition and employment dynamics: evidence from Bangladesh" (October 2001), p. 4 (<http://www.warwick.ac.uk/res2002/papers/Bhaskar.pdf>). The "excess" employment, as measured by the difference between the number of employees in the public sector mills and those in similar mills in the private sector, was not so high among the manual workers as among white-collar workers, indicating that "clientelism", providing employment to politically important constituencies, rather than "welfarism", providing employment to those most in need, is the more plausible explanation for overmanning (p. 5).

³³ See the Monterrey Consensus, para. 21.

change in ownership was combined with other reforms such as the establishment of institutions to address incentive and contracting issues, hardened budget constraints, removal of barriers to entry and an effective legal and regulatory framework.²⁹ In the absence of these complementary reforms, privatization may even have a negative effect on performance, the explanation being that "transfer of ownership without the institutional structures in place for owners to exercise their authority simply replaces poor government control of management with weak or no private sector control".³⁰

The role of the legal and regulatory framework is to set the parameters within which private enterprise can lawfully operate. Establishing such a framework is a continually evolving process and requires skilled personnel, whose training can itself take several years. In countries that did not have a market system, the task was doubly complicated by the absence of those with the experience and knowledge of the industry in question that would enable them to draw up and enforce realistic and sound regulations. As has been shown by major business scandals in the developed countries, even the most sophisticated regulatory agencies and oversight by shareholders might not detect at an early stage fraudulent business practices. Some observers have questioned whether it was feasible for some of these transition countries to wait until the regulatory framework was in place before privatizing: they felt that the benefits of privatization would be felt only when the share of the private sector in the economy had reached a large threshold level and that therefore a gradualist approach would have been incorrect and mass privatization the correct strategy. This is still a controversial issue where very much depends upon the situation in the individual country at the start of the transition.³¹

The regulatory environment has also changed with privatization. Provisions regarding employment have been relaxed to give the incoming private managers more power to adjust the size of the workforce. For instance, when part of the jute industry of Bangladesh, which had been nationalized in 1972 soon after independence, was privatized in 1982, the law was subsequently changed to allow the new owners to lay off employees.³²

The regulatory environment can itself help determine the future profitability of an enterprise that the Government wishes to privatize. Raising the barriers to entry for potential competitors or even excluding competitors, relaxing environmental or work safety standards or reducing applicable taxes could, in theory, make a State asset more attractive to a prospective purchaser and thereby increase the immediate revenue that accrued to the state from its sale. Over the longer term, the loss to the State, and to society at large, could be much greater. As mentioned above, it is now considered that one important aim of Government should be the creation of a competitive environment and a "transparent, stable and predictable investment climate, with proper contract enforcement and respect for property rights".³³

The situation is more complicated in the case of market regulations, whereby, for instance, the right to practise as a medical doctor is restricted to those with a degree from a recognized institution. Many of these regulations are essential. However, in theory, special regulations and controls could be imposed on a privatized industry so that the same outcome resulted as would have obtained under State ownership: regulation could, then, simply be a substitute for direct control. Yet, the State cannot achieve the same results with a

privatized industry that it would have wished to achieve with a nationalized industry. It is not possible to draw up a complete contract with a private enterprise covering all possible eventualities during the lifetime of the contract. Some decisions that a private firm would take, acting totally within the terms of any prior contract that could have been drawn up between it and a Government, could differ markedly from those that a Government might have taken. This was seen in the 1960s and 1970s when management contracts were drawn up by nationalized firms with the previous owners. In spite of their extensive provisions, they sometimes proved unsatisfactory to one or the other party. The reason was not that the private firms were necessarily acting unlawfully: rather, they had different perceptions from the Government of what the firm should do. In general, in the matter of the provision of goods and non-social services for private consumption, private companies do not want to enter into a contract with a Government and to act, as it were, like its agent.³⁴

The regulatory system, then, plays a different role in a market economy system than in another economic system and regulatory reform has been a major element in the move towards a market economy. In this respect, the first United Nations *World Public Sector Report*, in describing “an intelligent, democratic State”, argued that its role should be “catalytic and supportive—in other words, promoting without investing—and supervisory/regulatory. Recent experience has shown that people often benefit when the State is not involved in the production of goods and, generally, the provision of non-social services. Greater competition brings down prices and enhances the choice to consumers. Inherent in this concept of the State is the critical notion of quality, in particular the quality of the normative, strategic and steering tasks of the State”.³⁵

Promoting wider share ownership and helping develop national capital markets

Privatization can be seen in the context of the creation of a State whose citizens have a direct and tangible ownership stake in the economy. One of the aims of privatization has thus been to promote wider share ownership and, especially in developing countries, to help develop the national capital market.³⁶ Accordingly, many privatizations were effected by making shares available to the public. The growth of stock markets has been rapid during the period of privatization. Between 1983 and 1999, the total capitalization of developing countries’ stock markets rose from \$83 billion to \$2,185 billion.³⁷ At the end of 1983, the capitalization of the few British, Chilean and Singaporean firms that had been privatized was less than \$50 billion, but by the middle of 2000 the top 152 privatized firms in the world had a total market capitalization of \$3.31 trillion. Individual privatized companies, usually telecommunication companies, were the first, second or third largest companies in their domestic markets and could account for a large share of market capitalization: Telefónica for nearly 16 per cent in Spain, and Teléfonos de México for 24 per cent in Mexico. The sums realized by individual share issue privatizations have been larger than many realized through placements by private corporations.

Privatization assumed a major role in the development of capital markets throughout the world and, to the extent that efficient capital markets promote

³⁴ This discussion does not concern those social services that the State has a responsibility to see provided—whether directly or indirectly—such as health, education or prisons.

³⁵ *World Public Sector Report: Globalization and the State, 2001* (United Nations publication, Sales No. E.01.II.H.2), p. 65.

³⁶ In Nigeria, for instance, it was originally mandated that all public enterprises be sold through the public offering of shares. See Oliver Campbell White and Anna Bhatia, *Privatization in Africa* (Washington, D.C., World Bank, 1998), p. 36.

³⁷ All figures from Megginson and Netter, loc. cit., pp. 372-378.

³⁸ Sachs, Zinnes and Eilat (*loc. cit.*, p. 23) found that the existence of capital markets was uniformly supportive of economic performance in their study of the transition economies.

³⁹ Megginson and Netter, *loc. cit.*, p. 326.

⁴⁰ Cf. Kornai, *loc. cit.*, p. 34.

⁴¹ See, for example, the comments of Rudiger Dornbusch: "Where gradualism, circumspection, a plan and rules might have led is open to question ... It is true that the Russian reformers ... privatized without much care for niceties. They got rid of public sector assets at literally any price and with just about any process. This was controversial and it created an oligarchy with great wealth and political power. Yet in the end it worked. The massive privatization and restructuring of State enterprises is paying off ... Now you can begin to think of attracting foreign capital. Would that have been possible if Russia had been advised by someone who would still be drawing up perfect privatization plans in his head?" (*IMF Survey*, vol. 31, No. 6, 25 March 2002, p. 94).

economic growth and allow individual firms to fund investment opportunities that they would otherwise have to forgo, contributed to global economic growth.³⁸ The growth of stock markets also encouraged the development of those regulatory and supervisory institutions that made for tighter shareholder monitoring of enterprises. It also encouraged ancillary businesses, such as accounting firms, and fostered better accounting practices. The downside to privatization by means of share sales to the general public is that, as with any other share, the price of the share in the privatized company can always decline. This has happened most recently with the price of shares in telecommunications companies.

Raising revenue for the State from sales

Another of the goals of privatization was to raise revenue for the State from the direct proceeds of sales. According to one estimate, the cumulative value of proceeds raised by privatizing exceeded \$1 trillion by the second half of 1999, with annual proceeds peaking at over \$160 billion in 1997.³⁹ Since 1990, privatization in OECD countries has raised over \$600 billion, with Western Europe accounting for one half of these proceeds. While proceeds from privatization can be significant and could be used to reduce public debt, they are a one-time occurrence and so it would be unwise to use them to maintain otherwise unsustainable levels of government expenditure, especially when there are fewer attractive assets to sell in the future.

Controversies over the sale of assets

The question of the revenue accruing to the Government from the sales of its assets has generated considerable controversy, particularly when it was thought that they had been disposed of at exceptionally low prices. The controversy has been especially fierce when foreign purchasers, especially from large corporations, have been involved or when the assets sold were in the natural resources industries, such as mines or oilfields. If the transfer of ownership was effected by insider deals, the same group of individuals could be operating the properties before and after privatization, although their objectives (to make a profit and enhance the value of the firm) might be different in a market as compared with a planned economy.⁴⁰ In some instances, it has been alleged that the assets were transferred by criminal, and sometimes violent, means. Such accusations have been especially strong in the case of the transfer of the natural resource industries of the former Soviet Union from the State to private hands.

There are two points to be made regarding transfers involving criminality: one, that the speed with which the Soviet system collapsed created the opportunity for the illicit seizure of former State assets; and two, that the lack of a legal system designed to assist the functioning of a market economy sometimes made it difficult to draw the line between criminal and non-criminal behaviour. The need for due deliberation in effecting privatization and for having in place the supporting institutions, including an appropriate legal framework, is reinforced by this experience. However, what should have been done in circumstances where these institutions were not in place is still a matter of debate.⁴¹ The speed at which the assets were privatized has been questioned; moreover,

the manner in which privatization was often accomplished appeared unfair, with one set of individuals, “the oligarchs”, obtaining almost all the benefits.⁴² The perceived unfairness of the transfer of assets is thought to have weakened support for the introduction of the market economy.⁴³

Sale of assets through share issues

Even when criminality has not been involved, there have often been considerable differences between what a State asset was sold for and its value a few years later or the value of what would appear a comparable asset in private hands.

Studies of the sales of assets through share issues indicate that shares tend to be underpriced, often by considerable amounts. The initial returns to investors buying privatization issues were higher than those to private company issues. A comparison of (a) the returns to an investor who purchased a share at the offer price in the IPO of a privatized concern and then sold that share on the market on the first day of open trading with (b) the returns to an investor who did the same thing for a share of a private company, showed that the former would have enjoyed a much higher profit.⁴⁴ Similarly, the returns to an investor who kept his shares in the privatized enterprise for a longer period, of up to five years, were often larger than the returns to an investor in a private company.

As one purpose of privatization is to ensure that the assets are operated efficiently, generating greater revenues for the private owner than they would have for the public owner, and paving the way for a longer-term growth in profits as investments are channelled into the most promising avenues, it could be expected that the value of the assets would rise after privatization. However, such an improvement should, to some extent, be anticipated, and reflected in the share price. Moreover, it is difficult to see why privatization shares, which are shares in existing industries, should be seriously underpriced in relation to other IPOs, which are often in new and therefore high-risk fields.⁴⁵

One explanation for the underpricing is that a Government may put the achieving of wider share ownership above maximization of revenue from the sale. It has been argued that political motives were sometimes involved and that the Government wished to shift political preferences among the median-class voters who could determine the future electoral outcome towards market-oriented policies.⁴⁶ To induce the median-class citizens to participate in the privatization programmes, the shares were underpriced and restrictions were imposed on their resale. In this way, a constituency was created that would be averse to electing politicians whose policies reduced the value of their investments.

Sale of assets to companies supplying management and finance

The presence of foreign investors is most needed when they bring not just financial resources, but also technical and managerial abilities that are not present domestically in adequate amounts. Although the SOEs might have tried to develop the skills necessary to run the existing concerns, in some countries they were not able to develop both the whole array of skills necessary for their successful operation and the quantity of skilled people who would be needed to start up new concerns in the same industry. This would be the case in the natural resource industries, for instance, in those countries

⁴² How to treat the “oligarchs” who gained control of the assets of the former Soviet Union is a vexed question. See, for instance, Stefan Wagstyl, “The road to recognition”, *Financial Times*, 6/7 April 2002, p. 1.

⁴³ Cf. János Kornai, “Making the transition to private ownership”, *Finance and Development* (International Monetary Fund, September 2000), pp. 12-13.

⁴⁴ Megginson and Netter, *loc. cit.*, pp. 368-370.

⁴⁵ Biais and Perotti, *loc. cit.*, p. 243.

⁴⁶ These arguments are spelled out by Biais and Perotti, *loc. cit.*

⁴⁷ Chile provides an example of a country that had the skills necessary to operate its nationalized mining industry but that chose to rely upon private, including foreign, capital and expertise for expansion. Although the Government did not denationalize the mines, as early as the mid-1970s it had set about creating a favourable investment climate for the opening up of new mines by private enterprise and ensured that the nationalized concerns followed strict business principles. It negotiated agreements with foreign investors, permitting them to hold a majority of the equity. The result was that in 2000, the State-owned enterprise Codelco produced 1.6 million tons (as compared with 0.9 million tons in 1979 when it had accounted for about 85 per cent of total copper production), and other producers contributed 2.9 million tons. The privately owned mines were a yardstick that could be used to assess the performance of Codelco.

where the existing SOEs were not run as efficiently as the large international firms would have run them, or where new deposits were found or suspected to exist and the country did not have the skills base or the access to capital markets to develop them, or, finally, where the State chose the private sector route as a matter of policy rather than of necessity.⁴⁷

In cases where ownership and managerial control will be transferred from the previously nationalized concern to a foreign concern, many of the local staff will be retained, although there is likely to be a replacement of the top levels of management by personnel from the foreign concern (which could itself be a cause of domestic opposition to privatization). This transfer of management and ownership has proved particularly difficult in natural resource industries, where what is being sold has a finite lifespan, or in industries that have a dominant position in the economy.

Some of the difficulties have arisen from the fact that privatization means far more than a transfer of assets from State to private hands, with private concerns appropriating the benefits previously appropriated by the State. In the case of foreign-owned concerns taking over control of SOEs, the expected benefits of new investment will be accompanied by part of the resulting profits being sent out of the country as dividends. Especially in the case of large natural resource properties, there are a limited number of companies in the world that can operate them effectively and attract sufficient investment funds to them. These companies can choose to operate properties in many different countries.

The assessment of these companies has to take into account market factors, such as trends in demand for the product and expected changes in the price for inputs. In the case of natural resources, the following are to be considered: geologic factors, such as the nature of the ore body and the present state of the mine workings; infrastructure factors, such as whether adequate power supplies are available and whether the transport infrastructure is in place to ensure delivery to customers; and non-market factors such as whether an educated labour force is available, and, if not, how it can best be trained. It is difficult, then, to compare the value of one particular property with any other property: two deposits in two different locations containing the same tonnage of ore or the same volume of natural gas or oil are likely to be valued differently. Essentially, what is being purchased by the new owner is the right to make—or, more accurately, to attempt to make—a profit that will justify his expense in undertaking the purchase. Thus the book value of the property, or any other valuation depending upon the amount of past investment in the property, could be an unreliable guide to its value.

In cases where investment in the SOE had been insufficient to maintain safety standards, considerable investment might be needed to put both the treatment plant on the surface and the mine workings into a satisfactory and safe state. Further investment might be needed to prepare for expansion. The sale price could be much smaller than the Government had anticipated, but it could be accompanied by a commitment by the new owners to undertake new investment. The decision whether to undertake the sale of the property “as is”, which sale could be at an apparently low price, or to invest funds to modernize the property and thus, it is hoped, increase its eventual sale price, has often proved difficult. The market prices of some privatized enterprises have risen even before privatization. However, it is not clear that this was because of the expect-

tation that the privatized property would be operated more profitably than the SOE, or because of the prior steps taken to increase its market value.⁴⁸

Even after the property has been transferred, there is no assurance that the properties will be developed in the manner expected. Private owners can decide to abandon a property even after purchasing it. In such circumstances, it is to be hoped that other buyers will find the property attractive and that output and employment can be maintained to the greatest extent possible. Assistance could be needed to assist the country during the transition period.

The fact that a country might feel that it does not have the luxury of enough time to set up all the appropriate machinery for privatization and to restructure the properties before sale is being increasingly recognized by international agencies.⁴⁹ Especially in the case of a property that was operating at a loss and adding to the country's debt burden, and whose plant was deteriorating, a strong case can be made for a rapid sale. Countries are responding to the need for speed, for avoiding continuing losses in SOEs and for attracting new investment. In Romania, where much of the country's industry and businesses are still State-owned and most have debts to State-owned utilities, legislation was passed in early 2002 to allow for the sale of loss-making properties for the nominal sum of one euro—as long as the buyer pledged investment.⁵⁰

The costs in delay would include not just a possible fall in the sales price, as this is only one, potentially minor, element in a calculation of the total benefits coming from privatization—other elements would include the possible change in profitability and therefore in taxable income and government revenues, in the production that might have resulted from the more efficient use of existing facilities and increased investment from private sources, and in the development of all the secondary economic activities that would have been fostered if the dominant industry or industries in the economy had been revived.⁵¹ Against these benefits would have to be offset possible reductions, at least in the short term, in the labour force at the existing properties—which might have been absorbed by expansion elsewhere in the economy. The benefits from privatization can never be measured as solely the change in the Government's financial position coming from the sale: the wider interests of society must also be considered.

Sale of assets through auctions

In the past decade, considerable experience has been gained in privatization or other government sales of assets that could be usefully applied to future sales. A particularly successful one was that undertaken by the British Government when it held an auction to sell air—five telecom licences for the third generation (3G) of mobile phones (see box IV.3). The Government was selling the right to make a future profit from an asset—in this case, not a mine or factory but a licence. Auctions are becoming a popular way to sell such nationally owned or controlled assets. For instance, in early 2002, for instance, Ecuador set the rules for the auction of three wireless local loop licences. Twenty-two firms, including privatized telephone companies from other Latin America countries and a local private company, had shown an interest.

Yet when drawing up the precise rules for the auction, one size does not fit all.⁵² Finally, much could have been lost in delay: the prices of the shares of the

⁴⁸ Megginson and Netter, loc. cit., pp. 341-342.

⁴⁹ The World Bank has changed from arguing the necessity of restructuring before privatization to adopting a more nuanced approach (Megginson and Netter, loc. cit., p. 341).

⁵⁰ *Financial Times*, 1 April 2002, p. 15.

⁵¹ Cf. Caleb Fundanga and Andrew Mwaba, "Privatization of public enterprises in Zambia: an evaluation of the policies, procedures and experiences", Development Bank Group, Economic Research Papers, No. 35, (1997), (http://www.afdb.org/knowledge/publications/publications_report_privatization1997.htm African), p. 17, where they stated: "The point that should be emphasized is that a country will not realize all the benefits of privatization from the sale price. Most of the benefits from privatization will come down the road, from the new investments and turning around of the firms, expansion of output, increased exports, generation of new employment opportunities and incomes, and expansion of the tax base for government revenue."

⁵² The designers of the British auction felt that "European governments would be foolish not to copy the United Kingdom in auctioning the radiospectrum, but they would be equally foolish to blindly copy the UK design without attention to their local circumstances." See Ken Binmore and Paul Klemperer, "The biggest auction ever: the sale of the British 3G telecom licences", *Economic Journal*, vol. 112, No. 478 (March 2002), p. C94.

Box IV.3

SELLING MOBILE PHONE LICENCES IN THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

^a This box draws heavily on Ken Binmore and Paul Klemperer, "The biggest auction ever: the sale of the British 3G telecom licences", *Economic Journal*, vol. 112, No. 478 (March 2002); and Paul Klemperer, "How (not) to run auctions: the European 3F telecom auctions", *European Economic Review*, No. 46 (2002).

^b See Klemperer, loc. cit., p. 830.

^c The investment bankers who advised the Government, and were paid a fee that depended on the number of bidders participating in the auction, earned about \$7 million, which was 40 times the expenditure on economic consultants.

In 2000, the British Government raised through an auction about \$34 billion from the sale of five third-generation (3G) mobile phone licences.^a

The second-generation licences had earlier been awarded in a "beauty contest" in which firms had submitted business plans to a government committee which then granted the licences to those that it judged had best met a set of published criteria. This earlier sale had realized about \$600,000 each for the licences. The problems with a beauty contest are that the difficulties of specifying and evaluating the criteria make it a time-consuming and opaque process, often leading to political and legal controversy and the perception, if not the reality, of favouritism and corruption. The British Government thought that an auction would treat firms fairly and transparently and yield the greatest possible benefits for consumers and taxpayers. In the autumn of 1997, the decision was taken to auction the licences and those who were to design the auction were given the following objectives: to assign the spectrum efficiently, to promote competition and to "realize the full economic value", subject to the other objectives. This, in effect, put competition ahead of maximizing the proceeds to the Government from the sale.

Auction methods were tested with people who were paid a fee to attend trial auction sessions and a small amount proportional to the profit they made for the company on whose behalf they had been told they had been bidding. The designers decided to issue five licences, one more than the number of second-generation licences, and to make the rules of the auction such that one of the two large licences would go to a new entrant and no bidder could win two licences. The licences were to last until the end of 2021 and included an obligation to provide a network covering at least 80 per cent of the British population by 2007. Multiple rounds of simultaneous closed bids were to take place. The bids were revealed at the end of each round. An inactive bidder in any round was eliminated from the auction which would end when there were only five remaining bidders. These would then be allocated the licences on which they had been the top bidder. In early 1999, the Government accepted the auction method and moved quickly, thinking that prices might be driven higher if bidders believed that winning the auction would give them a competitive advantage in future auctions in other countries.

Thirteen companies qualified to enter the bidding which started on 6 March 2000. At that time, the media thought the licences would sell for a total of between \$3 billion and \$7.5 billion. After 94 rounds, the first bidder dropped out, and after 150 rounds the auction ended on 27 April 2000 with the total raised being \$34 billion. This amounted to 650 euros per person in the United Kingdom, the highest per capita figure realized by any auction and one considerably higher than the lowest figure realized during 2000 – that of 20 euros per person in Switzerland.^b

This auction confirmed that it is difficult to predetermine the valuation of the worth of an enterprise or an asset that the Government is willing to sell, but that it is important to arrive at a method of sale that is fair and transparent and promotes the objectives set by the Government. The costs of devising the auction were small in comparison with the proceeds.^c

companies that were successful in the bidding were considerably lower in 2002 than in 2000. Moreover, in later auctions, weak bidders would be discouraged from participating and existing bidders could acquire the experience of colluding together to keep their bids low.

Addressing employment and social protection issues

One of the most potent concerns about privatization has been its effect on employment. Individuals who fear that they will lose their employment and managers who expect a reduction in their benefits from running the enterprises have been opposed to some privatizations. Potential employment losses in those large SOEs that were run inefficiently or were obliged to employ workers for non-commercial reasons and on conditions other than those that would have been accepted by private enterprise, have proved one of the major obstacles to public acceptance of privatization. The need for safety nets to be in place as part of a package of market-based reform is now widely accepted and donors have assisted in supporting them.⁵³ In industries where privatization will necessarily result in major adjustments to the labour force, the provision of social safety nets, quite apart from being necessary in itself, could determine public acceptance of privatization.

Studies of the employment consequences of privatization have shown that privatization does not always lead to lay-offs.⁵⁴ Sales can grow fast enough in privatized firms to offset the increase in labour productivity that privatization brings and to encourage new investment which itself creates new jobs. Frequently, it is not the manual workers who lose their jobs in privatizations but the middle-management ranks.⁵⁵ However, it is difficult to separate the effects of privatization from other major changes in the economy that often accompany it—in the 1990s, the recessions in the transition economies and in Latin America rather than privatization itself played a large role in accounting for employment losses in these countries. Downsizing in an industry due to a fall in demand for its products can also be expected to lead to closures and job losses in both privatized and publicly owned enterprises. Moreover, in many cases the first firms to be privatized were the ones that would be most viable under private ownership and where substantial revenues would accrue to the Government from their sale. In cases where the most problematic firms, those with the largest reserves of excess labour, were left to the end of the privatization programme, the consequences for unemployment could be severe. Investigating the possible impacts of privatization on workers, including women, and mitigating any adverse effects through appropriate planning are essential functions for governments at all levels. Pursuing the correct policies can help build up the political support that successful privatization requires.

In absolute terms, potential employment losses are greatest in China where the numbers involved are in the millions. In 1999, the SOEs constituted two thirds of total assets, employed more than half of urban workers, accounted for three quarters of investment and absorbed three quarters of bank credit.⁵⁶ The situation is especially delicate as the SOEs serve as the social security net. China's move to a more market-oriented economy will have to take into account the disruption that could result if the remaining SOEs were to shed labour rapidly and the need to provide a social security net to workers that are likely to be affected.

⁵³ For a recent World Bank study of privatization as part of its adjustment lending, see World Bank, *Adjustment Lending Retrospective Final Report*, Operations Policy and Country Services (Washington, D.C., 15 June 2001), pp. 55-61.

⁵⁴ Megginson and Netter, loc. cit., p. 361; Sunita Kikeri and John Nellis, "Privatization in competitive sectors: the record so far", *World Bank, Rapid Response Unit, Background Paper* (Washington, D.C., 29 October 2001), p. 18, on the World Bank web site (at <http://www.rru.worldbank.org/strategy/discussions.asp>); and Steven Barnett, "Evidence on the fiscal and macroeconomic impact of privatization", *IMF Working Paper*, WP/00/130 (Washington, D.C., July 2000).

⁵⁵ See note 32 above; and Kikeri and Nellis, loc. cit., p. 20.

⁵⁶ Harry G. Broadman, lead economist, World Bank, Washington, D.C., "Lessons from corporatization and corporate governance reform in Russia and China", International Conference on "Corporate Governance Development in Vietnam" Hanoi, 11 and 12 October 2001, p. 12 (available on the World Bank web site); and *The Economist*, 30 September 2000, pp. 71-73.

In general, one intended consequence of privatization is the removal of the soft budget constraint. Whereas an SOE could continue to operate inefficiently and at a loss, absorbing budgetary resources, a privatized firm would be restructured or closed down. In the case of some SOEs, the provision of social services, including housing and childcare, was itself dependent on employment in the enterprise. This reflected an economic model one effect of which was to restrict the mobility and flexibility of labour. In these circumstances, privatization has to entail the construction of a different model for the delivery of social services, removing it from the control of the enterprise and transferring it to a more general authority. The continuing reliance on SOEs to provide social services, entailing the financial drain coming from subsidies, could itself delay the construction of these new forms of delivery.

PRIVATIZATION AND TECHNOLOGY

Privatization can entail a change in the sources of technological advance. The failure of the efforts devoted to technological advance in the former centrally planned economies to produce goods that were competitive in global markets—or could even compete in domestic markets with products from the market economies—would indicate that the market economy is better able to generate worthwhile technology than a system that relied on SOEs. The comparison is especially relevant in the case of the two former German States that started off at comparable levels of education and technological development.⁵⁷

Even over a longer-term perspective, the free-market system has proved to be the most powerful instrument for technological change and for raising living standards that the world has ever seen, a point made by its critics more than a century and a half ago.⁵⁸ While many of the inventions upon which the Industrial Revolution was based had been known to ancient civilizations, and while these civilizations had many learned and inventive people, they apparently did not have the incentive mechanisms and institutions in place to enable or encourage individuals to exploit them for their own personal gain. The Romans had a steam engine but did not use it for productive purposes—a recorded use for it was in opening the doors of a temple.⁵⁹ James Watt was able to become a very rich man by putting considerable effort and ingenuity into adapting a steam engine that had been used to pump water out of mines—the Newcomen engine—to work more efficiently. He saw that, with the protection of a patent, he would obtain his reward in the form of an income from those who used the steam engine to improve the profitability of their own operations. He later adapted his own steam engine, changing from an up-and-down motion to a circular one, so that it could be used in other industries, including milling.

Recent studies have shown the importance of the free market as an innovation machine, where innovation is not an unexplained and chance occurrence, but rather, as in the case of Watt's modifying his original engine to cater for an anticipated demand, a matter of routine.⁶⁰ They point to how firms compete not so much over price as over innovation, their fear being that if they do not keep up with innovations taking place elsewhere they will be driven out of the market. Thus, within the firm, innovation is incorporated into its normal activities, with its objectives often being set by the management. Innovation results in new products and new processes for making a particular product—for instance, new mining or treatment techniques in the minerals industry.

⁵⁷ The neglected state and low technological levels of industry in the former German Democratic Republic were revealed during the period of privatization that attended German reunification. For more information, see *World Economic and Social Survey, 1996* (United Nations publication, Sales No. E.96.II.C.1 and corr. 1), chap. VI, sect. entitled "The experience of the Treuhandanstalt (Treuhand) in Germany".

⁵⁸ "The bourgeoisie (i.e. capitalism) cannot exist without constantly revolutionizing the means of production ... The bourgeoisie, during its rule of scarce 100 years has created more massive and more colossal productive forces than have all preceding generations together" (Karl Marx and Friedrich Engels, *Manifesto of the Communist Party*, London, 1847, as quoted in William Baumol, *The Free Market Innovation Machine: Analyzing the Growth Miracle of Capitalism* (Princeton, New Jersey, and Oxford, Princeton University Press, 2002)). Baumol considered that Marx, Engels and Schumpeter were among the few economists to deal directly with an explanation of the "incredible growth record of the free-market economies". (p. x). Much of the present section relies heavily on Baumol's work.

⁵⁹ For materials on the history of the steam engine, including *The Pneumatics of Hero of Alexandria*, Thomas Savery's *The Miners Friend, or an Engine to Raise Water by Fire* (London, 1702), and material on James Watt, including Andrew Carnegie's 1905 biography see <http://www.history.rochester.edu/steam/>

⁶⁰ See, in particular, Baumol, *op. cit.*

Patent protection is an important means of ensuring that there exists an incentive to innovate, but the average lag between the introduction of an innovation and the entry of a competitor has shrunk—according to one sample, from 33 years in 1887-1906 to 3.4 years in 1967-1986.⁶¹ Yet private sector research expenditure has not suffered—indeed, it has expanded dramatically as enterprises ratchet up expenditure in order to maintain their competitive edge, aware of the severe consequences if they fail to keep up. An innovating firm has an incentive to license the technology to another firm if it can obtain the right price, and the potential customer has an incentive to pay the licence fee if it thinks that it can use the technology more efficiently. Because of the speed with which obsolescence supervenes, reverse engineering or industrial espionage could be a more costly way of obtaining the technology than through this “friendly transfer”. In any event, the fact that it takes time for the other firm to learn to use the technology that it obtains helps maintain the innovator’s advantage. Moreover, firms have an incentive to cooperate with other firms in voluntarily sharing their technology. This provides them with some degree of insurance against the possibility that one of them, or still another enterprise, will come up with an innovation that will give its proprietor an overwhelming competitive advantage. It also enables each member of the group to draw on a far larger pool of innovations than it could have generated by itself.

These theoretical considerations are supported by evidence of firms’ frequently licensing their technologies and freely sharing their information. Between 1980 and 1998, European, Japanese and United States firms collectively entered into almost 9,000 strategic technology alliances.⁶² This interaction among firms helps explain the rapidity with which technology is being diffused. It also provides an incentive for privatization.

Privatization is expected to result in the creation of new entities that will have the freedom to link up with similar entities in international networks that are usually the most powerful conduits for the transfer of technology. The above considerations show that the most promising networks tend to be those of private sector firms: networking in itself might not be very productive. During the period of central planning, the enterprises of Central and Eastern Europe and the former Soviet Union were able to link up only among themselves. Although these linkages were strong, especially in the military-industrial complex, it would appear that they had little knowledge, tacit or otherwise, that was worth transferring.⁶³ If privatization of enterprises in the transition economies involves a foreign partner, or being taken over by a foreign company, access to the international networks of private companies is facilitated. Exploiting these links has allowed firms to develop their skills base and to progress to higher value added tasks up the supply chain.

Outside the centrally planned economies, SOEs were assigned a role in the national research and development effort. One of the reasons for the nationalization of enterprises and their consolidation to form large SOEs had been the creation of national champions that could be large players on the national field, undertaking research and development (R&D) whose results could be spread to other areas of the economy. They would thus help build up national competencies in R&D and assist the country in advancing up the technological ladder, or in keeping abreast of leaders in the field. Such large SOEs were also expected to be significant players in the international arena, giving the country greater

⁶¹ Baumol, *op. cit.*, p. 76, based on Rajshee Agarwal and Michael Gort, “First-mover advantage and the speed of competitive entry, 1887-1986”, *Journal of Law and Economics*, vol. 44 (April 2001), p. 169. For instance, the phonograph record was introduced in 1887 and a competitor entered in 1920; the laser printer was introduced in 1980 and a competitor entered in 1982 (p. 175).

⁶² Baumol, *op. cit.*, p. 85.

⁶³ D. Dyker, and others, “‘East’-‘West’ networks and their alignment: industrial networks in Hungary and Slovenia”, *Technovation* (2001). Tacit knowledge is embedded in a particular organization or group of people and can be transferred only through continual hands-on contact.

leverage in its dealings with large foreign players, including multinational corporations, and allowing it entry to multi-partner projects.

Privatization, then, implies the abandonment of this particular model for industrial advance as the goals and nature of R&D undertaken by a privatized management are likely to change and to be focused on the interests of the enterprise. In the case of the wholly privatized British Telecom (BT), for instance, the first priority for its R&D was set as “the BT operating divisions and the corporate headquarters” and, in view of its public sector background, it was emphasized that this first priority did not include “British industry”, the “Government of the United Kingdom” or even the “national interest” except in cases where the interests of BT coincided.⁶⁴

The volume and nature of research have changed as companies have moved towards privatization. One study showed that research expenditures, as measured in absolute terms or as a percentage of sales, had declined, as had the share in total R&D projects of long-term projects (those with an average duration of over five years that involved basic rather than applied research). Research was shifted towards meeting the specific needs of the businesses. The change in the pattern of R&D during the period of privatization could have reflected the readjustment that had taken place as the companies prepared for greater exposure to competition by trying to eliminate the waste and duplication of resources.⁶⁵ It could not, then, be concluded that, simply because the volume of R&D expenditure had been lower during the period of privatization, future innovation in the economy would suffer. The rapid technological advances in the telecommunications industry, where considerable privatization has taken place, would indicate the contrary, although other factors such as deregulation and the encouragement of competition also played a role.

Moreover, since privatization, collaboration has taken place with other firms in the same industry to generate basic knowledge and “pre-competitive” technologies that can be useful to different members of the group.⁶⁶ The legislative and judicial branches of government have adjusted to the reality of technology alliances in their effort to promote innovation within a competitive environment. When the first major antitrust legislation was enacted in the United States, the Sherman Act of 1890, the possibility that a person with “superior skill” would be so successful as to be liable under the law was raised in the Senate debates.⁶⁷ Over time, concerns grew that the fear of antitrust action was constraining corporate strategy, and that inconsistency in applying the rules could induce uncertainty which would undermine investments in innovation. Moreover, there was concern in the United States that initiatives in advanced research in other countries could threaten the competitive position of domestic industry. In 1982, leading United States companies within the electronics industry formed the first high technology R&D consortium, the Microelectronics and Computer Technology Corporation (MCC), which subsequently pioneered research in advanced electronics and information systems, including artificial intelligence, electronic commerce, electronic packaging technologies and human interface.⁶⁸ In 1984, the antitrust regime was relaxed by the National Cooperative Research Act which explicitly eased antitrust sanctions against cooperative R&D ventures of otherwise competing firms, by applying the test of “reasonableness” and allowing “worldwide capacity” to be taken into account when determining the relevant market.⁶⁹ Whereas there had

⁶⁴ Federico Munari, Edward Roberts and Maurizio Sobrero, “Privatization processes and the redefinition of corporate R&D boundaries”, *Research Policy*, vol. 31 (2002), p. 39.

⁶⁵ *Ibid.*, p. 48.

⁶⁶ For example, British Gas carried out joint research with other European gas producers in the area of offshore safety to spread the burden of research (*ibid.*, p. 51).

⁶⁷ David Hart, “Antitrust and technological innovation in the US: ideas, institutions, decisions and impacts, 1890-2000”, *Research Policy*, vol. 30 (2001), p. 925.

⁶⁸ For more information, see the Corporation’s website (<http://www.mcc.com>). The shareholders include the following companies: 3M, Eastman Kodak, General Dynamics, Hewlett-Packard, Lockheed Martin, Motorola, NCR, Nortel Networks, Raytheon Company, SAIC/Telcordia Technologies and Texas Instruments. Later, in 2000, MCC restructured its business model to include the spinning off of all or part of its major projects as separately funded start-ups.

⁶⁹ See United States Code, Title 15, Chapter 69, Section 4302 (<http://www4.law.cornell.edu/uscode/15/4302.html>).

been only 21 newly formed research joint ventures before the passing of the Act, 154 such ventures were registered in the five following years. Cooperation is taking place among competitors in different industries, including the automobile industry.

Other countries have used various methods to promote research cooperation within private industry. Such efforts have been given greater urgency by the opening up of markets that the World Trade Organization is encouraging. Taiwan Province of China is seeking to increase government investment in R&D, while at the same time encouraging the R&D activities of private industry.⁷⁰ The Government's role changed over time as the domestic technological base was built up. It moved from supporting only non-profit applied research institutes performing R&D projects to subsidizing qualified enterprises in performing such R&D projects. In 1994, the Government required that non-profit research institutes performing research under the Technology Development Programme invite enterprises to participate. Its overall strategy is to take a supporting role as industrial technology development is shifted to the private sector. One of the results of private sector technological development in Taiwan Province of China is expected to be that world leaders in high technology will participate with Taiwanese companies in strategic alliances. Alliances with major foreign companies can give the Taiwanese companies access to technology that would be too risky and expensive for them to develop on their own.⁷¹

Privatization, then, offers the opportunity to give domestic and foreign technological leaders a direct stake in national enterprises and to bring their own technological knowledge into play in improving existing products and developing new products. In the less advanced technology sectors, this progress in introducing technology will be difficult to measure.⁷² Patents, one of the measures of progress in technology, are not likely to result from this kind of technology transfer. However, the participation of domestic and foreign firms can lead to better practices and an overall upgrading of technical skills. Especially in the higher-technology sectors, even the most technologically advanced industries in the developing countries have found that collaboration with foreign companies is useful.⁷³

There is a concern that privatization could lead to a hollowing out of the national capacity for research. Private companies can be expected to undertake—alone, in collaboration with other companies or in collaboration with the Government—only the kind of research that they consider will further their business interests. Privatization does imply, then, that those research tasks that had been previously undertaken on behalf of the government in SOEs and that would not be performed by the privatized concern should be transferred to governmental bodies, such as universities and research institutes. If the Government wished to keep control of a research institute belonging to a SOE that it planned to privatize, it could separate this from the rest of the enterprise before sale. The research tasks that Government wished to see performed could subsequently be undertaken by Government either alone or in cooperation with private concerns. The size of publicly funded research can itself attract private research, as has been shown by the relative switch in corporate pharmaceutical research from Europe to the United States, encouraged by the heavily publicly funded medical research in the latter.⁷⁴

Privatization to a foreign company raises serious issues if it results in the foreign owner's shutting down the domestic research facility and relying on the

⁷⁰ Chiung-Wen Hsu and Hsueh-Chiao Chiang, "The government strategy for the upgrading of industrial technology in Taiwan", *Technovation*, vol. 21 (2001).

⁷¹ See "Taiwanese are chipper despite the downturn", *Financial Times*, 23 April 2002, p. 20.

⁷² Keun Lee and Chaisung Lim, "Technological regimes, catching-up and leapfrogging: findings from the Korean industries", *Research Policy*, vol. 30 (2001), p. 462.

⁷³ "We find that important R&D projects, except automobiles where only private R&D was involved, involved both private and public capacities, and that entry was not driven by endogenous generation of knowledge and skills, but by collaboration with foreign companies" (*ibid.*, pp. 459-460).

⁷⁴ It was estimated that the United States spends at least five times as much on publicly financed medical research as the European Union (EU) countries put together. In 1990, Europe was home to \$7.2 billion worth of research by drugs companies, compared with \$4.9 billion for the United States, whereas in 2001 the figures were \$23.7 billion for the United States and \$16.9 billion for Europe (Geoff Dyer, "Seeking freedom in New England", *Financial Times*, 8 May 2002, p. 13).

⁷⁵ For instance, the Gdansk Institute for Market Economics found higher technological efficiency among Polish companies with foreign owners but a “relatively low propensity to engage in innovation” among foreign-controlled companies, nearly all of which had chosen to site their R&D facilities outside Poland (*Financial Times*, 24 April 2002, p. 13).

⁷⁶ Edmund Amann and W. Baer “Globalisation, industrial efficiency and technological sovereignty: evidence from Brazil”, *The Quarterly Review of Economics and Finance*, vol. 42 (2002), p. 12.

⁷⁷ *Ibid.*, p. 12.

⁷⁸ Oliver Campbell White and Anita Bhatia, *op. cit.*, pp 121-122.

⁷⁹ World Bank, *Accelerated Development in Sub-Saharan Africa: An Agenda for Action* (Washington, D.C., World Bank, 1981), p. 96.

⁸⁰ For instance, in the case of the Zambian copper industry, the Bank moved from attempting to reform the SOE (Zambia Consolidated Copper Mines) to seeking its privatization. See World Bank Zambia Country Assistance Review, report No. 15675-ZA, 3 June 1996: “Before 1980: the Bank shared Zambia’s optimism regarding copper and did not criticize Zambia’s industrial strategy” (p. 35). “From 1967 until 1980, the Bank had an uncritical approach to Zambia’s development strategy which emphasized public sector-led industrialization” (p. 36). “In line with the arguments of the Bank’s recent economic memorandum, the Bank’s strategy in relation with Zambian copper has changed, moving from attempts to improve Zambia Consolidated Copper Mines’ efficiency through restructuring to deliberate efforts to privatize the State company partly or wholly” (p. 68).

R&D facilities of its plants in other parts of the world.⁷⁵ The issues are complex: what is important is not necessarily the number of people employed in R&D facilities or the expenditure on R&D, but rather whether they conduct useful research that will result in products that can compete on international markets. The R&D of privatized concerns will be focused on the needs of the enterprise. There is evidence that privatized concerns have been successful in their R&D efforts. For instance, in Brazil, a recently privatized telecommunications institute has successfully exported a number of fibre-optic and digital exchange-related technologies.⁷⁶

In Brazil, overall economic policy shifted over time towards trade and market liberalization. In 2000, the Law of Patents was passed which substantially strengthened the intellectual property rights of foreign enterprises. The benefit of such a law, which is in tune with worldwide trends towards protecting intellectual property rights, is to foster a greater readiness among foreign enterprises to transfer more of their advanced technologies to Brazil, while “an inevitable additional consequence must be some reduction in the scope that exists for reverse engineering and other foreign exchange-saving (though potentially patent-breaching) indigenous innovative activity”.⁷⁷

INTERNATIONAL ASSISTANCE FOR PRIVATIZATION

In many cases, privatization has been actively promoted by the international financial institutions and donors as part of their effort to help countries build a modern market economy. A 1998 World Bank study for Africa concluded: “It is unlikely that there would have been much privatization without donors ... (With) few exceptions, programmes throughout Africa are perceived by the public to be not home-grown programmes but World Bank-International Monetary Fund (IMF) driven and supported by the donor community ... Privatization conditionalities are attached to some three quarters of World Banks loans or credits.”⁷⁸

The position of the World Bank on privatization has shifted over time. In 1981, for instance, when discussing Africa, it argued that “the problems that parastatals typically encounter do not stem from their public ownership, but rather come from their not being treated as commercial enterprises”.⁷⁹ It proposed that they should not be burdened with requirements to hire more people than they need, to provide services without payment, or to hold down prices of the goods and services they sell. Privatization was not proposed as part of the agenda for action to achieve accelerated development. Instead, until at least the early 1980s, the Bank supported public sector-led industrialization even in countries where privatization is now advocated.⁸⁰

As previously mentioned, the counterfactual cannot be accurately assessed: if privatization had been an essential element of earlier donor-assisted reform programmes, would the results in terms of growth and wealth creation have been greater than were the results of the application of reform programmes without privatization? The rationale for privatization is ultimately that, after measuring the benefits and costs of the enterprises being operated under private ownership against the benefits and costs of the enterprises under government ownership, the net benefits under the former regime would be found to be larger. The implication would appear to be that the absence of privatization from

earlier adjustment programmes could be a factor accounting for part of their shortcomings—that only the pain of adjustment but not the anticipated gains had been experienced.

The shortcomings of previous adjustment programmes could then explain why the addition of privatization as a condition for assistance has been treated with some suspicion, with the numerical targets' being met by the sale of numerous small enterprises rather than the sale of the really important assets.⁸¹ Privatization has often not been embraced wholeheartedly by the population, especially when the benefits were not realized at an early stage.

The international institutions and civil society have a major role to play in ensuring that privatization is “owned” by the country and not seen as an imposition from outside. The international financial institutions, donor countries and the Governments are having to continually refine their approach in order to achieve success in this matter.⁸² The World Bank and IMF are working on strengthening their collaboration to address the different time frames under which they both work.⁸³ Further coordination between the two institutions can be expected as they set up a process to help set priorities and clarify further their responsibilities.

CONCLUSION

The primary justification for privatization remains the perception that an economy where the private sector is the residual claimant—taking the risks and receiving the benefits—will, over the long term, achieve faster growth and higher living standards than one where the residual claimant is the State. In other words, the net benefits of a private sector-driven economy can be expected to be greater than the net benefits from an economy where SOEs play a predominant role. For this reason, assessing the success of a particular privatization based on the changes in output, on the number of people employed in the industry or even on whether the Government's fiscal position improved or deteriorated as a result of the change in ownership, is to adopt too narrow a perspective. Moreover, the discussion is bedevilled by the counterfactual: what would have happened if the enterprise had not been privatized.

At a deeper level, though, the counterfactual, while difficult to apply at the level of an industry, is of dubious applicability at the level of the country. If privatization is seen as part of a strategy to turn over to private operatives, and therefore to a large number of decision makers, the major investment decisions in an economy, the result will likely be different from what would have occurred if SOEs had continued to operate. Since what these numerous individual decisions—and their effects—will be can never be known in advance, privatization may be characterized as a “leap in the dark”. There is now considerable experience to indicate that it is a leap worth taking, but, as it is difficult or costly to reverse, every effort should be made to ensure its success. This entails action on many fronts—encompassing property rights, the rule of law, governance, investor protection, the construction of safety nets and the provision of social services and protection at a more general level than that of the firm and, in general, all those institutions whose growth over time in many countries has produced a private sector-driven economy that is viable and pro-

⁸¹ White and Bhatia, *op. cit.*, pp. 123-124.

⁸² The importance of ownership of the process was highlighted in a IMF-World Bank seminar on privatization, programme design and conditionality, held in July 2001. See *IMF Survey*, vol. 30, No. 17 (3 September 2001), pp. 283-285.

⁸³ See *IMF Survey*, 3 September 2001, pp. 284-285.

ductive. In many countries, this agenda implies a different role for the Government though not necessarily a smaller role.

The international community has an important role to play in this process of adjusting the economy to market forces. It can foster the interchange between countries of their experiences with respect to institution-building in preparation for and following privatization. It can put countries that are about to privatize their assets in contact with important actors, such as merchant banks and potential purchasers, to make certain that the process of privatization is conducted fairly, transparently and in a way most likely to ensure the success of the privatized enterprise. It can attempt to identify those who will lose most from the privatization and seek to provide them with adequate compensation and, in the case of labour, with training for new jobs. It can encourage “best practice” among the business community so that all firms, whether foreign or domestic, taking over the newly privatized industries try to achieve the standards of practice set by the most advanced firms. Finally, and perhaps most importantly for the success of the process, it must ensure that countries “own” the process of privatization—in other words, that they see it as one step among many in the construction of an economy that will serve citizens’ interests far better than did the previous economy. Privatization should be viewed not as just another condition imposed from outside, with targets being set for the number of firms to be privatized, since this can encourage only cynicism among the population. Rather, what is needed is a commitment to privatization as a programme that is perceived to be in the overall national interest.

V PUBLIC-PRIVATE INTERACTION IN AGRICULTURAL TECHNOLOGY

In 1798, Thomas Malthus contended that global food supplies would not suffice to feed the world's increasing population owing to the fact that the latter grew geometrically whereas agricultural production increased only arithmetically. However, over 200 years later, Malthus's fears have not yet been realized because in making his projections, Malthus had not taken account of the technological revolution that was being created by the Industrial Revolution. As noted in chapter IV, the private sector in a free market may be seen as an innovation machine, continually improving its products and processes. This became the case not only in the manufacture of goods, but also in agriculture where foodstuffs were produced as commodities not for the consumption of the immediate market, but rather for sale to a larger market. Developments in transport after Malthus had published his work made it possible for distant countries to supply agricultural commodities to large conurbations that could not possibly have fed themselves from their own agricultural resources. Advances in agricultural practices enabled yields to rise to meet the requirements of a growing population—a phenomenon that had not occurred previously when the population and technological progress were largely static.

Entrepreneurs and individual inventors in agriculture, as in any other industry, have had every incentive to undertake research and development (R&D) to effect the improvements in quality and efficiency through which the demand for their product—in this case, food—might be satisfied; and, on the whole, they have been highly successful. Contrary to Malthus's predictions, the real cost of food has decreased steadily over time and satisfying food demand takes up a smaller part of the household budget, at least on the world average basis. However, the private sector did not act alone. The State played a major role in the technological advances that occurred in agriculture—establishing much of the infrastructure that enabled goods to be delivered to markets, providing land and credit to farmers and setting up its own agricultural research institutes.

Technological progress in the agricultural sector, especially in the second half of the twentieth century, has resulted in vastly increased production of foodstuffs, as well as of other agricultural products. Utilizing roughly the same cropland base, farmers are now feeding almost twice as many people: while the land used for crop production increased from 1.4 billion hectares in 1961 to 1.5 billion hectares in 1998, the amount of grain and oilseeds doubled.¹ Advances in agriculture have included the development of new hybrid “high-yield” varieties of corn, wheat and rice, and the development of new fertilizers, as well as

¹ Philip Pardey and Nienke M. Beintema, “Slow magic: agricultural R&D a century after Mendel”, International Food Policy Research Institute, Washington, D.C., 2001.

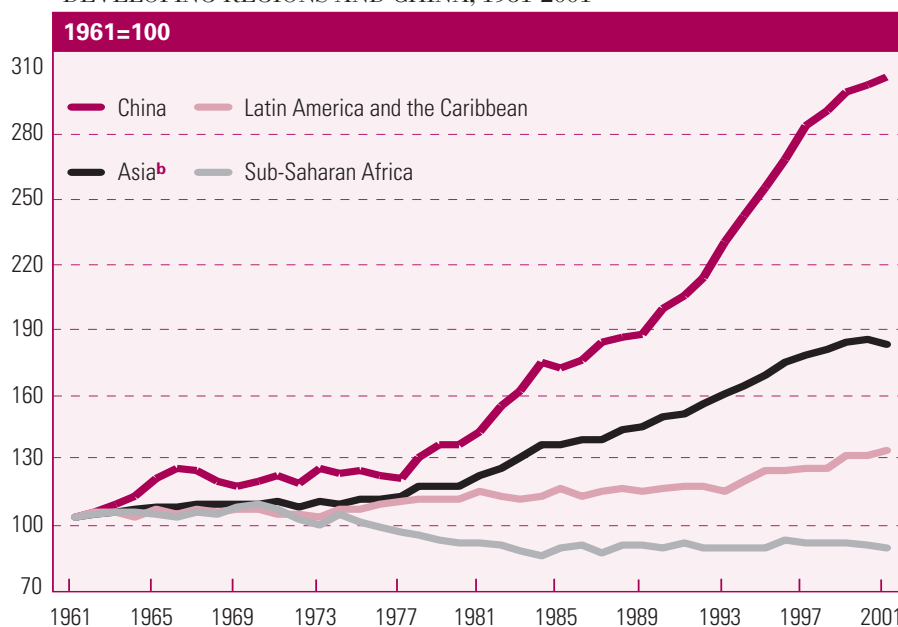
² See *World Economic and Social Survey, 1995* (United Nations publication, Sales No. E.95.II.C.1), box VII.2.

innovations in agricultural machinery and farm practices. These factors contributed to the success of the green revolution during the 1960s and 1970s.²

Although the green revolution did reach Africa, the region, particularly sub-Saharan Africa, has not yet reversed the declining trend of agricultural production on a per capita basis (see figure V.1). While countries in sub-Saharan Africa can, up to a certain level, import to maintain adequate food supply to their population, their limited export ability puts pressure on the balance of payments, thus calling in question the sustainability of food imports. Although there were some successful cases of applying more efficient technology, unfavourable climatic and socio-economic conditions in Africa make it difficult to increase agricultural output significantly: soils are not as rich as in other regions, many areas are drought-prone, and the irrigation and transportation systems necessary for the revolution to be successful are not well developed. Many farmers cannot afford to use fertilizers to correct for the overexploitation of their soil; and, as a consequence, the cost-benefit ratio of the required inputs does not favour their use, partly explaining why the agricultural productivity in the region has not increased as much as in other developing regions.

When considering developments in respect of new agricultural technology and new types of crop seeds and the diffusion of their uses, a variety of factors that differentiate the present from the situation in the 1960s must be taken into account. First, there have been changes in the way that technology is provided. In the early years of the green revolution, input distribution in developing countries was largely in the hands of government agencies, with State enterprises responsible for seed production. Increasing privatization and tight public funding have changed this picture, so that private companies, some of which are also heavily involved in plant breeding, carry out an increasing proportion of seed production. Second, in agriculture, as in many other areas, globaliza-

Figure V.1.
AGRICULTURAL PRODUCTION PER CAPITA,
DEVELOPING REGIONS AND CHINA, 1961-2001^a



Source: UN/DESA based on Food and Agriculture Organization of the United Nations (FAO) (<http://www.fao.org>).

^a Net per capita production index number provided by FAO. The index presents net production—that is to say, total quantities produced minus quantities used for feeding and seeding—weighted by the average international commodity prices during the period 1989-1991.
^b Excluding China.

tion and trade liberalization are having an impact. Farmers today may be exposed to a wider range of inputs and their production must often meet the demands of distant markets, and both factors influence their choices of technology.³ Third, many rural households in growing economies have more opportunities for non-farm labour and employment. Such current realities need to be factored into the future development of appropriate agricultural technology as well as into policies designed to ensure its successful adoption.

The present chapter therefore addresses the question what can be done to accelerate the growth of agricultural productivity by strengthening R&D activities undertaken by the public and private sectors and what role these sectors can play, independently or jointly, in such a new environment. The discussion will be set in the context of two major developments—the possibility of increasing yields from genetically modified foods and the patenting of agricultural inputs, in the context of the protection of intellectual property rights, which is increasingly taking place. Will these two developments advance or hinder the prospects of developing-country food producers for increasing their own agricultural output and supplying other markets?

Agricultural R&D has always involved both public and private funding and activity. During the past 20 years, however, the role of government has been increasingly reduced, mainly owing to tight public funding for such activities. The following concern persists: since agricultural research has the characteristics of public goods, it is not at all clear that the private sector, acting from motives of profit, will make the same choices that the public sector would have made.

On the other hand, while scientific knowledge is a public good, the private sector, if it sees profit-making opportunities, will make significant investment in R&D activities and use the new knowledge created by such activities.⁴ Moreover, the private sector might be better equipped to provide the “learning by doing” needed to augment agricultural R&D. In addition, the public sector is often accused of inefficiency.⁵ There are thus intellectual grounds for the public and private sectors’ involvement in agricultural R&D.

Agricultural development in general, and agricultural R&D activities in particular, are of crucial importance not only for eradicating extreme poverty and hunger in many developing countries, but also for promoting economic development through linkages with other sectors. Simply put, agriculture can act as an escape from the poverty trap.⁶

RESEARCH AND DEVELOPMENT IN AGRICULTURE

R&D activities are categorized in a variety of ways. A traditional classification, although its boundaries are somewhat blurred, is the fourfold one of basic, strategic, applied and adaptive research and/or development. According to this classification, basic research is theoretical or experimental work that is undertaken to acquire new knowledge without any particular commercial application or end use in mind. Strategic research addresses issues that influence the efficiency with which other research further “downstream” can be carried out. Applied R&D has specific commercial objectives with respect to either products or processes. Adaptive R&D is designed to adjust technology to specific environmental or socio-economic conditions. For the purpose at hand, it will be necessary to distinguish only between basic and applied research, and profit-oriented R&D further downstream.

³ David Gibbs makes a similar point, arguing that genetically modified crops need to be seen in the context of restructured activities within the biosciences and linked to the globalization of such activities, as well as the drive for trade liberalization. In contrast, the reaction to genetically modified foods and seeds is national or local (see David Gibbs, “Globalization, the bioscience industry and local environmental responses”, *Global Environmental Change*, vol. 10, No. 4 (2000), pp. 245-257).

⁴ See, for example, Ammon Salter and Ben Martin, “The economic benefits of publicly funded basic research: a critical review”, *Research Policy*, vol. 30, No. 30 (2001), pp. 509–532.

⁵ Dina Umali-Deininger and Klaus Deininger, “Towards greater food security for India’s poor: balancing government intervention and private competition”, *Agricultural Economics*, vol. 25 (2001), pp. 321–335.

⁶ *World Economic and Social Survey, 2000* (United Nations publication, Sales No. E.00.II.C.1), chap. IV.

Who engages in agricultural research and development?

Four major sets of actors engage in agricultural R&D. First, institutions and research councils or divisions of ministries are the domestic public sources of agricultural research. Second there are private firms, often referred to as “agribusinesses”, motivated by potential profit. Next, there are the national private and non-profit organizations, such as foundations, commodity boards, non-governmental organizations and universities. The research undertaken by these bodies is often channelled via the public extension system to what will be the final users of the technologies such as agricultural producers and processors. Finally, there are the national and international public institutes with a global focus. Examples of actors belonging to this set include specialized national agricultural research institutions (NARIs), as well as international, regional and national research agencies, such as the Consultative Group on International Agricultural Research (CGIAR), the Centre de coopération internationale en recherche agronomique pour le développement (CIRAD), the International Development Research Centre (IDRC) and the Australian Centre for International Agricultural Research (ACIAR). These institutions engage in collaborative research and networking and the findings they generate are disseminated to various countries.⁷

Private sector participation in agricultural R&D depends on the potential profits from the R&D being undertaken, as well as on the firm’s ability to appropriate these returns for itself.⁸ In particular, large markets are attractive because they enable firms to take advantage of economies of scale. In turn, this means that private R&D tends to focus on commodities and technologies for which there is high potential demand on world markets. Conversely, the other commodities for which this is not the case—irrespective of their social value—will fall by the wayside. Since profit is dependent on commercial applicability and size of the market, domestic and international public entities will always need to fill the “gap” between profitable private sector research activities and socially optimal levels.

A variety of factors have conspired to focus attention on the role of the private sector in agricultural R&D. Public research systems in most countries faced stagnating or declining funding levels by the second half of the 1990s and weak management and bureaucratic inefficiencies intensified the effects of reduced funding. At the same time, increasing attention was being paid to intellectual property rights owing to adherence to the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPs).⁹ The implementation of the Agreement which emerged from the 1994 Uruguay Round of multilateral trade negotiations has made returns to private investment potentially more valuable by increasing the ability to capture all possible returns. There has also been an increasing focus on privatization in numerous countries and many sectors over the course of the 1980s and 1990s. Lastly, growing global commercialization of agriculture, together with increased competition in domestic and international markets, has resulted in the increased use of purchased inputs. In turn, this has raised the demand for such inputs to a level that could sustain greater private sector involvement.¹⁰

The distribution of R&D between the public sector and the private sector is determined by more than their respective concentrations on potential profit. There is evidence that public and private R&D have different impacts on pro-

⁷ For more on different participants in the agricultural research sector, see Dina L. Umali, *Public and Private Sector Roles in Agricultural Research: Theory and Experience*, World Bank Discussion Papers, No. 176 (Washington, D. C., World Bank, 1992), pp. 6-8.

⁸ As Umali (op. cit.) points out, potential returns are dictated, on the one hand, by such factors as the size of the market and the level of development of the country in question and, on the other, by the quality and costs of research inputs.

⁹ See *Legal Instruments Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, done at Marrakesh on 15 April 1994* (GATT secretariat publication, Sales No. GATT/1994-7).

¹⁰ See Carl E. Pray and Dina Umali-Deininger, “The private sector in agricultural research systems: will it fill the gap?”, *World Development*, vol. 26, No. 6 (1998), pp. 1127-1148.

ductivity growth in agriculture, as well as different routes to that impact. Examining seven economies in Asia from the mid-1980s to the second half of the 1990s bolsters the evidence for strong complementarities between public and private research. Public research provided important “upstream” science and technology for private firms to adapt into applied product innovations, as well as reduced the cost of research inputs for private companies. For example, public research provided basic technology, such as downy mildew-resistant corn in South-East Asia and downy mildew-resistant millet in India. These breakthroughs allowed the development of the hybrid seed industries in South and South-East Asia. A survey of Indian private plant breeders found that the Indian public research system had been a major source of breeding material for cotton and sorghum. In China, two local private research firms are evolving out of provincial hybrid rice and corn research programmes. Moreover, public research has provided technology for improving seed firms’ appropriability. Hybrid rice has been the focus of much private research in India and some private research in the Philippines, Pakistan and Thailand, owing to the work of the International Rice Research Institute (IRRI), as well as national government programmes that developed hybrid rice technology for the tropics. Finally, public research has also been an important source of scientists for the private sector.¹¹

The notion of complementarity is yet further reinforced by examining the effects of cuts in federal science funding on the progress of science in the United States of America over the period 1953-1995. Data on government and private funding of science show that past public funding of science had not “crowded out” private funding of science: instead, there was “crowding in”,¹² implying that they are likely to wax and wane together. Among the initiatives geared towards strengthening the complementarity between research undertaken by different sectors has been the principle of sharing costs, with industry providing half the funding and government providing the other half. This approach has been fostered in Great Britain through the so-called LINK scheme, where a number of priority topics were identified and bids sought to address them through such joint funding. As of the late 1990s, the United Kingdom experience suggested that while privatizing science R&D had resulted in a number of benefits in terms of customer responsiveness and cost-effectiveness, an excessive focus on cutting short-run costs as opposed to a focus on the longer-run benefits could have a long-run negative impact on science and technology. Therefore, there is a significant role for the government to play in fostering public-private programmes and alliances in R&D with the appropriate time-horizons.¹³

Trends in expenditure on agricultural R&D

Expenditure on agricultural R&D in 1995 in developed and developing countries is estimated to have amounted to about \$33 billion, with 36 per cent of this total being for R&D carried out in developing countries (see table V.1). Roughly two thirds of expenditure on agricultural R&D in developed and developing countries was public. However, the differences between developed and developing countries were dramatic. In the developed countries, such research was divided fairly equally between public and private institutions, while in developing countries agricultural R&D was overwhelmingly a public undertaking.

¹¹ Carl E. Pray and Keith Fuglie, “Private investment in agricultural research and international technology transfer in Asia”, United States Department of Agriculture, Agricultural Economic Report No. 805, Washington, D.C., 2001.

¹² See Arthur M. Diamond, Jr., “Does federal funding ‘crowd in’ private funding of science?”, *Contemporary Economic Policy*, vol. 17, No. 4 (1999), pp. 423-431.

¹³ See Peter Cook, *loc. cit.*

Table V.1.
EXPENDITURE ON AGRICULTURAL RESEARCH AND DEVELOPMENT,
DEVELOPED AND DEVELOPING COUNTRIES, 1995

Billions of 1993 international dollars			
	Public	Private	Total
Developing countries	11.5	0.7	12.1
Developed countries	10.2	10.8	21.0
Total	21.7	11.5	33.2

Source: Philip G. Pardey and Nienke M. Beintema, "Slow magic: agricultural R&D a century after Mendel", International Food Policy Research Institute, Washington, D.C., 2001, table 2.

¹⁴ There is a fair amount of variation between countries, however. On the one hand, in Chile and Peru, private companies accounted for 4 and 6 per cent of agricultural research expenditure, respectively, in 1995. On the other hand, that same year, the comparable figures in Ecuador and Mexico were 36 and 28 per cent. See Pray and Umali-Deininger, loc. cit.

¹⁵ For all data and further details, see Pardey and Beintema, loc. cit.

Overall, only some 5 per cent of such research is carried out by the private sector.¹⁴ This is why the issue of reduced public participation in agricultural research is so significant for developing countries. Reduced public involvement would have to be counterbalanced by greater participation by developing countries' private sectors and/or by developed countries' private institutions focusing more explicitly on areas of concern to the developing economies.

Globally, public spending on agricultural R&D almost doubled from \$11.8 billion to \$21.7 billion over the period of 1976-1995 (see table V.2). However, it grew more rapidly in developing countries than in developed—4.5 per cent per annum compared with 1.9 per cent per annum - given the smaller base in the former. As is so frequently the case, disparities between developing regions were large. Growth of expenditure was robust in Asia and the Pacific, China and the Middle East and North Africa, but sluggish in sub-Saharan Africa.¹⁵ Notwithstanding this region's low expenditure, in 1995 for the first time, developing countries as a group spent a greater sum (\$11.5 billion) than the developed economies (\$10.2 billion) on public agricultural research.

While the absolute amount spent by developing countries is now larger than that spent by developed countries, research effort in agriculture of the former group of countries is not as "intensive" as that of the latter group. This is simply because the share of the agricultural sector in gross domestic production in the developing region is larger than in the developed region, thus making the share of research-related expenditure in total agricultural activities smaller. In fact, developing countries spent less on research expenditure relative to the size of the agricultural sector, the population and employment in the sector (see table V.3).

In 1995, the developed economies spent over four times what the developing countries spent on public agricultural research per agricultural output—and this despite the fact that agriculture is clearly of greater importance to the domestic economies of the latter group of countries as a whole. Indeed, the importance of agriculture in sub-Saharan Africa and in some countries in Latin America helps to explain the relatively high public expenditures in these two regions in absolute terms.

It should be noted that sub-Saharan Africa is the only region with declining intensities. Up to the mid-1970s, the total number of researchers increased significantly and the dependency on expatriate researchers declined, while such increases were matched by growth in expenditure.¹⁶ Since then, resources have been spread increasingly thin, threatening the efficiency and effectiveness of public agricultural research in the continent. Furthermore, some experts cau-

¹⁶ Philip G. Pardy and Nienke M. Beintema "Investments in African agricultural research", *World Development*, vol. 25, No. 3 (1997), pp. 409-423.

Table V.2.

PUBLIC AGRICULTURAL RESEARCH EXPENDITURE, 1976 AND 1995

Billions of 1993 international dollars		
	1976	1995
Developing countries	4.7	11.5
Sub-Saharan Africa	1.0	1.3
Asia and the Pacific (excluding China)	1.3	4.6
China	0.7	2.1
Latin America and the Caribbean	1.1	1.9
Middle East and North Africa	0.6	1.5
Developed countries	7.1	10.2
Total	11.8	21.7

Source: Philip G. Pardey and Nienke M. Beintema, "Slow magic: agricultural R&D a century after Mendel", International Food Policy Research Institute, Washington, D.C., 2001, table 1.

Table V.3.

THREE PUBLIC AGRICULTURAL RESEARCH INTENSITY INDICATORS, 1976 AND 1995

	Ratio of expenditure to agricultural GDP (percentage)		Expenditure per capita (United States dollars)		Expenditure per economically active agricultural population (United States dollars)	
	1976	1995	1976	1995	1976	1995
Developing countries	0.44	0.62	1.5	2.5	4.6	8.5
Sub-Saharan Africa	0.91	0.85	3.5	2.4	11.3	9.4
China	0.41	0.43	0.7	1.7	1.8	4.1
Other Asia	0.31	0.63	1.1	2.6	3.8	10.2
Latin America and the Caribbean	0.55	0.98	3.4	4.6	26.0	45.9
Developed countries	1.53	2.64	9.6	12.0	238.5	594.1
Total	0.83	1.04	3.3	4.2	12.9	17.7

Source: Philip G. Pardey and Nienke M. Beintema, "Slow magic: agricultural R&D a century after Mendel", International Food Policy Research Institute, Washington, D.C., 2001, table 3.

tion that a large portion of research expenditure is spent on administrative overhead and the maintenance of an extensive network of research stations and farms, thus reducing further expenditure on purely scientific research.

The structure of private R&D has changed over time. In the United States, for example, where time-series data are available, agricultural machinery and post-harvest food processing research accounted for over 80 per cent of total private agricultural R&D in 1960. By 1996, the contribution of these areas had fallen to 42 per cent of the total. "Growth areas" in private agricultural R&D have been plant breeding and veterinary and pharmaceutical research, as well as spending on agricultural chemical research.¹⁷ The shift towards such research areas seems to be consistent with the recent surge in genetic modification (GM) technology in many parts of the world.

¹⁷ Philip G. Pardey and Nienke M. Beintema, "Science for development in a new century: reorienting agricultural research policies for the long run", New York, UNDP, 2001, pp. 16-17, background paper for *Human Development Report, 2001* (New York, Oxford University Press, 2001).

PUBLIC-PRIVATE SECTOR INTERACTION

A number of factors play a major role not only in how agricultural R&D is carried out, but in whether it is even carried out. There is the question how public and private R&D activities interact in terms of some form of cooperation, as well as some division of labour, between these two sets of actors.

The public sector has to come to grips with the growing capacities of private research. The challenge will be for public sectors to fill the gaps, as regards, for example, identifying applied plant breeding priorities that neither domestic private sectors, nor transnationals, are willing to address. From this perspective, many crops and production issues will continue to fall into the national public sector domain, which, in turn, needs to make the best possible use of international public agricultural research centres, as well as of proprietary technology. The latter will require that public research bodies have sufficient intellectual property management skills to be able to interact productively with the private sector.¹⁸ The public sector must also take the lead in providing the information that allows farmers to make the best use of new technology. Meanwhile, private research can be expected to focus on products with large markets. A current concern is that for agricultural research in general, and for biotechnology in particular, “most public sector organizations have yet to formulate a strategy to complement private sector research”.¹⁹

At the same time, there is ample scope for both public and private involvement and joint participation by both sectors is common. A recent example is afforded by the decoding of the full genetic sequence of rice, announced in early April 2002, thereby providing agricultural scientists with the opportunity of developing improved strains of rice and cereals - such as barley, maize and wheat - that are more nutritious, drought-resistant and less vulnerable to certain pests and diseases than are existing varieties. This work was undertaken by two separate research teams—one commercially funded and the other publicly funded. The former, a research team from Syngenta, a Swiss-based biotechnology company, worked on *japonica*, a rice strain that contains 32,000-50,000 genes. Meanwhile, the Beijing Geonomics Institute decoded the genome of the *indica* rice strain, a variety common in China and other Asian-Pacific countries. A third group—the International Rice Genome Sequencing Project, an international consortium led by the Government of Japan—has been working on a more complete mapping of the *japonica* rice genome since 1997 and expects to finish in late 2002. Syngenta agreed to share its rice genome draft sequence with this Japanese consortium in May 2002, as did Monsanto, a transnational corporation, which in 2000 had developed a rough draft of the genetic make-up of *japonica*.²⁰ The contribution from Syngenta and Monsanto is expected to accelerate the completion of the full sequence and to reduce the overall project costs.

There have been co-mingled public and private inputs, including from private foundations, and collaborations in Africa, as well. At the end of March 2002, the West Africa Rice Development Association (WARDA) announced that farmers in West Africa would receive a newly developed breed of rice, which increases harvests by up to 50 per cent. WARDA, formed in 1971 by 11 African countries with the assistance of the United Nations Development Programme (UNDP), the Food and Agriculture Organization of the United

¹⁸ See Robert Tripp, “Agricultural technology policies for rural development”, *Development Policy Review* (Overseas Development Institute, London), vol. 19, No. 4 (2001), pp. 479-489.

¹⁹ Derek Byerlee and Ken Fischer, “Accessing modern science: policy and institutional options for agricultural biotechnology in developing countries”, *World Development*, vol. 30, No. 6 (2002), pp. 931-948.

²⁰ *Washington Post*, 29 March 2002, p. E04; *Financial Times*, 5 April 2002; and *The New York Times*, 5 April 2002.

Nations (FAO) and the Economic Commission for Africa (ECA), is an autonomous intergovernmental research association, currently consisting of 17 member States. In turn, WARDA, which is currently supported by its member States, developed countries, international organizations, including development banks and research organizations, and private foundations, is a member of the Consultative Group on International Agricultural Research (CGIAR), a network of 16 international research centres supported by over 50 public and private donors.²¹ So-called Nerica—short for New Rice for Africa—combines the hardiness of traditional African strains with the productivity of Asian varieties.²² This new variety of rice, the result of more than 10 years of research, has been developed to produce high yields without the need for irrigation; in addition, it matures about a month earlier than conventional varieties and is richer in protein. Early results have been encouraging, with increased rice production in Guinea, for instance, reducing its rice import bill by \$10 million in 2001. The seeds will be distributed to farmers in Benin, Côte d'Ivoire, the Gambia, Guinea, Mali, Nigeria and Togo. The target is to produce 750 million tons by 2003, which could save those seven countries as much as \$100 million by reducing rice imports.

Participatory research is at the heart of the Nerica success story. Through a mechanism called participatory varietal selection, thousands of farmers grew several varieties and provided feedback to WARDA. In this way, scientists in WARDA were able to learn about the traits that were most valuable to the farmers and to incorporate farmers' preferences into the breeding strategies.²³

Issues of public-private interaction are discussed in the context of two recent major developments. The first is genetically engineered technology that can increase crop yields and strengthen crop resistance to pests, drought and other natural calamities. The other is the issue of intellectual property rights (IPRs) which are central to the motivations of engaging in R&D in the private sector, thus affecting the types and ranges of R&D undertaken by the private and public sectors.

Genetically engineered technology

One area of agricultural research increasingly calling for interaction between the public and private sectors is genetically engineered technology. Genetic engineering allows the modification of a plant through gene transfer, rather than through the much lengthier process of conventional selective breeding. The material can come from other families, species and even kingdoms, and this is not possible with conventional breeding. Genetic engineering is thought to offer large potential benefits, both for the private sector entities directly involved and for society at large. At the same time, it embodies a number of broad risks, mostly unquantifiable in advance, and some with potentially large negative effects; in many cases, a large part of these consequences would not be borne by those developing or selling these technologies, but by society at large. While the potential rewards serve as large incentives for the private sector to develop these technologies, there is a critical role for the State in mitigating the risks associated with them and in continually conducting studies itself or through eminent scientific bodies that can form the basis for public discussion leading to the appropriate legislation.²⁴

²¹ <http://www.warda.cgiar.org/> For more information on WARDA, see "Development of agriculture and food production in Africa: WARDA's success in technological development and dissemination", discussion paper, No. 1, contained in part II of the report of the Ad Hoc Expert Group Meeting on Science and Technology for the Development of the Least Developed Countries, New York, 12-14 March 2001 (pp. 37-57), organized by the Office of the Special Coordinator for Africa and the Least Developed Countries of the Department of Economic and Social Affairs of the United Nations Secretariat in collaboration with the Economic Commission for Africa and the Economic and Social Commission for Asia and the Pacific.

²² WARDA news release, March 2002, available at <http://warda.org/News/>; and BBC News, 28 March 2002 (<http://news.bbc.co.uk>).

²³ Guy Manners, "NERICA: New rice transforming agriculture for Africa", *Science in Africa* (<http://www.scienceinfrica.co.za/nerica.htm>).

²⁴ See, for instance, the study of the Royal Society entitled "Genetically modified plants for food use and human health: an update", February 2002 (<http://www.royalsoc.ac.uk>).

Application of modern biotechnology in food and agriculture has the potential of increasing productivity and reducing the costs of production. It is sometimes argued that the economic benefits of genetically modified crops accrue primarily to the companies that develop the new varieties and hold the patents, along with the seed companies that distribute them. However, they should also lead to higher incomes for innovative producers, reduced prices for consumers, or some combination of the two. Farmers may gain from reduced pest management costs and, in the case of herbicide-tolerant crops, from greater efficiency as regards pesticide use. The larger yield should mean increased supplies and reduced prices for consumers. Since agriculture is often a more significant segment of the economy in developing countries than in developed ones, the gains are likely to be relatively more important to developing countries. Similarly, since consumers in developing economies spend higher proportions of their budgets on food, they are therefore likely to benefit more from these advances than their counterparts in developed countries.

On the negative side, genetically modified organisms give rise to environmental, food safety and broader development concerns. These include the danger of creating “super-weeds” that are resistant to pests and herbicides, the health risks for people with allergies, the risk that beneficial predators of crop pests could be harmed inadvertently, concerns about the possible impacts on organic farming, the possibility that antibiotic resistance in maize, for example, could spread to livestock and from livestock to humans, and potential dependence on bioengineered seeds and technology, especially given the development of so-called terminator genes in genetically enhanced seeds, which cannot be replanted. The public’s concern over safety has been increased by some past cases—like that of bovine spongiform encephalopathy (BSE) or mad cow disease—where assurances from official bodies that food supplies were not in danger proved to be incorrect. Additionally, there is concern that reducing the number of crop varieties increases the vulnerability of farmers, but also consumers, to a failure of the remaining varieties. Diversity is vital for smallholder farmers in developing countries. Because of these concerns, some degree of public regulation is widely deemed necessary.

The nature and extent of regulations have different impacts on producers and consumers. Weaker regulations tend to make consumers more hesitant about accepting genetically modified products. Stricter regulations, on the other hand, tend to make consumers feel safer but smaller seed companies and biotechnology companies find it more difficult to compete in a highly regulated environment because of the increased costs such regulations usually entail. This restrains the supply of agricultural biotechnology not only in industrialized countries but also and especially in the developing economies where resources are scarcer.

Since the late 1970s, when the commercial potential of genetic modification (GM) became evident, many Governments have introduced regulations for research in and release of genetically modified organisms (GMOs). By early 2001, more than 187 genetically modified crops, including most of the important crops, had been approved for planting, feed or food use in at least 13 individual countries, including Argentina, Australia, Canada and the United States, and some countries in the European Union (EU). Successfully modified traits important for the major agricultural crops include delayed ripening, herbicide

tolerance, and insect and virus resistance, as well as modified colour or oil content.²⁵ Because of differences in national strategies for technological development, in ecosystems and crop production, in national attitudes towards environmental issues and food safety concerns and in regulatory capacity, such regulations have varied. For example, the Government of the United States has kept regulations on GM technology at a minimum so as to encourage its development in the country. Its products are, however, tested by the United States Food and Drug Administration (FDA). Western Europe, on the other hand, has adopted a more extensive regulatory framework, including the European Parliament's voting in July 2002 to introduce GM labelling and traceability rules. At present, there is no internationally agreed regulation on food safety and GM technology. However, in March 2000, the Codex Alimentarius Commission, created by FAO and the World Health Organization (WHO) in 1963, established an ad hoc Intergovernmental Task Force on Foods Derived from Biotechnologies to develop standards, guidelines or recommendations for foods in this area.²⁶

This fragmented system of conflicting national food safety standards, and the absence of globally accepted standards, limit export opportunities, especially for poorer developing countries. For example, it has been estimated that adopting a worldwide standard for aflatoxin, based on current international guidelines, would increase the value of the nut and cereal trade from a set of 31 countries (21 of them developing) by about \$6 billion, or more than 50 per cent, above 1998 levels.²⁷ This suggests that it is not so much the existence of standards that serves as an export bottleneck, as the variability of import regulations among export markets. Similarly, the adoption of sanitary and phytosanitary requirements has been shown to be a major factor hampering the ability of developing countries to exploit export opportunities for agricultural and food products in developed-country markets.²⁸ At the same time, consumer acceptance or distaste for genetically modified crops in the domestic market can also have an effect on a developing country's agricultural trade. For example, because of their potential for reducing imports, technological advances in the agricultural sector were a political priority in Brazil, but consumer resistance has played a major role in slowing progress there.²⁹

The ad hoc Intergovernmental Task Force on Foods Derived from Biotechnology is considering the labelling of biotechnology-derived foods to allow the consumer to make an informed choice. In response to consumer reactions against genetically modified foods in Western Europe and also, to a certain extent, in Japan, separate production systems for genetically modified and non-genetically modified crops are emerging in the maize and soybean sectors in such countries as Argentina, Canada, China and the United States.³⁰ However, such an approach requires an elaborate (and therefore costly) monitoring and tracking system and this is likely to make the coexistence of two production systems non-viable in many developing countries. Particularly for developing countries that are reliant on agricultural exports, access to the new technologies is likely to mean that they will have to decide whether they wish to focus on the production and export of genetically modified foods or attempt to develop a market for exports of non-genetically modified foods to regions adverse to the genetically modified product. For example, Western Europe is Africa's major export market for agricultural products and could be such a niche market for the region's exporters.³¹

²⁵ See Michele Marra, "Agricultural biotechnology: a critical review of the impact evidence to date", in *The Future of Food: Biotechnology Markets and Policies in an International Setting*, Philip G. Pardey, ed. (Baltimore, Maryland, Johns Hopkins University Press, 2001).

²⁶ FAO, "FAO statement on biotechnology", March 2000 (<http://www.fao.org/biotech/stat.asp>).

²⁷ John S. Wilson and Tsunehiro Otsuki, *Global Trade and Food Safety*, World Bank Policy Research Working Paper, No. 2689 (Washington, D.C., World Bank, 2001).

²⁸ Spenser Henson and Rupert Loader, "Barriers to agricultural exports from developing countries: the role of sanitary and phytosanitary requirements", *World Development*, vol. 29, No. 1 (2001), pp. 85-102.

²⁹ Leila M. Oda and Bernardo Soares, "Genetically modified foods: economic aspects and public acceptance in Brazil", *Trends in Biotechnology*, vol. 18, No. 5 (2000), pp. 188-190.

³⁰ Chantal Pohl Nielsen and Sherman Robinson, "Genetic engineering and trade: panacea or dilemma for developing countries", *World Development*, vol. 29, No. 8 (2001), pp. 1307-1324.

³¹ See Chantal Pohl Nielsen, Karen Thierfelder and Sherman Robinson, "Genetically modified foods, trade and developing countries", Trade and Macroeconomics Division, International Food Policy Research Institute, Washington, D.C., 2001.

³² The term "precautionary approach" was used in principle 15 of the Rio Declaration on Environment and Development (*Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992*), vol. I, *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I.

³³ See United Nations Environmental Programme: *Convention on Biological Diversity* (Environmental Law and Institution Programme Activity Centre), June 1992.

³⁴ Anthony Arundel, "Economics: the Achilles heel of agricultural biotechnology", *Trends in Biotechnology*, vol. 19, No. 10 (October 2001), p. 428.

If a country decides to produce genetically modified crops, it should adopt a precautionary approach to protect the environment.³² It should take into account such factors as the possibility of outcrossing, which could lead, for example, to the development of more aggressive weeds with increased resistance to diseases or environmental stresses, and the possible loss of biodiversity, as a result of the displacement of traditional cultivars. The Cartagena Protocol on Biosafety to the Convention to Biological Diversity,³³ adopted by the Conference of the Parties to the Convention on 29 January 2000, seeks to protect biodiversity from the potential risks posed by modified organisms resulting from biotechnology and establishes a procedure for ensuring that countries are provided with the information necessary to make informed decisions. In the context of the World Trade Organization, the United States and Canada proposed the establishment of a working group to review the adequacy of existing rules concerning the use of GMOs. This was opposed by environmental non-governmental organizations and consumer groups in Europe who favoured an international convention—outside the World Trade Organization—that would permit the application of the precautionary principle. A final resolution of this matter has not yet been reached.

Adopting genetically modified crops can provide farmers with productivity benefits that outweigh the additional costs of the modified seeds used and there may be large welfare gains for developing countries that are able to adopt such technology. Yet it is not assured that a technology that was primarily developed for crops in the developed countries can be readily transferred to the developing countries. Even if modifications to suit the local conditions are commercially viable, broader public safety and environmental considerations also have to be taken into account. In addition, it may be considered desirable that existing systems be preserved so that non-modified products can be made available to consumers averse to genetically modified foods. Such questions can be addressed by a society only collectively, so that there is going to be an increasing need for interaction between the public and private sectors in order to ensure that all the costs and benefits to society are taken into account when genetically modified crops are being developed and diffused.³⁴

Intellectual property rights

Intellectual property rights (IPRs) are central to the private sector's motivation to engage in R&D because its involvement is usually contingent on firms' ability to capture the returns that are forthcoming from such activities. Responsibility for administering IPRs within individual countries rests with national Governments but there are endeavours by the international community to harmonize laws regarding IPRs across countries. With the entry into force of the World Trade Organization Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPs) on 1 January 1995, developing countries agreed to bring their IPR laws in line with those of other members, though countries could have different periods of time within which to apply all the provisions of the TRIPs Agreement.

In the case of agriculture, the costs of implementation of the World Trade Organization agreements could be large for developing countries. New legislation has to be drafted, for instance, in extending intellectual property right protection to plant varieties, and staff have to be trained. Implementing sanitary

and phytosanitary regulations for trade purposes can also require putting in place disease control measures, ensuring sanitary conditions in food processing and upgrading laboratories and quarantine facilities. It has been estimated that for a typical developing country, the cost of implementing the requirements under just three of the World Trade Organization agreements—on customs valuation, on sanitary and phytosanitary measures and on intellectual property rights (TRIPS)—could amount to \$150 million. This is equal to an entire year's development budget for some of the least developed countries.³⁵

Even if the appropriate IPR laws are passed, it will take some time and resources to build up a system of patent protection that will win the confidence of all concerned. Case law takes time to develop and each country will have to develop a body of expertise in this field.

In relation to agricultural research, the TRIPS Agreement requires that plant varieties be protected. This can be done via patents or via “plant breeders’ rights”, as spelled out under the International Convention for the Protection of New Varieties of Plants.³⁶ This has three broad implications. First, agricultural inputs can no longer be excluded from patent protection. Second, some types of plant breeders’ rights will have to be accepted. Third, enforcement of IPRs will have to be improved because the right to appropriate the economic returns from research activities is an important precondition for private participation.³⁷

Developed and developing countries are likely to have different priorities for agricultural innovation because of different climate and soil conditions, as well as differences in relative input endowments and prices. It has been argued that, with strong IPRs in developing countries, potential profits from innovation should be high and that intellectual property protection should therefore provide an incentive for firms from developed countries to undertake R&D activity that is appropriate to local needs.³⁸ Other benefits of IPRs are said to include an “advertising effect”, a “quality effect” and a “learning effect”. The advertising effect stems from the incentive of a patent holder to increase the demand for the innovation, thus encouraging diffusion. The quality effect arises because patent holders have more motivation to achieve repeat sales to recover their R&D costs than do non-patent holders. The learning effect is a result of the fact that, because IPRs are likely to stimulate diffusion, the human capital of the recipient population will increase, enhancing developing countries’ capacity to generate and utilize additional R&D.³⁹

On the other hand, there are concerns that intellectual property legislation—at the domestic and international levels—may, for a number of reasons, result in nationally and globally suboptimal levels of R&D. Actively enforced IPRs may reduce some firms’ ability to capture the potential returns from any R&D activities and may thus dampen their participation in such initiatives, particularly in developing countries. Where IPRs are operative, there is no incentive for private firms to disclose the results of any R&D that cannot be patented. Consequently, the pool of knowledge released into the public domain will be only a fraction of what has been generated privately. This, in turn, results in an inefficient use of R&D resources owing to the duplication of effort and additional costs incurred by other firms. Moreover, IPR-protected R&D will tend to be underutilized because of the charges imposed for its use. In addition, the rate of diffusion of knowledge may be slowed since IPRs raise the costs incurred by—and thus reduce the profitability of—potential adopters. It is

³⁵ See Dani Rodrik, “The global governance of trade: as if development really mattered”, United Nations Development Programme background paper (October 2001), p.26; and Michael J. Finger and Philip Schuler, *Implementation of Uruguay Round Commitments: The Development Challenge*, World Bank Policy Research Working Paper, No. 2215 (Washington, D.C., World Bank, September 1999).

³⁶ This Convention, concluded in 1961 and amended in 1972, 1978 and 1991, provides plant protection for between 20 and 25 years, though breeders can use an existing protected plant to produce a new variety. The International Union for the Protection of New Varieties of Plants—made up of the parties to the Convention—was established under the 1961 Convention and now has 51 members States (<http://www.upov.int>).

³⁷ Pray and Umali-Deininger, loc. cit.

³⁸ See Peter Phillips and Dan Dierker, “Public good and private greed: realizing public benefits from privatized global agrifood research”, in *The Future of Food: Biotechnology Markets and Policies in an International Setting*, Philip G. Pardey, ed. (Baltimore, Maryland, Johns Hopkins University Press, 2001). Phillips and Dierker maintain that the adoption of patents and copyright protection is, on the whole, welfare-enhancing for developing countries, even though it can limit socially optimal levels of research and commercialization.

³⁹ For additional discussion of these arguments, see Richard K. Perrin, “Intellectual property rights and developing country agriculture”, *Agricultural Economics*, vol. 21, No. 3 (1999), pp. 221-229.

therefore argued that strong and growing patent protection, together with the shift from public to private R&D that such protection encourages, could shrink the pool of technologies available to developing countries and thereby slow their rate of economic development.⁴⁰

⁴⁰ See Dina L. Umali, *Public and Private Sector Roles in Agricultural Research*, World Bank Discussion Papers, No. 176 (Washington, D. C., World Bank, 1992).

⁴¹ See Perrin, *loc. cit.*

Partially because the strength of property protection varies a great deal across countries and over time, empirical evidence about the effects of IPRs for agriculture in developing countries is limited.⁴¹ However, an illustration of the policy dilemma inherent in IPRs is provided by India, which accounts for nearly one quarter of the land under cotton cultivation and is the world's third largest cotton producer. India faces an IPR decision with respect to "Bt cotton"—cotton that has been modified via biotechnology to produce a resistance to insects. The Indian Government has announced that such pest-resistant transgenic cotton will start to be grown on a commercial basis in the season beginning in October 2002. However, stringent conditions are being imposed on the sole licensed producer of the seeds, Mahyco Monsanto Biotech India, a joint venture between Monsanto of the United States and India's Maharashtra Hybrid Seeds. As the use of Bt cotton seeds will provide a benefit of roughly \$100 per acre by eliminating pesticide use and improving productivity and quality, demand for the new seeds is booming. In mid-2002, Mahyco Monsanto enjoyed a monopoly on transgenic cotton seeds and was seeking to step up production. However, there was pressure on the Government to allow other companies to introduce the Bt gene construct. The Indian Government therefore had to weigh the argument of farmers' organizations that competition should ensure that growers obtain Bt cotton seeds at an appropriate price (and thereby disseminate the new technology) against the IPRs of the venture that had developed the improved variety.⁴²

⁴² *Financial Times*, 9 May 2002.

The use of IPRs is an important form of interaction between the public and private sectors and, for many developing countries, is particularly pertinent in the agriculture sector. As the Indian example demonstrates, it is difficult to determine the correct balance between protecting innovators' rights and maximizing the contribution of any innovation to a country's development. At the same time, the fact that private sector R&D is dominated by the profit motive and will therefore be selective is the crux of the case for engaging non-private institutions in agricultural research that is deemed necessary for developmental purposes. Because it is difficult to exclude those who have not paid for R&D from using its results, some areas of agricultural R&D will not generate adequate economic incentives to pique private sector interest and, if deemed to be in society's interest, such R&D will therefore have to be undertaken in the public domain. Various options have been suggested to ensure that research that may seem not to be privately profitable is nonetheless undertaken. Public R&D may focus on so-called orphan commodities—for example, low-value vegetatively propagated crops such as cassava and sweet potatoes, which are important primarily as staples for poor people in the developing world. Another possibility is to directly subsidize private sector research activities so as to make the exploration of more expensive technology viable.⁴³

⁴³ For further points, see Umali, *op. cit.*; and Clive James, "Agricultural research and development: the need for public-private partnerships", in *Issues in Agriculture 9* (Washington, D.C., Consultative Group on International Agricultural Research, 1996).

Another possible way to encourage research is to put in place a purchase-guarantee mechanism, whereby those who developed the new seeds would be assured of a reasonable income from sales. This suggestion is similar to that advanced by the President of the World Bank to spur the development of new

vaccines against diseases that are particularly prevalent in the developing countries: malaria, tuberculosis and acquired immunodeficiency syndrome (AIDS).⁴⁴ The proposal was that a fund be set up to help countries purchase the vaccines if and when they were developed. Such a purchase-guarantee commitment has the advantage of allowing the private sector to pursue the projects it sees as the most promising and, in the case of agricultural products, of giving it an incentive for developing new seed varieties by assuring it that there will be a market for the new products.

POLICY IMPLICATIONS AND CONCLUSION

Global food production growth rates continue to surpass population growth—a phenomenon to some extent attributable over the past four decades to agricultural R&D in general and the green revolution in particular. Further R&D activities are required to play an important role particularly in the context of African development because the growth rate of agricultural production in the continent has been on a par with its population growth rate, thus making per capita production stagnant.

The private sector has become increasingly engaged and increasingly important in carrying out research activities in agriculture since the 1990s, thus ensuring that a mix of public and private involvement will be the trend in the future. Such a blend of public-private activities has a great deal to offer inasmuch as the private sector is profit-oriented. For example, biotechnology and genetic engineering—promising research areas with a high potential for increasing agricultural productivity—as carried out in the future, are not going to be an “all or nothing” proposition, undertaken either by public or by private actors. There is ample scope for participation by both public and private actors, as exemplified by the participatory research selection shown in developing Nerica rice. Indeed, some “division of labour” is called for. In this context, the public sector should concentrate its research efforts increasingly on areas that are socially worthwhile, but have not yet been subject to undertakings by the private sector. From an efficiency standpoint, this is valid in developed and developing countries alike. Included here would be much pre-technology and general scientific research and certain areas of applied research in such fields as environment, food safety and human nutrition. Allowing private research to pursue areas of its own self-interest is only logical, especially since such a course frees up public funds that can then be focused elsewhere.

Moreover, there is a reason why the private sector in developed countries accounts for roughly 80 per cent of biotechnology research worldwide: the fact that this research requires sizeable physical and human capital investment makes it a difficult undertaking for developing countries.⁴⁵ Furthermore, a “critical mass” of scientific research resources is of paramount importance in biotechnology, making consolidation of effort both more fruitful and more cost-effective.⁴⁶ Several surveys by FAO, the Inter-American Institute for Cooperation on Agriculture (IICA) and the International Service for National Agricultural Research (ISNAR) have shown that critical mass is a key element in the case of Latin America and the Caribbean (especially Argentina, Brazil, Mexico, Cuba and Chile), where joint State, private and academic initiatives in genomics and deoxyribonucleic acid (DNA) recombinant technology are open-

⁴⁴ See Rachel Glennerster and Michael Kremer, “The need for new vaccine research” (<http://www.brookings.edu/dybdocroot/comm/PolicyBriefs/pb057/pb57.htm>); and Rachel Glennerster and Michael Kremer, “A better way to spur medical research and development”, *Regulation*, vol. 23, No. 2 (2000).

⁴⁵ Pray and Umali-Deininger, *loc. cit.*

⁴⁶ For further discussion on this point, see James, *loc. cit.*

ing the road to R&D projects oriented to the agri-export market (citruses; salmon; fruits; sunflowers).

As has recently been suggested, to unleash the true power of crop engineering, Governments have to pursue a long-term strategy because “markets by themselves will not do the job”.⁴⁷ The challenge in responding to the biotechnology revolution is how to adapt existing rules (regarding IPRs and regulations on genetically modified foods, for example) to the new realities of crop engineering. Developed countries that embrace genetic engineering should recognize that the dissimilarity between engineered and regular crops is wide enough to necessitate new regulations. Developing countries, meanwhile, face problems because—with a few exceptions—their regulatory systems are not well established. Realizing the potential of agricultural biotechnology will require activist policy reform, not a laissez-faire approach.

It is also imperative to recognize that, even if financing were unlimited, R&D alone would not suffice to increase agricultural output, nor would it allay hunger where it exists. Other complementary activities, such as extension services, are also necessary before returns from agricultural R&D can be realized. For example, comparing productivity growth and the sustainability of irrigated agriculture in Punjab of India and Punjab of Pakistan reveals that the former experienced much higher and more rapid growth of food crop yields from the 1960s to the mid-1990s. The difference can be partly related to dissimilar non-price policies that encouraged much faster growth of inputs in India than in Pakistan. More important, however, is the fact that the time lag between investment in infrastructure and improved productivity was shorter in India and this shorter time lag can be associated to learning by doing and investment in human capital. This suggests the need for policy makers to make a long-term commitment to creating complementarities between investments in technologies and supporting infrastructure.

New and innovative approaches to agricultural R&D will have to be devised in order to maximize the returns on all resources. For example, because such R&D involves serendipity and requires certain “threshold” levels to be effective, a regional approach is logical. One approach, for example, would be to form consortia of public national research systems within a region. Regional collaboration is already occurring through programmes such as the Asian Rice Biotechnology Network (ARBN), and the Asian Maize Biotechnology Network (AMBIONET), as well as the Technical Cooperation Network on Plant Biotechnology in Latin America and the Caribbean (REDBIO); but, to be able to handle sensitive IPR matters and to negotiate with the private sector, such networks will need to be upgraded to the status of consortia, with a legal basis.⁴⁸ In the case of REDBIO, a further institutional development has taken place with the transformation of the ongoing network into a private non-profit foundation (Foundation REDBIO International). Such a course makes particular sense in the agricultural field because of the similar geophysical properties within a region. Again, such novel partnerships are not to be restricted to developing countries. Owing to scarce resources, they are equally applicable to developed economies. One proposal to revitalize agricultural R&D, especially in sub-Saharan Africa, involves the use of so-called competitive agricultural technology funds (CATFs). The CATF model has been used to fund scientific research for many decades in developed countries and for at least 30 years in

⁴⁷ David G. Victor and C. Ford Runge, “Farming the genetic frontier”, *Foreign Affairs*, vol. 81, No. 3 (2002).

⁴⁸ See Byerlee and Fischer, *loc. cit.*

Latin America. A CATF is a pool of money designed to support the development of agricultural technology. When a CATF is established, a set of rules guiding its use, management and accountability arrangements are put in place in support of its objectives. CATFs relate funding more closely to performance, thus placing an activity that is being carried out in the public domain on the competitive market.⁴⁹

A second proposal to spur agricultural R&D entails decentralizing biotechnological innovation, bringing it closer to the land. This is an objective of the Centre for the Application of Molecular Biology to International Agriculture (CAMBIA), based in Canberra, Australia. The Centre's modus operandi is to support local plant breeders and growers in developing the foods they know best and value most highly. For example, CAMBIA researchers are working on new biotech relating to cassava, a starchy root that millions of people in sub-Saharan Africa rely on as their main meal.⁵⁰

Approaches such as CATFs and increased grass-roots innovation may be as close to the cutting edge as one can come in the sphere of agricultural R&D. Agriculture and food security are far from purely economic concerns. On the supply side, agricultural output is the result of a host of political, social and institutional variables. On the demand side, access to adequate food is seen as a basic human need. Thus, not only must additional private resources be harnessed, but the case for increasing levels of public funding for agricultural research with public good characteristics remains strong.⁵¹ Both sets of actors have a contribution to make. The challenge is how to capitalize on their strengths and minimize their weaknesses.

In many instances, a regional approach to agricultural R&D would be both cost-efficient and more productive. It is only through a public-private alliance—at the national, regional and international levels—that Malthusian concerns will continue to be allayed into the future.

⁴⁹ Gerard Gill and Diana Carney, "Competitive agricultural technology funds in developing countries", London, Overseas Development Institute, 1999 (<http://www.odi.org.uk>).

⁵⁰ *The Economist*, Technology Quarterly, 8 December 2001.

⁵¹ See Jonathan Beynon, "The State's role in financing agricultural research", *Food Policy*, vol. 20, No. 6 (1995), pp. 545-550.

VI UTILITY REFORM: THE CASE OF ELECTRICITY

An increasing number of developed, developing and transitional countries are reforming their utility sectors with a view to increasing private sector participation in the provision of basic services. Although the telecommunications sector accounted for a considerable share of privatization proceeds during the 1990s, the energy sector has also played a leading role in the process of utility reform in many countries around the world. The main incentives for this worldwide trend of electricity reform include increasing operational efficiency, enhancing competition, tapping private investments for the improvement or expansion of services and reducing government debt.

The electricity sector has produced some of the most interesting advances in new forms of competition that have been introduced in utility industries still reliant on a single network of pipes or cables. The present chapter focuses on pioneering experiences with public-private cooperation in electricity provision in Chile and the United Kingdom of Great Britain and Northern Ireland. The main aims of these two case studies are (a) to find out whether privatization has improved operational efficiency and quality of services; (b) to assess the impacts of increased competition (and regulation) on electricity prices and consumer welfare; and (c) to determine their usefulness for other countries. It is argued that the British experience with electricity reform, in particular, has produced some useful lessons for other countries.

The chapter concludes that Governments still have an important role to play in public-private interaction for the provision of utility services. Effective regulation, in particular, is essential not only for dealing with monopoly power, price discrimination and other market failures, but also for promoting competition and enhancing consumer choice. While it is recognized that enhancing competition can help to reduce the need for utility regulation in general, industries such as electricity, gas and water contain natural monopoly segments for which the benefits of regulation potentially outweigh its costs.

In addition, in order to assure a smooth privatization process and enough private investment in former public utilities, Governments also need to create a favourable investment environment and implement a broad market liberalization strategy. Another finding is that increased consumer choice and a certain degree of “product differentiation” can provide an incentive for product innovation or improved services by private electricity

providers that did not exist under State-owned monopoly systems. Last but not least, it is shown that the combination of market liberalization, greater private sector involvement and increased competition, together with effective regulation, can lead not only to improved services but also to a significant fall in the real price of electricity and other utility services.

PRIVATE SECTOR INVOLVEMENT IN THE PROVISION OF UTILITY SERVICES

In the past, the provision of utility services, such as electricity, gas, telephony, water and sewerage, were considered examples of “natural” monopolies because of technical and economic obstacles to their efficient provision by more than one producer. Economies of scope were thought to make it more efficient for producers to cover a range of different activities—such as electricity generation and distribution and local and long-distance telephone calls—and thus seek vertical integration. Furthermore, the possibility of deriving economies of scale would make it uneconomic to have two sets of networks competing for the same customer. Large sunk costs of investments required for the construction of networks of pipes and cables also hinder competition by acting as a barrier against new producers’ entering the industry. As a result, the efficient provision of utility services has usually been accompanied by some form of spatial monopoly.

Given their monopoly power—together with the fact that their outputs are often regarded as essential public services—utilities have frequently been subject to ownership or regulation by the State. Moreover, there has always been widespread political commitment to ensuring universal access to basic services, in particular water, sanitation and electricity.¹ In addition to their contribution to improving living standards, utility networks are also a central component of the social overhead capital. They are thus critical for economic activity and are often seen as strategic for national development. As a result, Governments in many countries have been directly involved in their provision.

Rationale for private sector involvement in utility provision

The worldwide drive towards utility reform can be traced back to the increasingly poor performance of State-owned utilities during the 1970s. Generally speaking, they tended to provide low-quality services at a high cost and were often overstaffed as “governments used them to generate and maintain employment”.² The fact that, owing to widespread political interference and weak management, prices tended to be heavily subsidized often resulted in large financial losses and costs to taxpayers. At the same time, fiscal constraints prevented Governments from making adequate investments for proper maintenance, improvement and expansion of utility networks. By the late 1970s, State-owned utilities in many countries were characterized by serious operational inefficiencies and became “a source of considerable macroeconomic burden”.³

It can be argued that, in spite of national and international commitments to universal access to basic services, large segments of the population, notably the poorest in developing countries, lack access to such services primarily because Governments have been unable to raise sufficient revenues to subsidize the

¹ There have been several major international declarations and programmes of action aimed towards universal access to utility services, such as water, sanitation and energy for basic human needs. See, for example, United Nations Millennium Declaration, contained in General Assembly resolution 55/2 of 8 September 2000; and the Copenhagen Declaration and Programme of Action of the World Summit for Social Development (*Report of the World Summit for Social Development, Copenhagen, 6-12 March 1995* (United Nations publication, Sales No. E.96.IV.8), chap. I, resolution 1, annexes I and II).

² See S. Kikeri, “Privatization in competitive sectors: the record so far”, mimeo, World Bank, Washington, D.C., October 2001.

³ A. Islam and C. Monsalve, “Privatization: A Panacea or a Palliative”, ESCAP Development Papers, No. 22 (ST/ESCAP/2122) (2001).

operation of their utilities.⁴ Furthermore, while utility subsidies are often justified on the grounds that lower-income groups cannot afford to pay for basic services, it is usually the wealthier and more influential groups that benefit disproportionately from such subsidies. Inadequate public investment frequently leads public utility networks in many developing countries to exclude the poorest households from services.

For example, while energy subsidies are often advocated for the poor, in practice, subsidized electricity hardly reaches low-income groups. Given that only a small segment of them have access to electricity networks, notably in Africa and in rural areas of many developing countries, these low-income groups usually have to rely on more expensive and lower-quality forms of energy.⁵ Similarly, evidence shows that subsidized urban water supply and sanitation are often provided disproportionately to higher-income groups which, in effect, pre-empt scarce supplies in many metropolitan areas of developing countries. As a result, lower-income groups living in poor neighbourhoods depend on private water vendors who have charged between 20 and over 100 times the rate per cubic metre paid by wealthier residents with piped water supply.⁶

During the 1980s, it became increasingly evident that government ownership itself was an obstacle to effective reform of the utility sector, notably because Governments faced strong social and political pressure to subsidize utility tariffs. As a result, there was a conceptual shift regarding private sector participation and the promotion of competition in the provision of utility services. While in some developed countries, such as France and the United States of America, early forms of private sector involvement had been confined to management of utilities or subject to strict regulation, the new approach implied that privatization of State-owned utilities could be achieved through partial or full ownership of utility assets by the private sector.

Governments of many countries have decided, for instance, to sell partial stakes in State-owned enterprises to private shareholders, sometimes retaining a minority stake or a “golden share” over a period of time in order to influence company policy. Some developed-country Governments have even sold whole utility companies through the stock market, whereas several developing countries have preferred to auction their State-owned utilities directly to other companies, often foreign ones. Other countries with less developed capital markets, particularly economies in transition, have used voucher schemes to transfer ownership of State enterprises to the private sector without cash exchanges.⁷

Greater private sector involvement in utility provision has sometimes taken place through alternative arrangements. For example, the past decade has witnessed a considerable increase in private sector management of public utilities through different types of lease contracts awarded by competitive bidding over various periods of time, along the lines of the “French model” of water privatization.⁸ In addition, it is estimated that about 40 per cent of the investment in private infrastructure projects in all developing countries over the past decade has involved private financing of new enterprises, notably independent power projects (see box VI.1).⁹

Regardless of the model used, during the second half of the 1980s and the beginning of the 1990s, private sector involvement in utilities gradually came to be seen as an effective tool for improving their performance and reducing the budgetary burden caused by their inefficient management. This ideological

⁴ C. Ugaz, “A public goods approach to regulation of utilities”, *Discussion paper, No. 2001/9*, (Helsinki, United Nations University (UNU) World Institute for Development Economics Research (WIDER), 2001).

⁵ *World Economic and Social Survey, 1996* (United Nations publication, Sales No. E.96.II.C.1 and Corr.1), chap. X.

⁶ *Ibid.*, chap. XI.

⁷ Voucher systems are also intended to create or expand national stock exchanges based on the trade of these vouchers.

⁸ The French model of water privatization is based upon four different categories of contractual arrangements between public utilities and private operators, ranging from subcontracting of specific services to 30-year concessionary contracts. See, for example, F. Neto, “Water privatization and regulation in England and France: a tale of two models”, *Natural Resources Forum*, vol. 22, No. 2 (1998), pp. 107-117.

⁹ Including investments in transport infrastructure. See P. Gray, “Private participation in infrastructure: a review of the evidence”, mimeo, World Bank, Washington, D.C., October 2001.

Box VI.1

THE ASIAN IPP MODEL

- a P. Gray, "Private participation in infrastructure: a review of the evidence", mimeo, World Bank, Washington, D.C., October 2001.
- b The origin of IPPs can be traced back to the 1978 Public Utilities Regulatory Policy Act in the United States, which allowed electric utilities to purchase power from small generators. The rapid expansion of IPPs throughout the world was facilitated by the development of new generation technologies, such as combined-cycle gas turbines. See T. Lefevre and J. L. Todoc, "IPPs in APEC economies: issues and trends", (paper presented at the *Joint Eighth Asia-Pacific Economic Cooperation (APEC) Clean Fossil Energy Technical Seminar*, Bangkok, Thailand, 30 October-3 November 2000.
- c Ibid.
- d See, for example, C. M. Tan, "Build-operate-transfer model for infrastructure developments in Asia: reasons for successes and failures", *International Journal of Project Management*, vol. 17 (1999), pp. 377-382; and D. Grimsey and M. K. Lewis, "Evaluating the risks of public private partnerships for infrastructure projects", *International Journal of Project Management*, vol. 20 (2002), pp. 107-118.
- e J. Stern, "Electricity and telecommunications regulatory institutions in small and developing countries", *Utilities Policy*, vol. 9 (2000), pp. 131-157. This "unbundled model" will be discussed further on in this chapter.
- f Ibid., p. 134.
- g Gray, loc. cit. p. 18.
- h PPAs usually involve long-term "take-or-pay" contracts with incumbent state-owned utilities.
- i One such dispute involved the Dahbol IPP in India, which led Enron, a United States energy company, to take legal action to terminate the contract and collect the penalty fees, as the allowed retail prices were too low to support the contract price of the generation from the project.
- j Stern, loc. cit.

It is estimated that about 40 per cent of private spending in utilities and other infrastructure projects in developing countries during the 1990s involved private funding of new assets, as opposed to purchasing of existing State-owned assets.^a Independent power projects (IPPs) have played an increasingly prominent role in these "greenfield" investments, notably in Asian developing countries.^b Asia became the most dynamic market for IPPs in the world during the 1990s, particularly before the 1997-1998 financial crisis. In 1997, for example, the Asia and Pacific region accounted for over half the number of IPPs in the world and almost 75 per cent of total investment in these projects.^c Although there are different types of IPPs, build-operate-transfer (BOT) projects tend to be the most popular in Asia.^d

It is sometimes argued that for many developing countries, the "Asian IPP model" provides an alternative to the "unbundled model" of electricity privatization.^e The Asian model usually involves a State-owned, vertically integrated electricity company purchasing additional power on contract from a small number of independent producers. Although the incumbent electricity company usually controls the monopoly segments (transmission and distribution) and even final delivery to customers, IPPs can compete with State companies in the generation segment. It is also argued that the Asian IPP model "was intended to, and apparently succeeded in economizing on regulation".^f

Some Governments perceive these projects "a free lunch" since they allow countries to increase generating capacity without having to undertake more complex reform of the electricity sector. For example, in such countries as India, Indonesia, Malaysia and Pakistan, Governments or State-owned enterprises decided to increase generation capacity through IPPs "without making at least parallel progress in improving the efficiency and financial self-sustainability of the State-owned power companies that had contracted to purchase the power".^g In many cases, given the widespread practice of price subsidization, State-owned utilities became unable to pay for the amounts of electricity stipulated in power purchase agreements (PPAs),^h leading to severe financial problems and legal disputes.ⁱ There are therefore risks and potential pitfalls with IPPs, particularly with regard to their reliance on PPAs. It is estimated that up to 60 per cent of contracts involving PPAs are renegotiated within three years owing to a variety of disputes.^j

The experience with IPPs in South-East Asia shows that the existence of clear contractual safeguards in long-term PPAs can, however, offer some protection against

shift gave rise to path-breaking efforts to increase the private sector's role in the provision of utility services, notably in the United Kingdom (Great Britain), as well as in other developed and even developing countries, such as Chile. Although there were many reasons for those early experiences of public-private cooperation, the most urgent priorities in most cases were to improve operational efficiency¹⁰ and services.

It was estimated, for example, that in the early 1990s, annual losses arising from technical inefficiencies in utility and transportation sectors—such as leaking water pipes and electricity transmission losses¹¹—in developing countries were equivalent to over a quarter of annual investment in those sectors (see figure VI.1). In addition, the widespread practice of setting average prices below long-run average costs produced additional losses of US\$ 123 billion a year. Given the growing scarcity of public funding, price subsidization of utility ser-

¹⁰ Greater operational efficiency is defined as the ability to produce a given level of output with fewer inputs (or at a lower cost).

¹¹ As also shown in *World Economic and Social Survey, 1996* (chap. X), in the early 1990s, transmission and distribution losses (as a percentage of net generation) tended to be much higher in electricity industries under public ownership than in privatized systems.

economic shocks or unexpected government behaviour. For example, private investors in the Philippines and Thailand have usually relied on enforceable legal safeguards to underwrite their agreement with the Government, whereas investors in Indonesia and Malaysia have opted for non-contractual safeguards. When the 1997 Asian financial crisis hit all four countries, the prospects for existing IPPs in these countries varied. There is evidence, for example, that IPP investors with contractual safeguards in Thailand and Philippines received better treatment after the crisis than investors in the other two countries.^k

Nonetheless, it is increasingly recognized that relying on PPAs for regulation can be very risky, particularly in the event of a macroeconomic shock. The Asian financial crisis showed that the Asian IPP model lacked effective regulatory mechanisms for dealing with major economic shocks. The model's PPAs proved particularly inadequate for coping with devaluations arising from the crisis. As indicated in the case study of electricity privatization in Western Africa (see box VI.2), such contracts can never cover all potential issues of conflict. The existence of an independent, sector-specific regulatory agency is thus essential not only to resolve disputes, but also to deal with such shocks. Another underlying problem with the IPP model in most developing countries (both in Asia and elsewhere) is that the IPPs are often used to preserve an artificial monopoly over the wholesale trading of electricity even when the vertically integrated, State-owned utility is unbundled. In many developing countries, this "single-buyer model" tends to weaken payment discipline and imposes considerable contingency liabilities on Governments.^l

While the Asian financial crisis slowed down the rapid growth of IPPs in the region and led to a temporary generation overcapacity in most affected countries, new IPPs are beginning to emerge as growth resumes. Several countries, such as Indonesia, the Philippines and Thailand have learned the lessons from the flaws in the Asian IPP model and have begun to introduce further reforms of their electricity sector.^m These reforms include vertical and horizontal unbundling, the privatization of non-monopoly segments, the enhancement of competition in wholesale markets (and eventually even in delivery services) and the creation of independent regulatory agencies to support electricity reforms. An increasing number of Governments of Asian developing countries agree that privatization and liberalization of the energy sector are essential for their future development.ⁿ

Box VI.1 (continued)

^k For details of these contractual safeguards, see W. J. Henisz and B. A. Zelner, "A comparative study of the political economy of private electricity provision in four southeast Asian countries", *East Asian Economic Perspectives*, vol. 12 (March 2001), pp. 10-37.

^l See L. Lovei, "The single-buyer model: a dangerous path toward competitive electricity markets", in *Public Policy for the Private Sector*, No. 225 (Washington, D.C., World Bank, December 2000).

^m See, in particular, Lefevre and Todoc, loc. cit., Stern, loc. cit., and J. Stern and S. Holder, "Regulatory governance: criteria for assessing the performance of regulatory systems—an application to infrastructure industries in the developing countries of Asia", *Utilities Policy*, vol. 8 (1999), pp. 33-50.

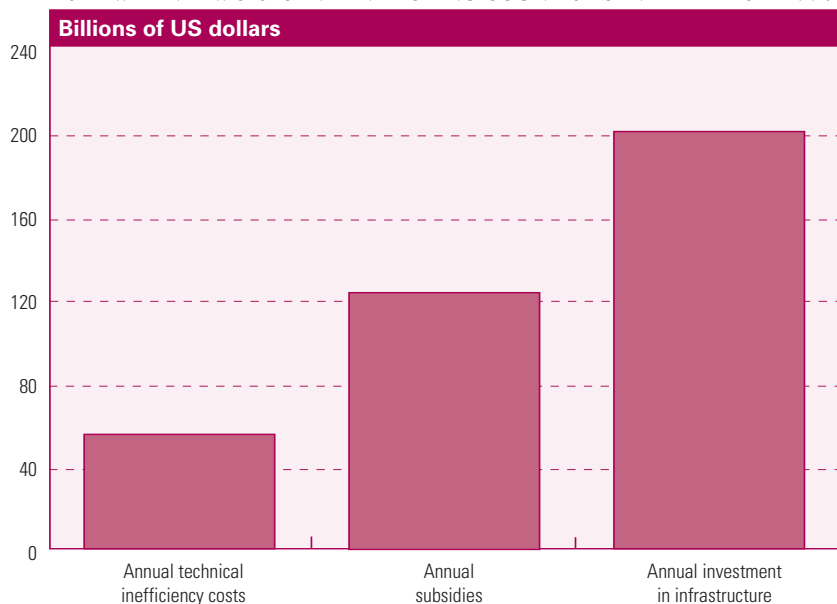
ⁿ At a seminar on electricity reform in Asia, energy ministers of Bangladesh, China, India and the Philippines presented diverse scenarios of their countries' electricity needs, but expressed a common view that privatization and liberalization were essential for the further development of their electricity sector. See "Asian Economies seek private investors for power development", news release No. 072/02 (9 May 2002), Asian Development Bank, Manila.

vices often led to insufficient investment in the modernization, expansion and even maintenance of utility networks. It is sometimes argued that such technical inefficiencies and price subsidization policies in developing countries have been partly responsible for the fact that nowadays 1 billion people lack access to safe drinking water, 2 billion people lack access to electricity and adequate sanitation, and half of the world's population lack access to telephone services.¹²

This vicious circle of inefficient operation, subsidized tariffs, insufficient investment and inadequate service expansion led to greater private sector participation in the provision of utility services—notably electricity and telephony—in many developing countries during the 1990s. During the last decade, for example, energy and telecommunications alone accounted for over half of the estimated US\$ 315 billion total privatization revenues in those countries (see figure VI.2).

¹² Gray, loc. cit.

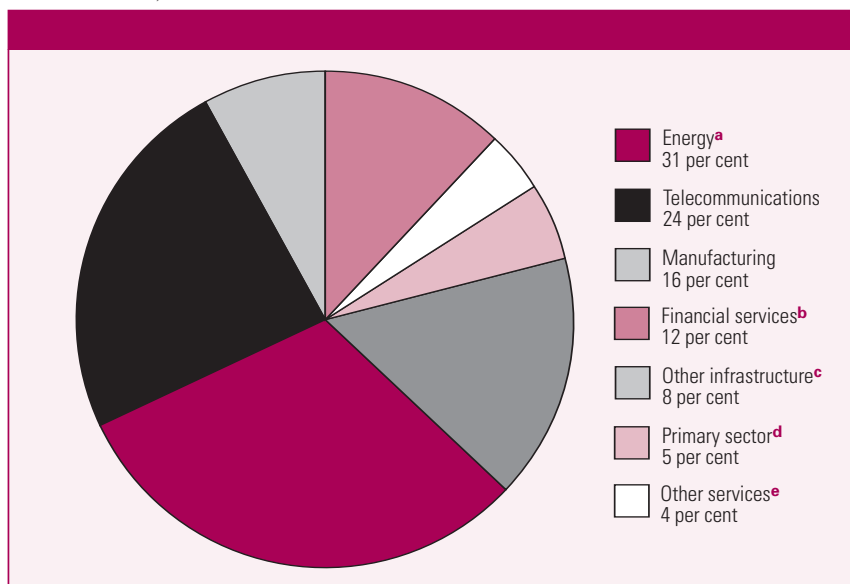
Figure VI.1.
ANNUAL LOSSES INCURRED FROM SUBSIDIES AND TECHNICAL
INEFFICIENCY IN STATE-OWNED WATER, ELECTRICITY, ROAD AND
RAILWAY NETWORKS IN DEVELOPING COUNTRIES IN THE EARLY 1990s



Source: World Bank, *World Development Report, 1994* (New York, Oxford University Press, 1994).

Note: Losses for the water sector are due to leak-ages; for the electricity sector, to generation, transmission and distribution losses; for roads, to added investment caused by poor maintenance; and for rail-ways, to fuel inefficiency, locomotive unavailability and overstaffing.

Figure VI.2.
SHARE OF PRIVATIZATION REVENUES IN DEVELOPING COUNTRIES,
BY SECTOR, 1990-1999



Source: UN/DESA, based on World Bank, *Global Development Finance: Building Coalitions for Effective Development Finance—Analysis and Summary Tables, 2001* (Washington, D.C., International Bank for Reconstruction and Development/World Bank, 2001).

- ^a Including electricity, oil and gas.
- ^b Accounting mostly for banking.
- ^c Accounting mainly for water and transport infra-structure.
- ^d Excluding oil and gas and accounting mostly for mining.
- ^e Including unreported cases in other sectors.

Potential obstacles to greater private sector involvement

Privatizing public utilities raises complex issues that are not present in other sectors, such as their provision of basic services and their monopoly characteristics, as well as possible political opposition to a permanent transfer of ownership and control of strategic industries to private (and potentially foreign) investors. Private sector involvement in utility provision has thus often been opposed on socio-political as well as economic grounds, notably in developing countries.¹³ It is argued, for example, that private ownership per se does not necessarily lead to enhanced economic efficiency. With regard to natural monopolies, in particular, “it is not clear whether public firms, subject to detailed price and profit regulation, will perform worse than privatized firms under similarly regulatory regimes”.¹⁴ As far as distributional equity is concerned, there is a widespread perception that it tends to worsen income and wealth distribution, and concentrate benefits on a “privileged few”—notably shareholders, managers, foreign business interests and those close to the political elite—while its costs are primarily borne by taxpayers, consumers and laid-off employees.¹⁵

As the early efforts towards utility reform evolved during the 1980s and early 1990s, notably in Chile and Great Britain, it became apparent that private ownership on its own was sufficient neither to enhance competition and efficiency nor to tackle major problems associated with the operation of State-owned utilities. It became increasingly accepted, however, that private enterprises would invariably outperform State-owned ones, provided that effective regulatory mechanisms were in place to deal with monopoly power, improve competition and efficiency, and ensure that consumers enjoyed the benefits of market liberalization.¹⁶

Regulation, competition and market liberalization

It is now generally agreed that most utilities can be broken down into two types of activities: one naturally monopolistic and the other potentially competitive.¹⁷ For example, in the electricity sector, whereas transmission and distribution lean towards the former, generation and supply to large users are potentially competitive. This potential for competition has become even more evident in the telecommunications sector as technological progress, such as mobile telephony, has undermined the natural monopoly characteristics of fixed-line telephony. While regulation is clearly required to address monopoly power and other market failures, those new perspectives on the limited natural monopoly characteristics of utilities have helped to demonstrate that competition can be used to improve operational efficiency and service quality in privatized utilities.

It is thus crucial to analyse the industry structure and the scope for competition to be promoted by the regulatory machinery before formulating and implementing a utility reform strategy. The success of efforts to attract private sector investment into public utilities depends largely on the establishment of transparent and reliable contract legislation and regulatory machinery. This has led Governments to develop new utility regulation models, often run by independent regulators, with clear price adjustment mechanisms. Innovative price-based mechanisms replacing rate-of-return regulation (used notably in Canada, Japan and the United States) have created incentives to improve efficiency and reduce costs, a particularly serious problem with rate-of-return

¹³ See, for example, World Bank, *Bureaucrats in Business: The Economics and Politics of Government Ownership* (New York, Oxford University Press, 1995); and R. Ramamurti, “Why haven’t developing countries privatized deeper and faster?”, *World Development*, vol. 27, No. 1 (1999), pp. 137-155.

¹⁴ Islam and Monsalve, loc. cit., p. 16.

¹⁵ Kikeri, loc. cit.

¹⁶ See, for example, J. A. Kay and D. J. Thompson, “Privatisation: a policy in search of a rationale”, *The Economic Journal*, vol. 96, No. 381 (1986), pp. 18-32.

¹⁷ See, in particular, J. Vickers, S. Cowan and M. Armstrong, *Regulatory Reform: Economic Analysis and British Experience* (Cambridge, Massachusetts, MIT Press, 1995); and also R. Green and D. Newbury, “The regulation of the gas industry: lessons from electricity”, *Fiscal Studies*, vol. 14, No. 2 (May 1993).

systems. Since the regulator allows the utility to set prices required to generate profits equal to an agreed rate of return on the value of the capital invested in the utility, when profits fall below the agreed rate, the utility can request the regulator to set higher tariffs. If on the one hand, this tends to encourage investment (and sometimes overinvestment), on the other hand, it gives the utility little incentive to improve efficiency and reduce costs, since the latter can be passed on to consumers in the form of price rises usually agreed by the regulator.

Another innovative departure from previous utility regulation models involves new forms of competition. Because utility industries can be broken up geographically into regional entities, “an industry yardstick, reflecting performance and prospect in the industry as a whole” is recommended for some utility sectors.¹⁸ The regulator can thus make performance comparisons among different regional suppliers. In this way, each supplier’s maximum allowed tariffs between two price reviews is determined in relation to the average of the industry’s unit costs. Consequently, yardstick competition prevents a regulated utility from obtaining a more favourable price at the next price review by manipulating its costs, given that each firm’s regulated price is relatively independent of its own performance. The yardstick concept can thus be an important instrument for increasing competition and efficiency, particularly in utilities such as water and sewerage, where there is limited scope for other forms of competition.

Competition can also be promoted through the liberalization of utility markets. Market-based regulatory reforms designed to offer choices to consumers can be introduced by reducing barriers to entry in utility markets and opening the way for private sector involvement, sometimes in competition with State-owned utilities. It is sometimes argued that introducing competition into previously monopolized and regulated network utilities is more important for achieving the full benefits of reform than regulation itself.¹⁹

In sum, utility reform can encompass a number of policies, which do not necessarily have to be pursued simultaneously. These policies include: (a) partial or full transfer of State-owned assets to the private sector; (b) introduction of competition by separating the natural monopoly segments from the competitive parts of utility industries; (c) restructuring of the monopoly segments and encouraging new firms to enter the competitive parts; (d) establishment of laws and institutions to regulate the monopoly segments and to promote competition; and (e) market liberalization in order to allow or increase consumer choice.

PUBLIC-PRIVATE INTERACTION IN ELECTRICITY PROVISION

While the telecommunications sector accounted for a considerable share of privatization proceeds during the 1990s, notably in developed countries, the energy sector has also played a leading role in the process of utility reform in many countries around the world. As figure VI.2 shows, privatization in developing countries has been driven to a great extent by the energy sector, followed by telecommunications, manufacturing and banking. It can also be argued that the electricity sector has produced some of the most interesting advances with regard to new forms of network competition introduced in utility sectors still reliant on a single network of pipes or cables.

¹⁸ S. Littlechild, *Economic Regulation of Privatised Water Authorities* (London, Her Majesty’s Stationery Office, 1986). See also W. Shew, “Natural monopoly and yardstick competition”, *Economic Affairs*, vol. 20, No. 4 (2000), pp. 36-41.

¹⁹ See for example, D. M. Newbury, “Privatisation and liberalisation of network utilities”, *European Economic Review*, vol. 41 (1997), pp. 357-383.

Major goals of electricity reform

Like other utility sectors, public electricity utilities in most countries have often been characterized by inefficient operation, weak management, inadequate investment and/or poor services. As a consequence, there has been an unprecedented expansion of electricity reform and market liberalization in developed and developing countries, as well as those with economies in transition, over the past 10 years.

In some countries, notably in Western Africa (see box VI.2), private sector involvement has taken place through management concessions to run State-owned electricity utilities. Other countries, notably developing countries in Asia, have given priority to increasing generation capacity through independent power projects (see box VI.1 above). Many developed and developing countries alike have, however, carried out more comprehensive reform of the sector, including market liberalization, selling off existing State enterprises to the private sector and enhancing competition in electricity-generation and retail markets. In several countries, Governments have gradually moved completely out of electricity provision and concentrated on the regulation of the private electricity industry. Three major aims of electricity reform and liberalization around the world are: (a) increasing operational efficiency; (b) enhancing competition; and (c) tapping private investments for improving or expanding electricity services.

Separation of natural monopoly segments

Electricity is generated from a variety of sources, in particular hydropower, fossil fuels, gas turbines, nuclear power and alternative sources of energy (such as wind and solar power). It flows along high-voltage transmission lines to distribution plants, where it is transformed into lower voltages for local distribution and final delivery to homes and businesses. Whereas transmission refers to the operation of the high-voltage network or grid, distribution is often used to mean the operation of the lower-voltage local/regional network that takes power from the (usually national) grid to final consumers. The transmission and distribution segments of the electricity industry are natural monopolies because they comprise the networks of high- and low-voltage cables, respectively.

The distribution segment is sometimes confused with electricity *retail*, that is to say, its sale to final consumers. In State-owned systems, most or all of the four segments of the industry (generation, transmission, distribution and retail) are run by a single public utility company. A crucial prerequisite of effective competition in the electricity sector is, however, its restructuring along separate subsectors. For example, in privatized systems, a separate company can be responsible for retail services, such as supplying households with electricity, billing, meter reading and home repairs, yet, without owning the distribution network.

The main objective of such vertical “unbundling” is to separate the (monopoly) transmission and distribution segments from the potentially competitive ones, namely, generation and retail. It is now generally agreed that separation of ownership among these four subsectors has a considerable potential to promote competition.²⁰ Many electricity reform programmes have initially targeted the generation subsector because it can more easily be separated from the rest of the network.²¹ Yet while enhancing competition in generation could pro-

²⁰ It is possible to have a functional and accounting separation but this has a more limited potential to enhance competition because the incentive to discriminate and some of the ability to discriminate remain. See International Energy Agency (IEA), *Competition in Electricity Markets* (Paris, IEA, 2000).

²¹ See, for example, International Energy Agency, *Electricity Reform: Power Generation Costs and Investment* (Paris, IEA, 1999).

Box VI.2

LEASING AND CONCESSIONARY CONTRACTS IN WEST AFRICA: THE CASE OF CÔTE D'IVOIRE

Several developing countries have promoted public-private partnerships in the electricity sector through leasing and concessionary contracts. Under leasing contracts (*affermage*), the Government leases utility assets to a private company for a period usually ranging from 5 to 15 years. Under this arrangement, the private company is responsible for operation and management, and operating costs (and profits) are covered by tariffs paid by consumers. Leasing contracts may be awarded by tendering or through bilateral negotiation with a selected operator. Under a concessionary contract (*concession*), the private company is responsible for operating, maintaining, financing and improving installations, including investments in fixed assets, which are amortized during the long period of the concession (usually 15-30 years). In both cases, the private company is required to return all assets to the State at the end of the contract.

This model of electricity privatization is particularly popular in West African countries, such as Côte d'Ivoire, Gabon, Guinea and Mali.^a Building on the success of an earlier private concession to provide water and sewerage to urban areas,^b Côte d'Ivoire was one of the pioneers with respect to private management of electricity utilities in the developing world. In early 1990, the Government decided to allow private sector participation in the management of the State-owned electricity company, *Energie Electrique de Côte d'Ivoire* (EECI). By then, EECI was virtually bankrupt and thus unable to invest in the expansion of services, following years of mounting losses and debts due to inefficient management, non-payment of bills, distribution losses and pilferage. The main aims of the Government were therefore to improve operational efficiency and to attract the substantial private investment needed to upgrade the network.

Later in the same year, a 15-year lease to run the country's vertically integrated electricity monopoly was granted to a newly created private company, *Compagnie Ivoirienne d'Electricité* (CIE), owned by two major French utility companies.^c CIE became responsible for operating and maintaining all generation, transmission and distribution facilities, as well as supplying electricity to final customers, including billing and repairs. State-owned EECI, however, retained ownership of all the assets and supervised CIE activities. In addition, the Government was responsible for investments in new fixed assets.

Private management has improved operational efficiency, restored financial credibility and produced welfare benefits to consumers. Operational efficiency increased during the first half of the 1990s, mainly as a result of various organizational innovations.^d Productivity gains have been closely associated with several cost reduction measures that allowed CIE to generate a net profit after only two years of operation, compared with the annual losses of EECI for every year during the 1980s.^e While there was a small reduction (2.5 per cent) in employment between 1989 and 1995, achieved primarily through voluntary separations, there is evidence that the remaining labour force has also benefited from private management.^f Other benefits included better customer service, more effective repairs and maintenance, and a reduction in both distribution losses and power outages from 50 hours a year per customer in 1989 to 13 hours in 1997.^g By 1998, the customer base had increased by 50 per cent and there had been a significant expansion of rural electrification.^h

Furthermore, most of the efficiency gains have been passed on to consumers through a significant tariff decrease, in real terms, despite the existence of a vertically

^a See, for example, J. Turkson and N. Wohlgemuth, "Power sector reform and distributed generation in sub-Saharan Africa", *Energy Policy*, vol. 29 (2001), pp. 135-145.

^b Private sector involvement in water services dates back to the early 1970s, when the Government granted a long-term concession to a private consortium to provide water and sanitation in Abidjan. It is argued that this consortium's success in improving efficiency and services convinced the Ivorian Government of the benefits of greater private participation in electricity provision. See J. S. Strong, "Azito: opening a new era of power in Africa", mimeo., September 1999.

^c Strong, loc. cit.

^d See P. Plane, "Privatization, technical efficiency and welfare consequences: the case of the Côte d'Ivoire Electricity Company (CIE)", *World Development*, vol. 27, No. 2 (1999), pp. 343-360.

^e Strong, loc. cit.

^f P. Plane, loc. cit., and L. de Luca, ed., *Labour and Social Dimensions of Privatization and Restructuring: Public Utilities, Part I: Africa/Asia-Pacific Region* (Geneva, International Labour Organization, Geneva, 1997), electronically available (at <http://www.ilo.org/public/english/employment/ent/papers/travint1.htm>). The latter also shows that (a) wage rates were maintained, (b) contracting-out activities were reduced and (c) there has been a significant increase in the company's budget for in-house training activities.

^g See D. Bolduc, "Privatisation, libéralisation et réglementation: bouleversements et enjeux dans le secteur mondial de l'énergie", mimeo., Université Laval Québec, Canada, May 2001.

^h Strong, loc. cit. and Bolduc, loc. cit.

integrated private monopoly and the absence of an effective regulatory machinery. This outcome is sometimes used to question the argument that efficient regulation and increased competition are essential for dealing with monopoly power.ⁱ It is also suggested, however, that the “private contractor was determined to use this experience as a means of promoting similar arrangements elsewhere in Africa”.^j In any case, the Côte d’Ivoire experience does not rule out the possibility that *even larger* efficiency improvements and consumer benefits could be achieved if there were competition in and effective regulation of the industry.

The case of Côte d’Ivoire shows that there are also problems with the leasing model of electricity privatization in developing countries.^k First of all, the boundary between maintenance works (*travaux d’entretien*) and “replacement expenditures” (*travaux de renouvellement*) is not always clear. The latter includes expenditure on replacement of equipment and machinery that can be depreciated during the period of the contract or that are required to maintain the operational performance of the system. Disputes can arise because leasing contracts do not always specify if such investment falls under the responsibility of the State or of the private operator. In addition, general budgetary constraints and, in particular, the difficulty of the State-owned EECl to fulfil its investment responsibilities have led to periodic modifications (*avenants*) in the original contract with CIE. These modifications have become a central feature of the Côte d’Ivoire model of electricity reform. CIE has thus carried out many replacement expenditures on behalf of the State and, as a result, CIE has become responsible for three quarters of ongoing investment in the State-owned electricity assets.

EECl has also failed to carry out its supervisory role of the industry for various managerial, technical and financial reasons.^l As a result, EECl’s supervisory responsibilities were shifted to several other State institutions, whose overlapping roles further complicated the regulation of the electricity sector. These problems led to an institutional overhaul of the sector in 1998. This involved the close-down of EECl and the creation of three new institutions to oversee the whole sector: (a) a State holding company (*Société de Gestion du Patrimoine de l’Electricité* (SOGEPE)) to manage State assets and oversee financial flows; (b) an independent operator (*Société d’Opération Ivoirienne d’Electricité* (SOPIE)) to monitor all new public works in the sector (such as IPPs, transmission lines and rural electrification); and (c) an autonomous electricity regulatory body (*Autorité Nationale de Régulation du Secteur de l’Electricité* (ANARE)) to deal with leasing contracts, dispute resolution and the protection of consumers’ interests.

The creation of ANARE is particularly important because regulation by contract alone is usually complicated by the fact that not all potential issues of conflict can be foreseen and thus included in the contract. The existence of an independent, sector-specific regulatory agency is thus essential for resolving such disputes. Problems with the conflicting roles of EECl have also helped to highlight the importance of separating the State’s regulatory functions from its ownership and policy responsibilities. It is worth also stressing that the creation of SOPIE is partly aimed at the vertical unbundling of the sector after the CEI concession ends in 2005. Like many other countries, Côte d’Ivoire is moving towards the separation of the natural monopoly from the potentially competitive segments of the electricity industry with an ultimate objective of introducing competition in the sector. While there are obstacles to the introduction of competition in such a relatively small market,^m private management should be seen as a step towards greater private sector participation in electricity provision.

Box VI.2 (continued)

ⁱ It is generally agreed that, in the absence of regulation and competition, private monopolies will capture most productivity gains (see J. A. Kay and D. J. Thompson, “Privatisation: a policy in search of a rationale”, *The Economic Journal*, vol. 96, N. 381 (1986), pp. 18-32; and J. Vickers, and G. Yarrow, *Privatization: An Economic Analysis* (Cambridge, Massachusetts, MIT Press, 1988). Plane (loc. cit.), however, concludes that the CIE case contradicts this argument.

^j Plane, loc. cit., p. 357.

^k The analysis here is based on Bolduc, loc. cit., and Strong, loc. cit.

^l Strong, loc. cit., also notes that, while most of the EECl staff were transferred to CIE, the fact that several senior EECl managers were not, created conflicts of interest and tension between the two companies.

^m Electricity markets in many developing countries are so small that transaction costs might exceed the efficiency gains from vertical unbundling. In addition, their markets are also too small to allow sufficient retailers to engage in price-based competition, without loss of economies of scale arising from horizontal unbundling. See, for example, J. E. Besant-Jones, “The England and Wales electricity model: option or warning for developing countries”, *Public Policy for the Private Sector*, No. 84 (June 1996), World Bank, Washington, D.C.; and R. Bacon, “Restructuring the power sector: the case of small systems”, *Public Policy for the Private Sector*, No. 10 (June 1994), World Bank, Washington, D.C.

duce some benefits on its own, such benefits are likely to be increased significantly if reform of the generation subsector is accompanied by market liberalization and private sector involvement in distribution and eventually in retailing. For example, franchising and licensing arrangements can be set up so that a dominant private distribution company runs the network but is obliged to lease the use of it to competing retailers.

Such competition can play a crucial role in enhancing efficiency and reducing costs, as well as in ensuring that consumers share its benefits. Market liberalization involves not only the introduction of competition with respect to supplying customers in any market segment of the industry, but also the ability of end-users to choose an electricity retail company. This can act as an effective bargaining tool for consumers even if they choose not to exercise it, because indirect effects on prices, product diversity and service conditions are thought to be potentially significant.²²

²² *Competition in Electricity Markets...*

Regulation of the electricity industry

At the same time, given that there are inherent structural features in segments of the electricity industry that are inclined towards market concentration and price discrimination, effective regulation is required to address monopoly power and other market failures in these segments. While it is increasingly recognized that enhancing competition and market liberalization can help to reduce the need for utility regulation in general, industries such as electricity, gas and water contain natural monopoly segments for which the benefits of regulation potentially outweigh its costs. Effective regulatory mechanisms are thus essential for dealing with monopoly power and price discrimination.

With regard to price discrimination, there has been a shift away from rate-of-return regulation towards the adoption of price-cap regulation. As discussed earlier, rate-of-return regulation can promote investment but provides little incentive for improving operational efficiency, as costs arising from inefficient operation can often be passed on to consumers in the form of higher prices. This helps to explain, for example, why performance assessments of American electricity utilities usually find little significant difference in efficiency between private utilities and public utilities that operate under rate-of-return regulation.²³ Moreover, attempts to liberalize wholesale generation prices while maintaining rigid control of retail electricity prices have also proved problematic, as the recent experience with electricity reform in California has shown (see box VI.3).

An increasingly used alternative to rate-of-return regulation relies on the establishment of price caps or ceilings. These are usually set by an industry regulator according to a “RPI minus X” formula, where “RPI” refers to the retail price index and “X” is a measure of the reduction in costs that the company is expected to achieve within the period between two price reviews (the regulatory lag). For electricity utilities, the price-cap system has the benefit of providing economic incentives to innovate and reduce costs, as the company can keep any profits derived from improved efficiency during the regulatory lag. However, if costs rise, particularly at the beginning of the regulatory lag, the company’s profits can fall significantly because it will be unable to raise prices until the next price review.²⁴ Price caps can thus increase the risks faced by privatized utilities and may even reduce investment.

²³ See S. Atkinson and R. Halvorsen, “The relative efficiency of public and private firms in a regulated environment: the Case of US electric utilities”, *Journal of Public Economics*, vol. 29 (April 1986), pp. 281-294; and Gray, loc. cit.

²⁴ See, for example, M. Giuliotti and J. Otero, “The timing of tariff structure change in regulated industries: evidence from England and Wales”, *Structural Change and Economic Dynamics*, vol. 13 (2002), pp. 71-99; and P. Boulding, “United Kingdom”, in *Utility Regulation*, I. Lewington, ed. (London, Centre for the Study of Regulated Industries (University of Bath), 1997). The latter argues that one of the main disadvantages of price-cap regulation is the delay in receiving the benefits of lower tariffs between long price reviews.

For most of the last century, the bulk of California's electricity sector was owned and operated by three private, vertically integrated monopolies: Pacific Gas and Electric (PGE), Southern California Edison (SCE) and San Diego Gas and Electric (SDGE).^a Their costs, prices and rates of return were regulated at the State and federal levels by the California Public Utilities Commission (CPUC) and the Federal Energy Regulatory Commission (FERC), respectively. Although services were very reliable, California's average electricity rates became among the highest in the United States of America during the 1990s.

Electricity reform in the State followed pressure from industrial consumers in the mid-1990s to reduce electricity prices. The reform programme was shaped by a 1996 restructuring law (Assembly Bill 1890), which came into force in April 1998 and whose major provisions included:^b

- (a) *Competition in generation*: the three incumbent private utilities were encouraged (and, in some cases, obliged) to sell their generating capacity in order to enhance competition. Forty per cent of the State's generation capacity is now controlled by other companies, most of which are part of major multinational energy groups;^c
- (b) *Creation of a wholesale market*: two non-profit market institutions were set up: the California Power Exchange (PX), a wholesale market in which electricity was traded on a forward basis; and the California Independent System Operator (ISO), responsible for the operation of the high-voltage transmission network owned by the three major utilities.^d The three incumbent utilities were obliged by the new law to place all output from their own generation plants into the PX market, and also to purchase all electricity required for delivery to their customers from the same market;
- (c) *Open access to networks*: the incumbent utilities were also obliged to provide non-discriminatory access to their transmission and distribution networks to independent power producers, energy traders and competing electricity service providers (ESPs);
- (d) *Consumer choice*: all retail customers were free to choose any ESP operating in their area, or to continue to receive the "default service" from the incumbent utility at regulated prices. It was expected that most retail customers would gradually switch from incumbent utilities to the ESPs;
- (e) *Retail price freeze*: retail electricity tariffs were frozen (until March 2002) at their 1996 levels so that the three incumbent utilities could recover their stranded costs.^e In addition, the price ceiling for residential customers and small businesses was frozen for up to four years at 10 per cent less (in nominal terms) than the retail tariffs in place in 1996.

It was assumed that, because of enhanced competition in generation, electricity wholesale prices would fall below regulated retail prices so that the difference between the two would help pay for the utilities' stranded costs. The tariff freeze would cease if such stranded costs were recovered in less than four years, so that retail prices charged by the utilities could fall (sic) in line with lower generation prices. It was never envisaged that generation prices might rise after the reforms were in place.

It soon became apparent, however, that few ESPs could compete with the incumbent utilities, particularly in the residential and small business markets. Since these customers were receiving the automatic 10 per cent bill reduction, very few were interested in experimenting with new ESPs. Of some 300 ESPs that had originally entered the market, only a handful survived. By September 2000, only 3 per cent of all consumers, accounting for 12 per cent of total demand, had switched to the new ESPs.^f This not only frustrated efforts to enhance retail competition, but would have become a great burden on the three incumbent utilities if prices in the wholesale markets had risen. Since the three utilities had been forced by law to sell a significant part of their generation capacity, they became dependent on the PX market to cover any shortfall in the total electricity required to supply their final customers. Because those consumers did not migrate to ESPs as expected, the incumbent utilities' service obligation was much higher than expected.

Between January and August 2000, average monthly electricity prices at the PX market rose

Box VI.3

CALIFORNIA'S ELECTRICITY REFORM: CHRONICLE OF A DEATH FORETOLD

^a For a detailed account of the structure and history of the Californian electricity sector, see P.L. Joskow, "California's Electricity Crisis", *NBER Working Paper, No. 8442* (Cambridge, Massachusetts, August 2001).

^b For details of the reform legislation, refer to Joskow, loc. cit., and S. Weinstein and D. Hall, *The California Electricity Crisis: Overview and International Lessons* (London, Public Services International Research Unit (PSIRU)/University of Greenwich, February 2001).

^c Prior to the electricity reform, the three incumbent utilities owned 55 per cent of all generation capacity in the State, and had exclusive access to another 22 per cent of capacity owned by other generation companies under long-term contracts. At present, the three incumbents own only 15 per cent of California's capacity and have maintained their exclusive access to another 22 per cent on long-term contracts. See Weinstein and Hall, op. cit.

^d For details of the operation of the PX market and the ISO, see Joskow, loc. cit.; and C.-K. Woo, "What went wrong in California's electricity market?", *Energy*, vol. 26 (2001), pp. 747-758.

^e Stranded costs are defined as the value of non-amortized investments in electricity assets that could not be recovered in a competitive market, or the total fixed costs of generation less the proceeds from selling such generation assets in the market.

^f Joskow, loc. cit.

from \$3 per megawatt hour (MWh) to over \$16 per MWh.^g It is estimated that average 2000 prices were 7 times higher than in 1999 and that, even during the cooler, lower-usage first four months of 2001, average wholesale prices were 10 times higher than in 1998 and 1999.^h Part of the problem arose from demand and supply imbalances.ⁱ California's robust economic growth during the second half of the 1990s caused electricity demand in the State to rise much faster than had been anticipated. The excess generation (and transmission) capacity that existed in the early 1990s had gradually disappeared by the end of the decade, as practically no new capacity was added to the system during the second half of the decade.^j

Since the rising wholesale prices could not be passed on to consumers, there was no incentive for demand to respond to these developments in the supply side. Faced with artificially low prices, consumers continued to use increasing amounts of electricity and, since there was little spare generation and transmission capacity in the system, energy rationing soon followed. Frequent blackouts in 2000-2001 affected not only residential and small business consumers but also large industrial and commercial consumers, including many energy-intensive technology firms in Silicon Valley. Power to PGE consumers was cut off 18 times in 2000 and the State experienced over 30 "energy alerts", when demand was within 5 per cent of available capacity.^k

Since retail prices were frozen for a four-year transition period, the two largest incumbent utilities (PGE and SCE) were able to collect from consumers a decreasing proportion of the increasing price they had to pay to purchase electricity from the PX market.^l Both companies were declared insolvent in early 2001.^m Given the utilities' increasing inability to pay for their purchases of electricity, most of the multinational energy groups that had come to dominate California's generation subsector stopped selling power to them. From January 2001, a public agency had to use State funds to buy electricity on their behalf in order to avoid extensive blackouts.ⁿ The PX market closed in the following month owing to lack of trading and filed for bankruptcy in March 2001. Partly as a result of the State intervention to purchase power on behalf of the utilities, retail prices were allowed to rise by 30-40 per cent in mid-2001.

There were increasing moves to strengthen regulation of the sector, in particular to counteract potential price manipulation by the new independent generation owners and energy traders. The serious capacity constraints had allowed these companies to increase prices without engaging in collusion. For example, several leading independent producers and energy traders in California have acknowledged some "round-trip trading" in the State's PX market.^o Such fake energy trading artificially inflates trading volumes and revenues, and could also raise electricity prices by artificially inflating demand. It has been argued that such activities could have been avoided if there had been effective regulation of the market.^p FERC had been warned of questionable trading practices as early as mid-2000 but was slow to react. FERC, in turn, had expected CPUC to deal with many of the causes of the electricity crisis but State authorities took too long to respond and committed costly errors in the process.^q California's electricity reform was thus doomed not only by inadequate regulatory mechanisms but also by the overlapping (and even conflicting) roles of federal and State regulatory agencies.

One of the main lessons is that an effective regulatory machinery is essential for dealing with monopoly/oligopoly power and other market failures. At the operational level, the California case also shows that electricity wholesale markets are likely to perform more satisfactorily in an environment of surplus generation capacity—together with many competing sellers, easy market entry and adequate transmission networks—that will avoid price manipulation and the detrimental exercise of market power. Another lesson is that competitive electricity markets are unlikely to perform satisfactorily if there is no mechanism that ensures that consumer demand responds to wholesale market prices. As a recent analysis of this experiment concludes, the real surprise should not be that California's electricity reform failed but "that the market, as it was designed, took two years to self-destruct".^r

Box VI.3 (continued)

^g F. P. Sioshansi, "California's dysfunctional electricity market: policy lessons on market restructuring", *Energy Policy*, vol. 20 (2001), pp. 735-742.

^h Weinstein and Hall, *op. cit.*; Joskow, *loc. cit.*

ⁱ Other factors include the reduction of exports from neighbouring States, rising prices for natural gas and market power problems.

^j The reasons for this included uncertainty over the new rules introduced by the 1996 reform law and strict environmental regulations that added to the cost of generation from non-renewable sources. The first new plants did not come on-stream until the summer of 2001.

^k Sioshansi, *loc. cit.*, p. 739. Although heavily regulated systems in the United States generally aim to have a reserve capacity close to 20 per cent in order to maintain supply during extraordinary circumstances, an excess capacity of about 7 per cent is considered optimal for operational purposes (Weinstein and Hall, *op. cit.*, p. 20).

^l By the end of 2000, they had collected US\$ 11 billion less from consumer tariffs than they had to pay for purchasing power from the PX market (Sioshansi, *loc. cit.*, p. 738).

^m PGE declared bankruptcy in April 2001.

ⁿ Between January and May 2001, State authorities spent about US\$ 8 billion on such emergency deals and is estimated to have committed another \$50 billion on long-term supply contracts (Joskow, *loc. cit.*).

^o *Financial Times*, 23 May 2002. Round-trip trading refers to cases in which two or more traders buy and sell energy among themselves for the same price and at the same time. Although illegal in securities markets, round-trip trading was not prohibited in the loosely regulated PX wholesale market.

^p F. P. Sioshansi, "California's electricity market: finally turning the corner?", *Energy Policy*, vol. 30 (2002), pp. 245-248; Weinstein and Hall, *op. cit.*

^q Joskow, *loc. cit.* Having committed US\$ 50 billion of State funds for long-term supply contracts at the peak of crisis, for example, turned out to be a costly mistake when electricity-generation prices in California dropped to pre-crisis level in June 2001. As one commentator notes, "it is not a good idea to go shopping for hurricane insurance just as the hurricane is taking the roof off one's house" (Sioshansi, "California's electricity market" ..., p. 245).

^r S. Borenstein, "The trouble with electricity markets: understanding California's restructuring disaster", *Journal of Economic Perspectives*, vol. 16, No. 1 (2002), pp. 191-212.

It is therefore worth taking a closer look at real-world examples of electricity reform in order to find out how the complex issues raised in the present section have been addressed and to assess the major outcomes of such reforms. The next two sections will thus focus on the relatively long experience of radical electricity reform in two countries—Chile and Great Britain. The choice of countries was determined not only by their diversity and extensive approach to reform of their electricity sector, but also by the length of time that has elapsed since privatization and liberalization. Most countries that privatized and reformed their electricity industry have done so too recently to allow a detailed assessment of the results. The three main aims of the following case studies are: (a) to determine whether privatization has improved operational efficiency and quality of services; (b) to assess the impacts of increased competition (and regulation) on electricity prices and consumer welfare; and (c) to identify any lessons for other countries.

ELECTRICITY REFORM IN CHILE

Chile was one of the first countries in the world to initiate radical reform of the electricity sector and many features of its pioneering model²⁵ were introduced in several other Latin American countries—such as Argentina, Peru, Bolivia and Colombia—throughout the 1990s.²⁶ Electricity privatization and liberalization in Chile date back to the early 1980s and took place in the context of a broader utility privatization programme in the country.²⁷ Before the sector was privatized during the 1980s, particular efforts were made to develop a regulatory framework, defined by a 1982 law that eliminated differentiated treatment for State-owned and private electricity suppliers, and distinguished separate segments of the industry: generation, transmission and distribution/final delivery.

Restructuring of the sector

The country's two major State-owned electricity utilities (Endesa and Chilectra) were broken up and privatized, mostly during the 1980s. In 1982, Endesa was divided into two separate generating companies (Endesa and Colbun), a transmission company (Transelect) and six distribution companies. Chilectra also split generation from distribution by creating a generation company and two distribution ones. Most of the shares in these companies—as well as those in several separate electricity utilities in the far northern region of the country—were sold to private investors (both institutional and small shareholders) and employees between 1983 and 1989. A second round of privatization in 1996 included the sale of shares in Colbun (91 per cent) and Edelnor (46 per cent), a major electricity utility serving the far northern region. In addition, between 1997 and 1999, Spain's leading electricity utility (also called Endesa) acquired almost two thirds of Enersis—a leading local holding company that owned a quarter of Chilean Endesa—and eventually took over Chilean Endesa itself.²⁸

There are two major regional networks in the country: *Sistema Interconectado Central* (SIC) and *Sistema Interconectado del Norte Grande* (SING). These two networks are not connected to each other owing to the long distance between them, extending over a thinly populated desert. SIC is by far the biggest network,

²⁵ The analysis of the Chilean model of electricity privatization and regulation in this section is based primarily on G. Moguillansky, *La Gestión Privada y la Inversión en el Sector Eléctrico Chileno*, Serie Reformas Económicas 1 (Santiago, United Nations Economic Commission for Latin America and the Caribbean, 1997); and E. Bitran and P. Serra, "Regulation of privatized utilities: the Chilean experience", *World Development*, vol. 26, No. 6 (1998), pp. 945-962.

²⁶ While Argentina adopted many characteristics of the Chilean model, it replaced or modified some key features, leading some authors to identify a "Southern Cone" model. See P. Lalor and H. Garcia, "Reshaping power markets: Lessons from Chile and Argentina", *Public Policy for the Private Sector*, No. 85 (Washington, D.C., World Bank, June 1996); and A. Estache and M. Rodríguez-Pardina, *Light and Lighting at the End of the Public Tunnel: Reform of the Electricity Sector in the Southern Cone* (Washington, D.C., World Bank, 1998).

²⁷ For the background to utility reform in Chile, see R. Paredes M., "Redistributive impact of privatization and regulation of utilities in Chile", *Discussion paper No. 2001/19* (Helsinki, United Nations University (UNU) World Institute for Development Economics Research (WIDER), 2001).

²⁸ See F. Trillas, "The takeover of Enersis: the control of privatized utilities", *Utilities Policy*, forthcoming, 2002.

covering an area 1,800 kilometres long and currently accounting for over three quarters of the country's consumption (in terms of peak demand), mostly from hydroelectric sources. An expansion of gas-fired generation capacity, however, is planned for the SIC area, where a recent drought provoked major power shortages. Endesa and its subsidiaries play a dominant role in generation, transmission and distribution in much of the SIC area.

The much smaller generation capacity of SING used to be based on coal-fuelled power stations but, following the introduction of an economic protocol for natural gas imports from Argentina, it now relies primarily on combined-cycle gas power stations.²⁹ The cost of generating electricity in gas-fired combined-cycle plants has decreased over the past decade, owing to both reduced investment costs and improved efficiency for combined-cycle gas technology.³⁰ Despite the rapid process of substitution from coal to gas, it is estimated that overinvestment in combined-cycle gas turbine power stations has led to a current overcapacity of about 120 per cent in the SING area, which is dominated by two generators (Electroandina and Edelnor).

Regulation and promotion of competition

Although there are only a few leading generation companies in each of these two regional networks, the regulatory framework encourages competition in the generation subsector. Each network has a "wholesale pool" coordinated by an "Economic Load Dispatch Centre" (CDEC), whose management tends to be dominated by the largest generation companies. These companies are allowed to sell any amount of power (up to their installed capacity) directly to large customers, defined as users with a peak demand above 2 megawatts. The fact that these large consumers negotiate their tariffs directly with competing generation companies provides an incentive to generators to reduce costs in order to increase their share of the large consumer market. When generation companies are unable to fulfil their contractual obligations with large consumers from their own power plants, they are required to purchase shortfalls from the wholesale pool at market prices.

Generation companies are paid the wholesale pool price for energy, when dispatched (that is to say, delivered), not the actual cost of generation. This wholesale pool price or spot price is based on the variable operating cost of the most expensive generating plant in each regional network.³¹ Plants are selected for dispatch by the CDEC on the basis of the variable costs posted with the CDEC. Because the price received by a given plant is not related to its posted price, there are no incentives to engage in price manipulation, assuming that there are enough generation companies to ensure effective competition in the pool market. This innovative concept of a private wholesale electricity pool was first introduced in Chile, rather than in Great Britain as is often believed. Furthermore, spot prices in the original pool in England and Wales were determined on the basis of price offers made by generating firms—which did not necessarily correspond to their variable costs—and were thus open to price manipulation (see the British case study below).

While large consumers are able to purchase energy directly from generators at freely negotiated prices, the 1982 law also entrusted the National Energy Commission (CNE)—a regulatory agency linked to the Ministry of the

²⁹ See O. E. Moya, "Experience and new challenges in the Chilean generation and transmission sector", *Energy Policy*, forthcoming, 2002.

³⁰ See U. C. Colpier and D. Cornland, "The economics of the combined-cycle gas turbine: an experience curve analysis", *Energy Policy*, vol. 30 (2002), pp. 309-316.

³¹ For details of the cost-based Chilean pool, see in particular, Latorre and Garcia, loc. cit.; and Moya, loc. cit.

Economy—to regulate prices for small residential and business consumers. This regulated price has two components: node prices (*precios de nudo*) and distribution tariffs (*tarifas de distribución*).³² Both components are reviewed by CNE—the former every six months and the latter every four years—with a view to covering the operating costs of an “efficient company” and providing a 10 per cent annual real rate of return on the replacement value of assets. The estimated replacement value of assets, as well as the operating costs of a model “efficient company”, is calculated as a weighted average of estimates made by CNE and industry representatives, with the weight of the CNE estimate accounting for two thirds of the average.

Besides price-based regulation, the unbundling of the sector was accompanied by several rules on private sector activity in each subsector. Privately owned transmission companies must provide free access to their network to all generation companies. They can also deliver electricity from generation companies directly to large customers or to distribution companies. Distribution companies operate under concession and are also obliged to provide non-discriminatory access to their networks to third-party (retail) competitors. They can purchase electricity for sale to final customers through bilateral contracts with generators or spot market purchases. Generation and distribution companies can thus compete with each other to supply large consumers.

The Chilean model of electricity reform and regulation pioneered (or developed) at least three innovative features, which were subsequently introduced in several other countries. First, the model separated three segments of the industry for regulatory or competition purposes: generation, transmission and distribution/final delivery. Second, it created a (cost-based) wholesale power pool with a view to using market mechanisms for setting energy generation prices. Third, the model allowed large consumers to purchase power directly from generation and distribution companies. This was aimed not only at enhancing competition in different market segments, including the large consumer market, but also at encouraging such companies to improve efficiency and reduce costs in order to increase their market share.

In addition, it is sometimes argued that the Chilean model of electricity regulation has the advantage of including explicit mechanisms for settling disputes between regulatory agencies and the privatized utilities, with the judiciary as the final arbiter.³³ There are, however, considerable costs in respect of relying on the courts to resolve disputes, particularly disputes that can be otherwise tackled by transparent and effective regulatory mechanisms. Finally, another innovation of the Chilean model of utility reform is that private concession contracts that mandate access to rural electricity and telephone services are awarded to the lowest bidders for public subsidies, so that significant rural expansion can be achieved by minimizing subsidies.³⁴

An assessment of the reform

Following almost two decades of gradual market reform, public-private interaction in the Chilean electricity industry has produced many benefits in terms of increased operational efficiency, lower prices and improved services. The unbundling of the sector has been accompanied, however, by some cases of market concentration and lack of competition. These problems should be tack-

³² For details, see in particular, Moguillansky, *op. cit.*; and Bitran and Serra, *loc. cit.*

³³ Bitran and Serra, *loc. cit.*, p. 945, who also state that such mechanisms “are credible because the country has a long tradition of judicial independence in these matters”.

³⁴ See A. Estache, A. Gomez-Lobo and D. Leipziger, “Utilities privatization and the poor: lessons and evidence from Latin America”, *World Development*, vol. 29, No. 7 (2001), pp. 1179-1198.

led by more effective regulatory mechanisms and measures to enhance competition in both the generation and retailing subsectors.

Operational efficiency, pricing and service expansion

Private sector involvement in electricity provision has been responsible for significant improvements in operational efficiency. For example, electricity generation per employee increased by about two thirds on average between the late 1980s and 1997, while the number of consumers per employee rose from less than 300 to almost 600 during the same period.³⁵ In addition, the largest distribution company cut energy losses (mainly due to “leakages” and pilferage) in its network from 23 to 9 per cent between 1990 and 1994.³⁶

Generation prices dropped by 50 per cent between 1988 and 1998, but this was owing primarily to the growing use of natural gas imported from Argentina and cannot be attributed directly to electricity privatization. While consumers have generally benefited from increased service coverage, improved service quality and lower retail prices, it is sometimes argued that opportunities for cross-shareholding and market concentration (see below) may have hindered the conversion of those efficiency improvements into even lower prices. For example, despite the large reductions in distribution losses and the 50 per cent fall in generation prices, retail electricity prices fell by less than 25 per cent between 1988 and 1998.³⁷

Electricity privatization was also responsible for a considerable increase in investment and in access to services. Installed generation capacity rose by 50 per cent between 1985 and 1995, and electricity consumption grew by an average of almost 8 per cent a year during the same period.³⁸ There is also strong evidence that the expansion of private electricity services has particularly benefited lower income groups in both urban and rural areas. As table VI.1 shows, between 1988 and 1998, the proportion of national households in the lowest income per capita decile without access to an electricity network fell from almost 30 to 7 per cent, whereas the proportion of households without access in the second lowest decile

³⁵ Estache and Rodriguez-Pardina, *op. cit.*

³⁶ Bitran and Serra, *loc. cit.*

³⁷ Estache, Gomez-Lobo and Leipziger, *loc. cit.* As will be seen in the British case study below, larger retail price falls were achieved for different market segments during a comparable period.

³⁸ Moguillansky, *op. cit.*, p. 26; Bitran and Serra, *loc. cit.*, p. 945. Most of the consumption growth took place in the SIC area, which is not connected to the SING network (where there is some overcapacity). A second round of capacity expansion associated with gas-fuelled power plants took place in the second half of the 1990s.

Table VI.1.
SHARE OF CHILEAN HOUSEHOLDS WITHOUT ACCESS TO ELECTRICITY
AND TELEPHONE SERVICES, 1988 AND 1998

Percentage				
Decile	Households without electricity		Households without telephone	
	1988	1998	1988	1998
Highest	0.9	0.7	12.0	4.4
Second	1.6	1.1	29.5	6.8
Third	2.8	2.5	45.5	9.8
Fourth	5.1	1.3	63.9	14.9
Fifth	5.9	2.3	72.8	22.2
Sixth	7.7	2.4	84.5	24.6
Seventh	11.3	3.1	87.4	35.3
Eighth	12.0	2.7	91.3	43.6
Ninth	19.9	4.0	96.2	53.2
Lowest	29.4	7.0	98.8	68.9

Source: R. Paredes M., "Redistributive impact of privatization and regulation of utilities in Chile", *Discussion Paper, No. 2001/19* (Helsinki, UNU World Institute for Development Economics Research (WIDER), 2001), p.14.

dropped from 20 to 4 per cent. In addition, electricity coverage in rural areas increased from 53 to 76 per cent between 1992 and 1997.³⁹

Regulatory problems and market concentration

It is generally agreed that the increased private sector investment required to achieve the necessary increase in generation capacity to match the country's electricity needs was made possible only by, inter alia, macroeconomic stability and a stable legislative and regulatory environment that ensured adequate return on investment.⁴⁰ On the other hand, there is some dispute whether the Chilean electricity regulator is sufficiently large and knowledgeable to regulate the sector effectively. It is often noted, for example, that “the regulator's limited information and technical capacity vis-à-vis the companies being regulated has prevented efficiency gains' being fully passed on to consumers through price cuts”.⁴¹

While regulators everywhere are unlikely to know as much as the firm about the latter's microeconomic conditions—usually referred to as the problem of asymmetric information—regulatory agencies in many developing countries tend to be even more ill-prepared than their counterparts in developed countries to discuss complex technical and financial matters with powerful private utility companies with the best expertise in the field, and often a good deal of political influence. Asymmetric information has been particularly evident in recent reviews of regulated prices in Chile, as regulatory agencies have had difficulties in collecting relevant cost data from the privatized utility companies. As a result, price-setting has become complex and crisis-prone.⁴²

Conflicts and disputes between regulatory agencies and regulated companies also arise from the overlap of institutional responsibilities, none of which is fully independent from the Government. Some of these regulatory problems were highlighted during the 1999 drought that led to the first compulsory electricity rationing since privatization. Since the prevailing law could not determine whether rationed consumers were entitled to compensation, the Government introduced a by-law obliging the private companies to maintain electricity supply in the event of future droughts.⁴³ While a regulatory framework established by a primary law (such as the above-mentioned 1982 law) may help to reduce the scope for “regulatory opportunism”, it may also lead to an inflexible regulatory regime and to a significant number of costly legal disputes.⁴⁴

Another potential difficulty with the Chilean model of electricity reform is that it does not forbid cross-ownership of generation, transmission and distribution companies. In the SIC system, for example, the three top firms account for the bulk of generating capacity, and Endesa (together with its affiliates) alone controls 55 per cent of this capacity. Enersis, the holding company that has a controlling stake in Endesa, is the owner of the largest distribution company in the SIC area. Moreover, as noted above, both Enersis and Chilean Endesa have been taken over by Spanish Endesa, which intended to make these acquisitions a central platform for its expansion in Latin America. In addition, Chilean Endesa also owns the SIC transmission network through its ownership of Transelec, as well as the water rights on the most attractive future hydroelectricity projects in the country. This is important because, despite the growing use of natural gas in generation, hydroelectric power is still the most cost-effective generation option and accounts for an overwhelming share of generation capacity in the SIC area.

³⁹ Gray, loc. cit., p. 8.

⁴⁰ Moguillansky, op. cit., p. 35.

⁴¹ Bitran and Serra, loc. cit., p. 946, further note that “due to their sheer economic size, utility companies have acquired an influence in the political system and in society as a whole, against which it is hard for regulators to contend”.

⁴² See Lalor and Garcia, loc. cit., for further evidence of such asymmetric information.

⁴³ Moya, loc. cit., raises the question of whether this by-law will undermine private investor interest in the sector from now onward.

⁴⁴ J. Stern, “Electricity and telecommunications regulatory institutions in small and developing countries”, *Utilities Policy*, vol. 9 (2000), pp. 131-157.

⁴⁵ Lalor and Garcia, loc. cit.

Market concentration has acted as a powerful barrier to entry and thus hindered the development of more competitive generation and distribution markets. In addition, information asymmetries in the operation of CDECs appear to have also been used to limit competition in generation and wholesale trade. Although both CDECs became operationally independent (from the leading generators) in 1998, their board of directors is composed of representatives of leading generation and transmission companies. It is argued that these boards have both the ability and the incentive to “interpret” data in favour of the large generation companies, “which are able to use their superior access to market information, and to the market itself, to the detriment of smaller competitors”.⁴⁵

These regulatory weaknesses in the Chilean model show that the existence of an independent regulatory agency is essential not only to promote competition and deal with monopoly power, but also to resolve disputes associated with electricity privatization. Many developing countries may lack the capacity to regulate the industry effectively, as was also shown in the case of Côte d’Ivoire (see box VI.2). Such constraints need to be addressed before efforts to increase private sector provision of electricity services are implemented in countries with weak institutional and governance structures and limited human resource capabilities.

Another lesson from the Chilean experience is that the complete vertical unbundling of the sector—including measures to prevent extensive cross-shareholding among the four different subsectors of the industry—is crucial to ensuring that the benefits of privatization, including improved efficiency and lower tariffs, are enjoyed by consumers. Last but by no means least, electricity privatization should be accompanied by effective competition in both generation *and* retail. As will be seen in the British case study, market liberalization helps not only to maximize the benefits reaped by consumers but also to reduce the need for price regulation in the first place.

ELECTRICITY REFORM IN GREAT BRITAIN

The restructuring of the electricity industry in Great Britain during the late 1980s and early 1990s was one of the earliest, largest and most radical transformations ever experienced by such an industry. Electricity privatization took place in the broader context of utility reform and redesign of the State’s role in the economy during the 1980s and 1990s.⁴⁶ Prior to the transfer of both management and ownership of the industry to the private sector in 1990, the electricity industry in England and Wales had been a classic case of a vertically integrated State monopoly. It consisted of a Central Electricity Generation Board (CEGB) that generated and transmitted all electricity and 12 Area Boards responsible for distribution and delivery to final customers in designated geographical areas. In Scotland, the industry was even more vertically integrated in that two State-owned monopolies were responsible for all activities—from generation to retailing—in their respective geographical areas.⁴⁷

⁴⁶ See *World Public Sector Report: Globalization and the State* (United Nations publication, Sales No. E.01.II.H.2) for an overview of how the State’s role was “redesigned” throughout the world during the 1980s and 1990s.

⁴⁷ For a detailed account of the nationalization and privatization of electricity industry in Great Britain, see J. Surrey, ed., *The British Electricity Experiment – Privatisation: The Record, The Issues, The Lessons* (London, Earthscan, 1986).

Restructuring of the sector

The industry was restructured and initially broken up into three different segments—generation, transmission and distribution/final delivery to customers—in preparation for privatization, in 1989. The new industry structure emerged in March 1990, and sales of shares to private investors began to take place later that year. The non-nuclear generation assets of the CEGB in England and Wales were split into two separate companies (National Power and Powergen).⁴⁸ All the nuclear power stations in England and Wales, and those in Scotland, were placed in two new State-owned companies, Nuclear Electric and Scottish Nuclear, respectively. Their modern nuclear reactors, however, were subsequently amalgamated into a new holding company (British Energy), which was also privatized in mid-1996.⁴⁹ The national transmission grid of the former CEGB in England and Wales was hived off to a newly created transmission company (National Grid), which was initially fully owned and operated by 12 newly privatized regional electricity companies (RECs).⁵⁰

With regard to distribution and retail in England and Wales, the structure of the RECs remained largely unchanged from that of the 12 previously State-owned Area Boards. As a result, they continued to have responsibility for both electricity distribution and delivery to customers in their authorized geographical areas. The 12 RECs were the first privatized electricity companies to be floated in the stock exchange, in December 1990, although the Government retained a “golden share”—mainly in order to block mergers or takeovers—until March 1995.⁵¹ Later in that year, the link between distribution and transmission was severed as the RECs demerged their shareholdings in the National Grid, which was also floated in the stock exchange.

Regulation and promotion of competition

One of the major innovations of the British model of utility reform was the creation of ad hoc independent regulators for each utility industry. Prior to the establishment of the two regulatory agencies for the telecommunications and gas sectors in Great Britain in the mid-1980s, the main institutional model of utility regulation was provided by the United States experience with multisectoral public utility commissions, such as the California Public Utilities Commission (see box VI.3). Besides their focus on rate-of-return regulation, major problems with such commissions include a lack of expertise about specific utility sectors and an accumulation of too much economic decision-making power, given that in many cases such commissions are responsible for several or all utility sectors.

An independent regulatory agency can avoid these problems and still act as a safeguard against both regulatory failure and “regulatory capture” by either political authorities or the regulated industry.⁵² Electricity reform in Great Britain was thus accompanied by the establishment of an Office of Electricity Regulation, in 1990. Given the increasing convergence of the electricity and gas industries during the 1990s, this office merged with the gas industry regulator to form the Office of Gas and Electricity Market Regulation (Ofgem), in 1999. The broad goals of Ofgem are (a) to enhance operational efficiency, (b) to promote competition and (c) to protect consumer interest from monopoly power, notably

⁴⁸ In Scotland, the non-nuclear assets of State-owned companies were also privatized—as two separate, vertically integrated companies (Scottish Hydro Electric and ScottishPower)—in 1991.

⁴⁹ The older Magnox stations were kept out of British Energy and were eventually transferred to another State-owned company (British Nuclear Fuels). For an account of the problems with the privatization of nuclear power stations, see J. R. Branston, “The price of independents: an analysis of the independent power sector in England and Wales”, *Energy Policy*, vol. 30, No. 9 (forthcoming, 2002); and “A counterfactual price analysis of British electricity privatization”, *Utilities Policy*, vol. 9 (2000), pp. 31-46.

⁵⁰ Both the distribution and retail operations of these 12 regional electricity companies will be referred to simply as RECs throughout the present chapter for the sake of consistency.

⁵¹ The golden share was aimed at restricting any single private entity in the RECs and generation companies to a maximum stake of 15 per cent. The British Government has recently also redeemed its golden shares in the two original generating companies in England and Wales (National Power and Powergen) but it still holds such shares in National Grid (transmission), British Energy (modern nuclear stations) and the two vertically integrated Scottish companies.

⁵² “Regulatory capture” by the regulated utilities appears to be a major problem with United States-style rate-of-return regulation. See, for example, C. D. Foster (*Privatization, Public Ownership and the Regulation of Private Monopoly* (Oxford, Blackwell, 1992)), who also proposes several measures to reinforce regulators’ independence from both regulated industries.

through price-based regulation. However, it makes use of different instruments to deal with the four different segments of the electricity industry.

Generation and transmission

Since it was generally assumed that competition would develop most quickly in the generation subsector, there was no formal price-based regulation of this subsector. Ofgem has, however, been able to exert pressure on the generation companies to sell off some generating capacity in order to enhance competition. It can also refer (or threaten to refer) disputes involving potential monopoly behaviour or pricing to a Competition Commission.⁵³ At the same time, the privatized distribution companies (RECs) have been allowed to acquire generation assets in order to introduce more competition in generation. Allowing individual RECs to produce their own electric power led to a surge in REC investment in independent power projects (IPPs), although a regulatory rule allows them to meet only up to 15 per cent of their demand from such IPPs.

The only formal restrictions placed on National Power and Powergen after privatization was that they had to sell all their electricity to a national wholesale electricity pool.⁵⁴ Independent power producers could also sell their output through the electricity pool if they chose to do so. It soon became apparent, however, that the operation of this market lacked effective competition to the dominance of the two generation companies. There was particular concern about the possibility that these two companies were behaving as a duopoly and about their ability to exploit their dominant position to manipulate pool prices. Since both companies were once part of the same State monopoly, they were likely to have a good knowledge of each other's cost structures. Possible price manipulation was associated with the facts that pool prices fluctuated sharply and that prices occasionally rose even during times of low demand.

Following many reviews of pool prices, Ofgem concluded that the generators could raise prices above marginal costs in several ways, inter alia, by declaring some plant unavailable and thus artificially reducing supply relative to demand. In 1998, Ofgem launched an industry-wide review of the trading arrangements and, partly as a result, new electricity trading arrangements (NETA) were introduced in March 2001 to replace the pool.⁵⁵ Under NETA, bulk electricity is traded between generation companies and electricity providers through bilateral contracts and on power exchanges, where buyers and sellers come together to trade different energy contracts. One of the key features of NETA is that the demand side is fully incorporated into the new arrangements to balance output with consumption.⁵⁶

While it was assumed that competition would quickly develop in generation, it was also generally agreed that transmission (as well as distribution) contained natural monopoly characteristics that required regulation, including price controls. For this reason, the national transmission network operated by National Grid has been subject to price caps, along the lines of the "RPI minus X" formula. At the outset of privatization, the productivity factor ("X") was set at zero, that is to say, there were no expected efficiency improvements until the following price review. The two following reviews, however, requested increasing productivity gains by setting tougher price caps for the transmission sector: RPI-3 for 1993-1997 and RPI-4 for 1997-2001.

⁵³ The Competition Commission is a panel of independent experts that conducts enquiries on specific cases. See R. Green, "Checks and balances in utility regulation: The UK experience", in *Public Policy for the Private Sector*, No. 185 (Washington, D. C., World Bank, May 1999).

⁵⁴ For details of the operation of this electricity pool, refer to Branston, "The price of independents"....; J. Bower and D. Bunn, "Experimental analysis of the efficiency of uniform-price versus discriminatory auctions in the England and Wales electricity market", *Journal of Economic Dynamics and Control*, vol. 25 (2001), pp. 561-292; and R. Green, "Markets for electricity in Europe", *Oxford Review of Economic Policy*, vol. 17, No. 3 (2001), pp. 329-345.

⁵⁵ See, for example, Electricity Association (EA), *Electricity Industry Review (London)*, No. 6 (February 2002), and Green (2001), loc. cit.

⁵⁶ Green, loc. cit.

Distribution and retail

Similarly, the distribution businesses of the RECs are subject to indefinite price controls. Their price cap formula (RPI-X+Y), however, was originally different from the transmission one in that a “Y” factor was incorporated with the aim of providing the industry with sufficient cash flow to meet projected capital expenditure and operating costs. During the first four-year regulatory cycle, their “X” factor was also set at zero, whereas their “Y” factor ranged from zero to +2.5, depending on the company. Partly because of these generous price caps, the distribution businesses of RECs recorded growth in profits that averaged up to 30 per cent a year during the first years of privatization.⁵⁷ As a result, the first price review in 1994 compelled the RECs to reduce their distribution prices by between 11 and 17 per cent in 1995-1996 and change their price-cap formula to the standard RPI-X, with the “X” productivity factor set at 2 (RPI-2) for the four-year period until 2000.

While all RECs were originally responsible for both distribution (for which they acted as regional monopolies) and retailing activities, subsequent legislation embodied in the Utilities Act 2000 has compelled them to separate their regional monopoly distribution and retail businesses into distinct companies.⁵⁸ The Utilities Act 2000 also obliges all distribution network operators to facilitate competition, to develop and maintain a coordinated and cost-effective system of distribution and to be non-discriminatory in all practices. All British distribution companies must thus offer non-discriminatory access to competing retailing firms, under the same terms and conditions applied to their own retailing operations.

Competing retailers are thus entitled to supply both household and industrial customers in any designated area through another company’s distribution networks and pay a non-discriminatory fee to the distribution company for the use of the system. The regulator’s main priorities for the retail sector are to promote competition, ensure service quality and protect consumer interests, although Ofgem can also exert pressure on retailing prices. The retailing activities of dominant regional companies (that is to say, RECs in their original geographical areas) are subject to price controls, although they were originally supposed to have different “X” productivity factors and time lags than those for distribution and transmission. Following the introduction of full competition in the retailing market in 1999 (see below), these price controls became more of a safety net, given that there are generally lower prices available in the market.⁵⁹

The introduction of competition was phased in over eight years because of the huge number of customers and the technical complexities involved. At the outset of privatization in 1990, the first segment of the electricity market, covering about 5,000 large industrial and commercial consumers, was opened to competition. In 1994, another segment of the market covering about 50,000 medium-sized consumers with a peak demand of more than 100 kilowatts was also opened to competition. The last market segment covering the other 26 million consumers, including small business and residential customers, with a peak demand below 100 kilowatts was gradually opened up for competition between September 1998 and May 1999.

⁵⁷ See R. Bacon, “Lessons from power sector reform in England and Wales”, *Public Policy for the Private Sector*, No. 61 (Washington, D.C., World Bank, October 1995).

⁵⁸ For further details about the Utilities Act 2000, see *Electricity Industry Review*....

⁵⁹ As the benefits of full competition spread, particularly in the residential electricity market, these redundant price controls are expected to be permanently removed during the course of 2002.

An assessment of the reform

In just over a decade, privatization and gradual market liberalization have drastically changed the structure and operation of the British electricity industry. Not only has the sector been dismembered into different generation, transmission, distribution and retailing segments, but barriers to entry into two of them (generation and retail) were virtually removed. The main question, therefore, is whether this transformation has also produced benefits with regard to enhancing competition, operational efficiency and service quality, as well as prices reductions.

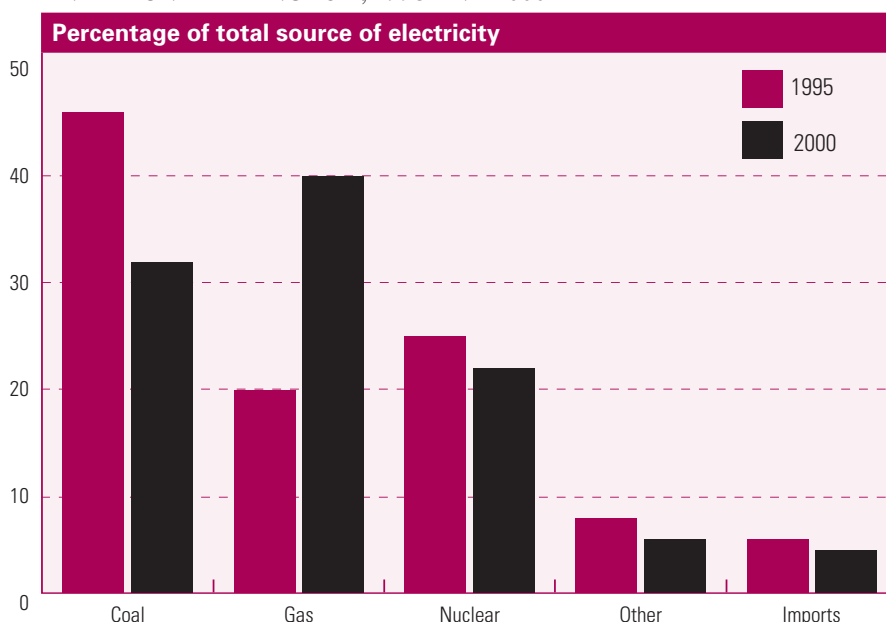
Competition in different market segments

Private sector involvement has moved the industry away from three vertically integrated regional monopolies (one in England and Wales and two in Scotland) to a market consisting of many competing generating companies. There are currently over 40 companies regarded as major electricity producers in Great Britain, compared to seven State-owned ones in 1990. This reduction in horizontal concentration has resulted in greater competition in the market and led to a significant reduction in the market shares held by the largest generators, particularly in England and Wales. Allowing individual RECs to produce part of their electricity has contributed to the expansion of IPPs—whose preferred method of generation is based on more efficient and cost-effective combined-cycle gas turbines—and thus to greater competition in generation. As figure VI.3 shows, there has been a shift from relatively inefficient or costly coal and nuclear sources towards more cost-effective (and environmentally cleaner) natural gas-fired capacity.⁶⁰

This increasing convergence between the electricity and gas industries is also highlighted by the fact that the privatized gas utility (formerly British Gas

⁶⁰ The cost of generating electricity in gas-fired combined-cycle plants has decreased significantly over the past decade. As a result, their use in electricity-generation has been increasing in many countries: it is estimated that their demand now represents over half of the world market of thermal power plants. See J. Islas, "The gas turbine: a new technological paradigm in electricity generation", *Technological Forecasting and Social Change*, vol. 60 (1999), pp. 129-148.

Figure VI.3.
SOURCES OF ELECTRICITY GENERATION
IN THE UNITED KINGDOM, 1995 AND 2000



Source: *Digest of UK Energy Statistics*, (London, United Kingdom Department of Trade and Industry (DTI), 2001), chap. 5.

Note: Based on actual outputs in the respective fiscal years.

and now called Centrica) has become a major player in the electricity-generation market. In addition, there has also been increasing foreign investment in both new power stations and the acquisition of existing capacity from National Power (now called Innogy) and Powergen. A leading (State-owned) French energy group *Electricité de France* (EdF), for example, has become a major player in the generation market with ownership of significant British capacity. These rapid changes in market conditions are illustrated by the recent takeovers of both Powergen and Innogy by two German utility conglomerates (EON and *Rheinisch—Westfälische Elektrizitätswerke* (RWE), respectively).

Transmission has remained the most concentrated industry segment, consisting of a monopoly in England and Wales and two regional monopolies in Scotland. The introduction of NETA, however, has resulted in the rapid development of a large and transparent wholesale market, similar to that in which other commodities are traded. Forwards, futures and spot markets are evolving in response to the requirements of participants and a number of power exchanges have been established. Participants, which include generators, aggregators, distributors and traders, now have much greater choice in respect of how, where and when to trade electricity.⁶¹

The high profitability of the distribution businesses of the RECs made them attractive targets for takeovers as soon as the Government's golden share ended in 1995. An upsurge of proposed mergers and acquisitions in 1995 prompted the Government to intervene in order to prevent a growing vertical concentration, particularly between generation and distribution companies.⁶² Three of the country's largest generation companies (Powergen and the two Scottish generators) subsequently took over three separate distribution companies in England and Wales. EdF of France, which owns significant generation capacity in England and Wales, has also taken over a distribution company.

Privatization has encouraged a consolidation of the distribution segment in England and Wales, given the potential benefits of economies of scale, reduction of costs and increased operational efficiency. There are now 9 distribution companies operating the 12 authorized distribution areas of the original RECs in England and Wales, although these companies hold separate licences in respect of each area. Although further mergers are likely in the near future, Ofgem does not see this consolidation as a potential threat to consumer interests owing to the availability of effective price control mechanisms, as well as its ability to enforce the keeping of separate licences, in respect of each area, by the remaining companies, and to facilitate competition.

Similarly, while the retailing activities of nine original RECs have been taken over by five major generating companies,⁶³ effective regulation and the development of strong competition in the retailing market have prevented the use of local monopoly power in the original geographical areas of the RECs. The obligation to allow access to their regional distribution networks has ensured that competing retailers—including other RECs outside their original geographical areas—have made substantial inroads into what had originally been a captive local market for RECs. It can be argued that the concept of the regional electricity company as an exclusive regional monopoly was effectively abolished by the Utilities Act 2000.

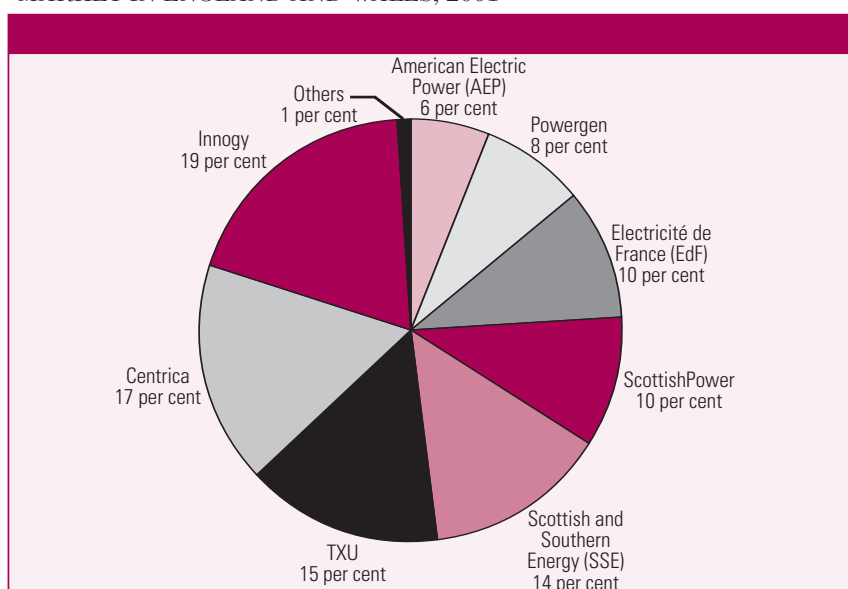
Consolidation has also offered the remaining companies an opportunity to become more competitive as they intensify their search for new customers. There are now 8 major retailing groups in England and Wales (see figure VI.4),

⁶¹ It is also argued, however, that large market players may still have an information advantage that is conducive to the maintenance of a dominant market position. See R. Emmanuel and A. Macatangay, "Market definition and dominant position abuse under the new electricity trading arrangements in England and Wales", *Energy Policy*, vol. 29 (2001), pp. 337-340.

⁶² The two major generation companies (Innogy and Powergen) had attempted to take over two RECs in 1995, both attempts having been referred to the Competition Commission (which approved them) and then blocked by the Government in 1996.

⁶³ Three are fully owned by RWE/Innogy, two by Scottish and Southern Energy (SSE), formerly Scottish Hydro Electric, and one each by EON/Powergen and ScottishPower. In addition, EdF has also taken over the retailing businesses of two former RECs.

Figure VI.4.
SHARE OF MAJOR COMPANIES IN THE RETAIL ELECTRICITY
MARKET IN ENGLAND AND WALES, 2001



Source: Electricity Association, *Electricity Industry Review* (London), No. 6 (February 2002).

formed from the previous 12 REC retail businesses through takeovers or mergers. Although most of them are part of powerful utility groups, the lack of a dominant national retailer is reflected by the well-balanced distribution of the national market. Besides the major English (Powergen and Innogy) and Scottish (Scottish and Southern Energy (SSE) and ScottishPower) generation companies, Centrica⁶⁴ (formerly British Gas), and leading European (EdF⁶⁵) and American (TXU and American Electric Power (AEP)) utility groups, have become important electricity retailers. Conversely, the retail businesses of the ex-RECs have become major players in the gas market. The increasing convergence of electricity and gas has thus increased competition and consumer choice in both markets.

Operational efficiency

The operational efficiency of the British electricity industry has improved markedly since privatization. That most efficiency gains were achieved during the first years after privatization is an indication of how inefficient the industry was under State ownership. The most visible productivity gains were probably associated with labour reductions. As table VI.2 shows, employment in the 15 privatized companies in England and Wales was cut almost by half in the first five years following privatization, during which electricity output, delivery and consumption rose significantly.⁶⁶ The fact that Great Britain's private electricity industry can be run with half of the people employed when it was State-owned has led to criticism that efficiency gains have been primarily achieved at the expense of its labour force. There is evidence, however, that remaining employees generally gain from privatization. For those that are laid off in the process, compensation, retraining schemes and social security mechanisms should be used and this has largely been the case in the British model.⁶⁷

⁶⁴ Given its national reach in the gas market, Centrica has attracted over half of residential customers that have switched to different electricity retailers so far.

⁶⁵ As well as the two German utility groups (EON and RWE) that have just taken over the two English generating companies.

⁶⁶ Total electricity-generation rose by an annual average of 1 per cent during the first half of the 1990s and by 2.5 per cent during the second half of the decade. See *Digest of UK Energy Statistics*, (London, United Kingdom Department of Trade and Industry (DTI), 2001), chap. 5.

⁶⁷ Kikeri, loc. cit. Government policies to minimize the harmful employment impacts of privatization include compensation and other forms of standard social security, such as unemployment benefits, for laid-off employees, as well as retraining schemes to help former utility employees reintegrate into the labour market.

Table VI.2.
EMPLOYMENT IN THE ELECTRICITY INDUSTRY IN
ENGLAND AND WALES, 1989-1990 AND 1995-1996

Privatized companies	1989-1990	1995-1996
National Power and Powergen	82,478	54,469
National Grid	26,407	8,996
RECs	14,415	4,907
Total	123,300	68,372

Source: Electricity Association, *Electricity Industry Review* (London), No. 2 (January 1997).

Note: Fiscal year runs from 1 April to 31 March.

Privatization has also led to other improvements in operating efficiency, such as more efficient use of equipment and reduced costs of fuel inputs. For example, during the first four years after privatization, National Power reduced its fuel costs per unit of electricity generated by no less than 13 per cent, for various reasons, such as changing power plants' fuel mix and improving fuel contracting.⁶⁸ Other technical efficiency improvements have been associated with the growing use (and greater technical efficiency) of natural gas in electricity generation.⁶⁹

Quality of service

Service quality has improved since privatization, partly as a result of increasing competition for customers. Retail competition and consumer choice, generally seen as unfeasible or uneconomic only 15 years ago, have developed rapidly over the past few years, particularly since the liberalization of the retail market. An increasing number of customers have thus switched suppliers in order to obtain better-quality or cheaper services.

In 2000, 10 years after competition had been introduced in the large commercial and industrial segment of the market, over 80 per cent of these customers were being supplied by a company other than their local REC.⁷⁰ Similarly, over two thirds of medium-sized consumers (with a peak demand of between 100 and 1,000 kilowatts) switched to a non-local supplier between 1994 and 2000. With regard to the largest market segment, despite its being opened for competition later than the telecommunications and gas sectors, the number of residential customers switching electricity providers has not only caught up with the figure for gas, but is much higher than that for telephones. During the first two years after the introduction of full competition in the residential market, about 11 million residential customers (or 38 per cent) switched to a non-local retailer at least once.⁷¹

Furthermore, a survey commissioned by Ofgem and conducted in September 2001 shows that lower-income groups have begun to close the gap with upper-income groups in terms of switching, although the switching rates for pensioners and rural dwellers are much lower. While lower prices are the main motive for switching retailers, better customer service and the ability to receive electricity and gas from the same company are also important reasons. Over 80 per cent of customers who have switched now are served by a single company and about half of them have switched their gas supply to their electricity retailer. Generally

⁶⁸ See International Energy Agency, *Electricity Reform: Power Generation Costs and Investment ...*, p. 38.

⁶⁹ In 2000, for example, the thermal efficiency of combined-cycle gas turbine stations was estimated to be 46.6 on a gross calorific value basis, compared with 37.3 for nuclear stations and 36.2 for coal-fired stations. See *Digest of UK Energy Statistics ...*

⁷⁰ *Ibid.*

⁷¹ The proportion of customers who have switched to a non-local retailer more than once (23 per cent) is also growing, and only a third of them have returned to their original supplier. All data mentioned in this section are derived from *Electricity Industry Review* (London), No. 6 (February 2002).

speaking, there is a high degree of satisfaction with current retailers across different areas of England and Wales, with only 3 per cent being dissatisfied.

The opportunity to change electricity retailers has had a positive impact on the quality of services provided. One of the biggest advantages of electricity privatization and liberalization in Great Britain is that they allow a degree of consumer choice that was impossible under public monopoly provision. There is now a degree of “product differentiation” in the electricity retail market, given the significant number of retailers in each region. Assuming that households would like to consume different “types” (or degrees of quality) of electricity services, these different consumer tastes can provide an important incentive for innovative services by private electricity retailers that did not exist under State-owned monopoly systems. The availability of information on different consumer tastes arising from private provision of electricity in a competitive market can thus lead to innovation aimed at introducing differentiated products (or services) into the market.⁷²

Pricing

It is generally agreed that privatization, regulation and market liberalization have had a beneficial effect on electricity prices over the past decade. The average price of electricity has declined since privatization, mainly as a result of increasing retail competition and effective price-cap regulation. The average annual household electricity bill dropped by 32 per cent in real terms between April 1990 and April 2001.⁷³ Medium-sized and large industrial and commercial users have also enjoyed price falls since privatization. For example, between 1990 and 2000, customers with a maximum demand of 500 kilowatts experienced a drop of 33 per cent (in real terms) in their average annual bill, whereas those with a peak demand between 500 and 2,500 kilowatts experienced a real fall of almost 37 per cent.⁷⁴ Privatization and market liberalization have thus also contributed to improving the operational efficiency and competitiveness of other sectors of the British economy.⁷⁵

Privatization and price-cap regulation have provided a strong incentive to increase operational efficiency and reduce costs, and thus increase profits within the price caps until the next price review. However, while it can be argued that the lower prices generated by price-cap regulation tend to benefit all consumers, changes within price structures can also be relatively more beneficial to specific groups of consumers with different consumption patterns. For example, a relative increase in the minimum basic tariff could harm consumers with lower levels of consumption, who often belong to low-income groups. Although it is possible for private companies to offer differentiated prices within the price caps, it is sometimes argued that profit maximization prevents them from being sensitive to the needs of vulnerable groups.⁷⁶

A particularly sensitive socio-political issue is the link between private sector involvement and disconnections for non-payment, especially during the first years following privatization. Immediately after the privatization of British Gas in the mid-1980s, for example, disconnection rates for the non-payment of residential gas bills rose significantly. As a result, the regulator decided to intervene in order to prevent widespread disconnection, unless a prepayment meter had been offered as an alternative. Disconnection rates for electricity immediately after privatization were far lower than those for gas, and rates of prepay-

⁷² See, for example, A. Dixit and J. Stiglitz “Monopolistic competition and optimum product diversity”, *American Economic Review*, vol. 67 (1977), pp. 297-308.

⁷³ *Electricity Industry Review* (London), No. 6 (February 2002).

⁷⁴ *Ibid.*

⁷⁵ A survey of international electricity prices conducted in January 2001 shows, for example, that prices for an average medium-sized industrial user in Great Britain are 40 per cent lower than those in Italy, which has the most expensive average electricity price for this consumer category in the European Union. See *Electricity Industry Review* (London), No. 6 (February 2002).

⁷⁶ See C. W. Price and A. Young, “UK utility reforms: distributional implications and government response”, *Discussion Paper No. 2001/10* (Helsinki, United Nations University (UNU) World Institute for Development Economics Research (WIDER), May 2001); and K. Bayliss, “Privatisation of electricity distribution: some economic, social and political perspectives”, mimeo., University of Greenwich, London, April 2001.

ment are much higher.⁷⁷ Moreover, the share of prepayment tends to be much higher for vulnerable and low-income groups (see table VI.3).

Since prepayment is the most expensive of the three methods of payment⁷⁸ for the electricity retailing companies, as it involves frequent small cash payments, such companies have an incentive to reduce the cross-subsidy involved in charging a single price to all customers. Under State ownership, electricity prices included significant cross-subsidies, in that all customers paid the same price, with the result that high-cost consumers, such as, for instance, distant rural dwellers and prepaying consumers, were subsidized by low-cost ones. Economic pricing by private electricity companies tends to reflect these cost differences and thus to reduce or eliminate such cross-subsidies. There is evidence that, while all consumers have enjoyed lower prices for both electricity and gas as a result of price-cap regulation, prices tended to fall much faster for direct debit payers than for prepayment customers (see table VI.4). Old age pensioners and disabled consumers appear to have gained less than the average household. This may be considered a socio-economic drawback of Great Britain's electricity privatization.

⁷⁷ In 2000, while 17 per cent of electricity consumers used a prepayment method, the figure for gas was only 8 per cent (C. W. Price and A. Young, loc. cit.).

⁷⁸ There are three methods of payment for gas and electricity in Great Britain: (a) quarterly bills payable in arrears after a meter reading; (b) direct debt from a bank account; and (c) prepaid cards that are inserted into meters to release electricity.

Table VI.3.
METHODS OF PAYMENT FOR GAS AND ELECTRICITY IN
THE UNITED KINGDOM IN THE MID-1990s

Percentage in each household category						
Household category	Gas			Electricity		
	Quarterly bill	Direct debt	Pre-payment	Quarterly bill	Direct debt	Pre-payment
All households	59	38	4	62	27	11
Pensioners	70	27	3	79	18	3
On disability benefit	55	38	7	60	24	16
On income support	54	34	12	49	22	29
Lowest income quintile	58	33	9	54	20	26
Highest income quintile	61	38	1	68	31	2

Source: UN/DESA, based on C.W. Price and R. Hancock, "Distributional effects of liberalizing residential utility markets in the UK", *Fiscal Studies*, vol. 19, No. 3 (1998).

Table VI.4.
MEAN GAINS FROM PRICE REBALANCING IN THE GAS AND
ELECTRICITY INDUSTRIES SINCE PRIVATIZATION, 1996

In British pounds		
Household category	Electricity	Gas
All households	0.0	0.0
Pensioners	-1.2	-1.7
Customers on disability benefit	-1.6	0.0
Customers on income support	0.0	-0.1
Prepayment customers	-0.1	-3.1
Quarterly bill payers	-1.7	-8.9
Direct debt payers	4.1	14.2

Source: UN/DESA, based on C.W. Price and R. Hancock, "Distributional effects of liberalizing residential utility markets in the UK", *Fiscal Studies*, vol. 19, No. 3 (1998).

Price-cap regulation and economic pricing by privatized companies have therefore been criticized for their potentially detrimental effects on distributional equity, in particular in terms of the welfare of low-income and vulnerable consumers. It is further argued that the efficiency improvements arising from price-cap regulation in the gas and electricity industries have not been equitably distributed among major stakeholders, such as company shareholders, employees and, in particular, consumers. A consequence of the success of price-cap regulation and market competition in improving efficiency and reducing operating costs has also been that profits of the most efficient firms can diverge considerably from normal levels during regulatory lag.

While such consequences of privatization may be troublesome from an equity perspective, State ownership and its associated inefficiencies and distortions would be a worse alternative. Stricter regulation of the industry has already gone some way towards addressing these problems and further refinement can be expected in the future. One of the main advantages of the British model is that it is flexible enough to respond to such problems without compromising the broadly beneficial shift towards greater economic efficiency in electricity provision.

CONCLUSION

The case of Chile shows that it is feasible to privatize both the management and the ownership of the whole electricity sector in some developing countries. The benefits of greater private sector involvement can be increased with full market liberalization and enhanced competition in electricity provision. Nevertheless, as the case studies of public-private interaction in Asian and African developing countries also show, it may be preferable for some developing countries that are privatizing electricity to do so only partially. Private ownership of the generation subsector or private sector management of electricity utilities can thus be beneficial in terms of tapping private investments for infrastructural improvements and expansion, and providing incentives for private operators to improve performance and services. In any case, many problems with the Asian IPP and West African leasing models could be tackled by an effective regulatory machinery.

The British model of electricity reform has been among the most advanced to be fully implemented anywhere the world. It is sometimes seen as an ultimate goal for electricity privatization, competition and market liberalization, although in many countries, only a gradual or even partial move towards that goal may be feasible. Its practical applicability to many developing countries, in particular, may be limited by a series of factors, including the small size of their electricity markets, weak institutional and governance systems, and their capacity for effective regulation of the sector. Regulatory constraints in many developing countries—notably inadequate institutional and human resource capacity—can pose serious obstacles to the successful implementation of electricity reform.

Several developing countries and those with economies in transition have used important features pioneered by the Chilean and British experiences as a policy guide in their own electricity reform, even though the features of their electricity markets may differ significantly, particularly from those existing in Great Britain. Such differences affect features ranging from the quality and

coverage of electricity services to levels and distribution of income, as well as social security provision. Nonetheless, the Chilean and British experiences offer some lessons for other countries. The British model is particularly useful because of several innovative features, such as (a) widespread change in ownership and market structure, (b) separation of the transmission network from generators and distributors in order to ensure open access to the network, (c) price-based competition in segments of the industry that are not considered natural monopolies and (d) price-based regulation of naturally monopolistic transmission and distribution.

Electricity privatization in both Chile and Great Britain took place in the context of broader market liberalization, including a widespread utility reform programme. Political commitment can be crucial to the success of utility reform, particularly when unexpected problems arise during implementation, such as the lack of competition in the electricity-generation market and the emergence of abnormal profits by newly privatized generation and distribution companies. Such problems can usually be resolved by firm regulatory action undertaken to deal with monopoly practices, as opposed to yielding to pressures to revert to the pre-reform structure.

Governments, therefore, still have an important role to play in respect of the achievement of society's goals through public-private interaction in the provision of utility services. The success of efforts to attract private sector investments into public utilities will depend largely on the establishment of transparent and reliable contract legislation and regulatory machinery that offer a minimum level of guarantee to private investment. The creation of a favourable investment environment, in the context of a broader economic liberalization strategy, is thus vital for the success of utility reform.

The creation of genuine consumer choice for final consumers is also a key requirement for enhancing competition, improving efficiency and, ultimately, ensuring lower prices. One of the most important outcomes of the creation of the British model is that it allows an unprecedented degree of consumer choice, which is unfeasible under public monopoly provision. Greater information about consumer preferences and a certain degree of "product differentiation" in a competitive electricity retail market have provided incentives for both improved service and product innovation.

At the same time, there is evidence that some groups of consumers have gained more than others from privatization. While this can be considered a socio-economic drawback of greater private sector involvement in electricity provision, such problems are best remedied by targeted government support to help the worse-off groups of consumers to adapt to new market conditions. Similarly, at a broader macrolevel, there is some concern that the gains from greater private sector involvement are unequally distributed among shareholders and managers, on the one hand, and consumers and laid-off employees, on the other.

In several countries, socio-political resistance to greater private sector involvement in utility services is often explained on the grounds of the above-mentioned social impacts, in isolation from the concrete benefits, which often outweigh the costs. There is, however, some legitimate concern that many developing countries have had little experience with private sector involvement in utility provision. The case studies of Africa, Asia and Latin America, as well

as the relatively successful experience in Great Britain, are thus intended to highlight the potential benefits of utility privatization, particularly against the background of inefficient State ownership and management.

As discussed in *World Economic and Social Survey, 1996*, with regard to greater private sector involvement in water supply, moving towards a more efficient provision of utility services may displace workers and even mean the contraction of some economic sectors. The central goal, however, must be to raise employment and production in the economy as a whole – as achieved by the provision of more efficient and indeed cheaper utility services – and thereby raise overall living standards. It should be axiomatic by now that public-private cooperation in utility provision brings about considerable efficiency gains, as well as some welfare losses. Although the latter are sometimes difficult to quantify, they tend to be much smaller than the gains to the economy as a whole, and can in any case be tackled by specific government action at much lower social costs than those incurred by State ownership and provision of utility services. Markets never provide a perfect structure of economic organization but recent economic history has shown that in most cases they perform much better than central planning.

VII

HEALTH SERVICE DELIVERY IN DEVELOPING COUNTRIES: WORKING MORE EFFECTIVELY WITH PRIVATE HEALTH PROVIDERS

1. *Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*
2. *Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same protection.*

—*Universal Declaration of Human Rights, adopted and proclaimed by General Assembly resolution 212 A (III) of 10 December 1948, article 25.*

(S)ocial security must be achieved by co-operation between the State and the individual.

*-Social Insurance and Allied Services
report by Sir William Beveridge
(London, His Majesty's Stationery Office, 1942), article 9.*

Most countries in the world are simultaneously facing rising costs of health services, growing demands for such services and increasingly limited resources for the financing of these services. These stresses on health-care systems have increased the concern of Governments and their citizens regarding the performance of their systems, and have given rise to pressures to redesign existing health systems, or design new ones, so as to meet social goals. In such reform attempts, policy makers throughout the world are increasingly recognizing the importance of incorporating private health providers into national health systems in order to enhance national health status. The present chapter examines the present roles of private health providers and examines ways to incorporate such providers more effectively into the overall national health systems in developing countries. It addresses some central issues arising from public and private interaction (or the lack of interaction) in health systems reforms, in general, and the delivery of essential health care, in particular, with the main focus on the roles of Governments and the private sector in improving the quality of and the accessibility to essential services offered within national health systems in developing countries.

States have usually kept essential (or primary) health care in the public domain, mainly because Governments have determined that such services have large positive externalities and that without public interventions the market would provide less than socially optimal levels of health goods and services. However, experience suggests a more nuanced reality: the private sector is already an important contributor to health services for the populations in all countries and consequently better coordination between the public and private sectors has great potential to improve performance of national health systems. Greater interaction between the health authority and private providers is a key to strengthening the understanding of health needs of the population by the authority and thus to making health regulation and monitoring more effective.

During the early 1990s, there was great enthusiasm for health reform in many parts of the world. Some countries in Western Europe—the Netherlands, Sweden and the United Kingdom of Great Britain and Northern Ireland, for example—introduced new financing and delivery schemes and the United States of America debated a significant proposal for reform of its health system. Economies in transition redesigned their health systems in the face of declining government revenues and deteriorating public health. Further, the World Bank advocated new health system strategies for developing countries;¹ and some States, such as Chile, China, Colombia, South Africa and Zambia, implemented, or were soon to implement major health reforms.

Such enthusiasm reflected the strong desires of Governments and the general public to better the health status of their populations through new, “improved” health systems. In developed countries, where rapid population ageing and skyrocketing medical expenses imposed large pressures on general government budgets, the greater involvement of the private sector (including individuals and households) in the financing and provision of health-care services was sought.² Those developing countries undertaking reforms, in particular middle-income countries, where private health-care providers and the insurance industry had been reasonably well developed, pursued similar reforms to take advantage of the presence of such private actors. The hope of these developed and middle-income developing countries was that greater private sector involvement would help build more efficient and effective health systems and reduce the cost to the Government and the public in providing health services and financing them.³

In other developing countries, and in particular the least developed countries, the emerging concern was that health indicators—such as life expectancy, child mortality rates and immunization rates—were not improving as quickly as they had been, or, even worse that they were deteriorating. Given the tightened resource constraints in these States, primarily owing to economic stagnation during the 1980s and resulting fiscal contraction, their Governments sought ways to increase the cost-effectiveness of health-care provision. At the same time, Governments and health experts increasingly recognized the comparatively larger presence of private actors in health-care provision in developing countries than in more developed countries. Examples of such private provision included clinical practitioners (both legal and illegal), community-based organizations, non-governmental organizations and an increasing reliance on out-of-pocket payments for medical services and drug purchases. This acknowledgement of the large role already played by the private sector in

¹ World Bank, *World Development Report, 1993: Investing in Health* (Washington, D.C., World Bank, 1993).

² Health care includes medical aspects of care—doctors, drugs, dispensaries and hospitals—as well as non-medical aspects such as food, safe water, hygiene, smoking and peace of mind. The term “health care”, however, has become synonymous with “medical care” among experts. See Mukund W. Uplekar, “Private health care”, *Social Science and Medicine*, vol. 51, No. 6 (September 2000), pp. 897-904.

³ The sources of rising health costs are complex. While the ageing population in developed and middle-income developing countries contribute to the higher costs, increasing use of sophisticated but more expensive medical technologies and the labour-intensive nature of health care are at least partly responsible for these rising costs.

health delivery in these States, combined with the realities of sharply depleted Government resources, led States and health experts to reverse their almost four decade history of underestimating the importance of private sector activities in health systems, and embrace the potential of leveraging the private sector to improve the health of the population.

Economies in transition similarly faced deteriorating health conditions and rapidly declining government revenues during the economic turmoil in the early to mid-1990s, factors which also led them to restructure their health systems. In all cases, the central challenge in designing new systems concerned to what extent Governments should or could be involved in financing and providing health-care services and what would be the appropriate roles for private actors in new systems. While the economic and social contexts of countries differ from one another, a common issue for almost all was, again, the question of greater involvement of the private sector.

In tandem with the greater involvement of the private sector in health systems in the world, policy makers, health experts and social scientists have begun to place more emphasis on examining the nature and the extent of such private activities. Policy makers and experts have increasingly recognized the importance of understanding the interaction between the activities of the public sector and those of the private sector in the overall framework of existing national health systems or of their redesign. They began, in particular, by investigating whether these activities complement, substitute for or are largely independent of each other. This research and policy development is of vital importance to developing countries, where, as will be shown below, the presence of the private sector has been large and its activities can complement public-health systems, which exhibit “gaps” or “institutional weaknesses” in providing health-care services to the population.

The design and performance of health systems that incorporate the private sector effectively is thus one of the major issues of concerns for policy makers, experts and the general public throughout the world. Health systems policy, however, is intrinsically complex. In the words of one writer: “The evidence is weak, no country has discovered an ideal model, and appropriate policies differ widely in different country settings”.⁴ More evidence, more sharing of experience and information across countries, and constructive debates are required to build health systems policy appropriate to national conditions.

The range of issues encompassed in discussions of a “health system” is wide, and the questions surrounding essential health service delivery cover only a portion of a broad spectrum. Other critical health system issues include, inter alia, production, distribution and pricing of pharmaceuticals, equipment and other inputs, health insurance and the financing of health systems. This chapter examines the areas of the health sector where private activities are more prevalent and thus the areas that could benefit most from broader cooperation and better coordination between the public and private sectors. It examines the role private activities play in essential health-care provision in developing countries, particularly least developed countries, and examines ways to improve national health status by properly understanding private demand and devising appropriate incentives for health-related workers. It concludes that Governments need to build their own capacity to form coalitions with the private sector in order to allocate resources effectively, enforce regulations and generate and disseminate information.

⁴ Richard G. A. Feachem, “Editorials”, *Bulletin of the World Health Organization*, vol. 78, No. 6 (June 2000), p. 715.

HEALTH SYSTEMS REFORMS PAST AND PRESENT

A century ago, organized national health systems designed to provide health services to the population at large barely existed, even among industrialized countries in Europe and North America.⁵ Although hospitals were functioning, very few people visited them; and there was little available protection from the financial risk associated with illness for the large majority of the population. Economic, social and political events during the eighteenth and nineteenth centuries, however, together with the advances in medical knowledge, were slowly changing the situation. The Industrial Revolution transformed many aspects of society, compelling people to recognize the large economic toll exacted by illness, disability and death in the workforce. Because illness and death lowered the productivity of their workers, employers began to provide medical services to their employees. At the same time, the importance of clean water and sanitation for preventive health became better understood, driving employers to begin to improve their employees' overall living conditions. Further, wars—such as the American Civil War and Crimean and Boer wars—contributed to changes by showing that infectious diseases killed more soldiers than the enemy. Advance in the control and prevention of such ailments also led to increased concern for the wider provision of health care.

The political ferment engendered by the Industrial Revolution also led to changes in health provision. The changing nature of production and employment created a large number of workers, some of whom became advocates of the socialist movement. To prevent such movements from gaining strength, Otto von Bismarck, Chancellor of Germany, proposed a government takeover (that is to say, nationalization) of labour unions' sickness funds, on the grounds that, insofar as those funds were a source of workers' support for the movement, by detaching the funds from the labour unions such support would weaken. In 1883, Germany enacted a law requiring employers to contribute to health coverage for low-wage workers in certain occupations. The popularity of the law among workers convinced other Governments in Europe to adopt similar legislation and subsequently such regulations spread outside Western Europe.⁶

The two World Wars, which destroyed much health infrastructure in Europe, paved the way for the expansion of health systems for some countries and the introduction of new systems in others. The Beveridge report of 1942 had identified health-care provision as one of the basic prerequisites of a social security system⁷ and laid the conceptual foundation for national health systems that would flourish in the post-war era all over the world.

Reforming health systems has been an ongoing process since the Second World War and current attempts build on the experience accumulated over the period. In a historical perspective, the current health reforms in the developing world have been deemed by the World Health Organization (WHO) as the "third generation" of reforms. Each generation of reform has been prompted by perceived failures in then prevailing health systems, by new attempts to achieve greater efficiency and fairness and/or by public demands for reforms. Advances in medical knowledge and technologies have also played an important role in generating support for reforms.

The present section will briefly examine the development of health systems reforms since the Second World War in order to clarify the primary goal of the

⁵ The present section is based on World Health Organization, *The World Health Report, 2000: Health Systems: Improving Performance* (Geneva, WHO, 2000), chap. 1.

⁶ Russia had begun establishing a network of provincial medical stations and hospitals in the late nineteenth century. The network provided free medical care and was supported by tax funds. After the Bolshevik revolution in 1917, the network was enlarged to cover the entire population and largely maintained for eight decades.

⁷ *Social Insurance and Allied Services*, report by Sir William Beveridge (London, His Majesty's Stationery Office, 1942).

current reforms. The importance and expected roles of the private sector in the current reforms will be discussed in the following section.

The first and second generations of reform

The first generation of health systems reforms were launched in the 1940s and 1950s in developed countries, and extended to middle-income developing countries. The main goal of these reforms was to establish national health systems with the promise of universal access (along with social insurance systems). By the late 1960s, however, many national systems in developing (as well as developed) countries had started recognizing difficulties on two fronts: medical costs were rising as the volume and intensity of hospital-based care increased, and access by the poor to the national systems was not completely guaranteed, despite the explicit goal of universal access. The rising costs of hospital-based care were partly associated with large spending on inpatient treatments for conditions that could have been managed by ambulatory care. Inadequate access, meanwhile, was particularly acute in some developing countries in Africa and Asia where Governments or colonial powers excluded indigenous people from their national health systems unless they were employed in the public sector.

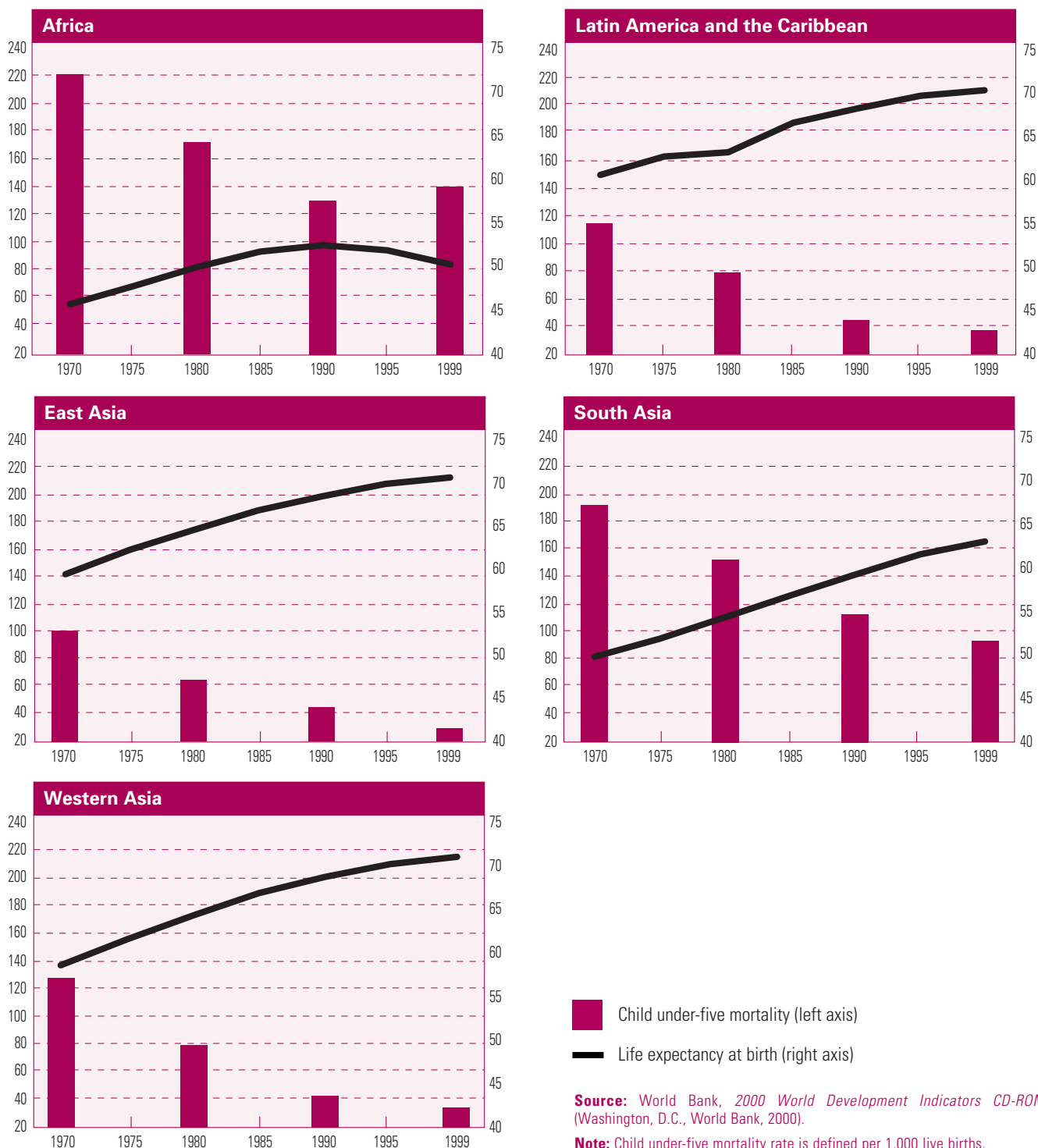
The second generation of reforms were aimed at ameliorating these limitations, and thus strove to make health systems more cost-efficient, fairer and more accessible. During the era of these reforms, the term “primary health care” became a household expression, denoting the means to provide affordable universal access to health care.⁸ This generation of health reforms made great strides in improving health at relatively small cost in many developing countries. Life expectancy at birth increased by more than 10 years in a matter of two decades in many developing countries (figure VII.1). Child mortality rates declined and immunization rates increased significantly. Countries with great successes in these areas included—but were not limited to—Botswana, China, Costa Rica, Cuba, Guatemala, Indonesia, Mauritius, the Niger, Sri Lanka, the United Republic of Tanzania, Zimbabwe and some States in India. The power of public-health measures, and the emphasis of prevention over cure became widely recognized in the developing world, with many countries committing themselves to deliver not only adequate primary health care, but also a minimum level of education, food, safe water and sanitation. As a result, most developing countries have achieved within a half-century health advances that took nearly two centuries in the now developed countries.

While the second generation of reforms delivered significant improvements in health outcomes in many countries, they proved relatively weak in providing affordable universal care: some countries made only slow progress in improving health status, particularly among the poor, while others experienced deteriorating health status of the population, reversing previous gains. These trends were particularly noticeable in Africa (figure VII.1). Several weaknesses were identified, in addition to the devastating effects of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) on mortality.⁹ Many patients did not utilize the lower levels of the system (such as health posts and health centres) and sometimes bypassed the public system altogether; funding was not adequate, leading to insufficient health training and a shortage of

⁸ The term “primary health care” has different connotations for different groups of persons or countries. In general, however, it refers to the first contact with the health system, or the basic level of care, or simple treatment that could be provided by health-care workers with minimum medical training, or interventions acting on primary causes of disease (see *The World Health Report, 2000* ..., p. 14).

⁹ For an analysis on the effects of HIV/AIDS, see WHO, *Macroeconomics and Health: Investing in Health for Economic Development*, report of the Commission on Macroeconomics and Health (Geneva, WHO, 2001), pp. 47-53.

Figure VII.1.
 UNDER-FIVE MORTALITY AND LIFE EXPECTANCY AT BIRTH IN DEVELOPING REGIONS, 1970-1999



equipment; health workers were not well motivated; the allocation of health resources continued to be inequitable or, sometimes misallocated, particularly to the detriment of the poor, and; demand for public-health services was low in response to the supply-side failures mentioned above.¹⁰

These weaknesses relate to the low quality of health-care services and falling demand, organizational aspects of health-care systems and delivery care services management, and a lack of funding. The third generation of health systems reforms came about to address these three primary shortcomings.

Current health systems reforms: recognizing the presence of the private sector

The issues surrounding the current health systems reforms are more complex than those the previous reforms sought to resolve. They require a careful examination of economic and social policies that goes beyond the traditional analysis of health-related technical issues.¹¹ Such an examination necessitates that policy makers understand a host of issues. Policy makers and experts need to understand the reasons people demand or use some services provided at certain publicly managed health facilities but not others (factors influencing demand). They need to determine why medical staff do not perform their assignments as planned (workers' incentives related to the quality of services). Additionally, in light of the first two requirements, policy makers and experts must determine the most cost-effective means to improve the performance of health-care services (efficiency and effectiveness). This requires identifying the obstacles that prevent health-care systems at the subnational and local levels from working as effectively and as efficiently as desired (organizational issues). Finally, policy makers need to determine how the entire health system should be monitored and supervised (governance and regulation at the national level). In addition to these operational issues, policy makers must address the issue of funding and its allocation among regions or social groups.

These issues are interrelated. The low quality of services may result from insufficient funding, which triggers disruption of pharmaceutical and other medical supplies and works against health workers' incentives through low pay. Weak coordination at various levels of health systems or among various health programmes may dilute the effectiveness of health care. Low utilization rates of publicly managed health entities may reflect not only the low quality of health services, but also the mismatch between what people demand and the needs perceived by the authorities.

While supply-side considerations remain an integral part of reform schemes, the third generation of reforms have emphasized demand for health services as the primary means to address these issues. The new approach not only probes factors that affect demand for health-care services in response to medical fees, and the quality of, and the ease of access to, health services and human resources, but also tries to identify causes of mismatches between demand—what people really desire—and perceived needs—what people are believed to need. This focus marks a stark contrast with that of the second generation of health systems reforms.

The emphasis in the second generation of reforms was on the *supply side* of health systems and, as mentioned, the goal was to make health service provi-

¹⁰ The weakness of the primary care system was recognized in the Bamako Initiative adopted by the WHO Regional Committee of African Health Ministers at its session held in Bamako, Mali, in September 1987. The Initiative was a strategic approach to revitalizing health systems in countries with poor primary health care systems, by, inter alia, decentralizing decision-making from the national to the district level and instituting community-based financing and co-management of basic health services. See UNICEF, "Recommendation to the Executive Board for Programme Co-operation, 1989-1993: the Bamako Initiative" (E/ICEF/1988/P/L.40), 15 March 1988.

¹¹ For an assessment of the current health reforms in developing countries, see Peter A. Berman and Thomas J. Bossert, "A decade of health sector reform in developing countries: what have we learned?" (paper prepared for the Data for Decision Making (DDM) Symposium on Appraising a Decade of Health Sector Reform in Developing Countries, Washington, D. C., 15 March 2000), Harvard School of Public Health, 2000.

¹² *The World Health Report, 2000* ..., p. 15.

sions more cost-efficient, fairer and more accessible. This gave rise to the concept of primary health care. However, demand for health-care services, which is derived from people's desire for such services and reacts to the quality of health care as well as to the responsiveness of health systems, was given little consideration in these systems' designs. Instead of measuring *actual* demand, the approach focused on *presumed* health needs when designing health provision and financing. This inadequate attention to people's demand is apparent in the Alma-Ata Declaration (proclaiming the objective known as "Health for All"), adopted at the Joint WHO/United Nations Children's Fund (UNICEF) International Conference on Primary Health Care in 1978 held in Alma-Ata, Union of Soviet Socialist Republics (now Almaty, Kazakhstan)—a landmark document in the era of the second-generation health reforms.¹² The declaration is largely ignorant of demand-side factors, although it does state the importance of community participation in creating small-scale private financing.

One aspect of demand issues is inadequate access of the poor to primary health care or, more specifically, the inability of the poor to express their demand for publicly offered health care. This not only encompasses an issue of financial constraint, but also involves organizational problems of health systems. For example, the poor in a remote area may opt not to register at a publicly managed health post in a distant town, but rather to visit a "traditional" medical practitioner, licensed or not, closer to home. In this case, demand of the poor is not officially observed and the utilization of the provided health post will be lower than expected. However, if the cause of the poor's low utilization is high costs (including medical fees, time in travel and other non-medical payments), then lowering medical fees or building another health post close to the patients' residence may make visits more affordable and accessible. On the other hand, if the cause is rooted in the low quality of medical services, the frequent absence of medical personnel or the lack of drugs—possibly due to illegal diversions, corruption or theft—then lowering the costs associated with hospital visits or injecting more resources into the system may do little to resolve the situation.

Current reforms address these organizational and governance issues, including the creation of proper incentives for health workers, the need to monitor the performance of workers and their behavioural responses to the structural changes of the health system and the public function of Governments' stewardship. In previous reforms, local health authorities and international experts treated local government officials, and health professionals and workers, as well as patients, as "passive" agents who obeyed a set of regulations and guidelines mandated by the health authorities. In reality, however, they are "active" agents who respond and react to regulations, guidelines and the responsiveness of health systems. Health policies that do not accurately predict the reaction of participants may thus lead to unintended outcomes. When a health budget is cut or inflation erodes real wages, health workers may not report to a health post as regularly as their employment contracts specify, especially if there are opportunities outside the system in which to earn extra money: this lowers the overall quality of health care further. If the distribution of medical drugs is liberalized without effective regulation and supervision of prescription and usage, some drugs are likely to be diverted to the "unofficial" sector and unlicensed drug providers will mushroom, wasting official resources and permitting the spread of unsafe drug prescriptions.

It is in the arena of organization and governance of health systems that the private sector has been making significant contributions in many developing countries. Where private involvement has not been strong, there is large scope for the improvement of health status by employing private entities properly. Where public-health systems were weak and underfunded, private health providers, including for-profit and non-profit organizations and organizations with religious affiliations, have emerged. While these private providers have various motivations, which may be different from public objectives, they often complement the public-health system and sometimes compete with the public sector, creating incentives for it to improve.

Greater involvement of the private sector is also justified from a logistic standpoint. Implementing a new approach for health interventions in the current reforms—WHO styles it the “new universalism”—does not call for establishing a large number of full-fledged hospitals in poor countries; rather, it can be supported by smaller medical facilities run by private groups. While the basic technical understanding of primary health care—that health and nutrition interventions can make a substantial difference to the health of large populations¹³—remains valid, it is undergoing continuous refinement, moving towards the new universalism. It calls for high-quality delivery of “essential” (rather than primary) health care, defined by cost-effectiveness for everyone, rather than all possible care for everyone, or only the simplest, most basic care for the poor.¹⁴ Essential care has been developed in several countries based on epidemiological evidence and the costs of interventions in specific localities, thus offering the potential for “tailor-made” systems specific to local realities. The cost-effectiveness of interventions is measured in terms of costs of the disability-adjusted life year (DALY) gained—the smaller the costs for gaining one DALY, the more cost-effective a particular intervention is.¹⁵ The most cost-effective interventions are preventive care of communicable diseases and prenatal and child care. Such cost-effective, location-specific essential interventions can be provided at small facilities with adequately trained staff.¹⁶

This approach does not deny the need for increasing health spending in developing countries and for further and stronger commitment by donor countries to assisting such increases. At the same time, the shift of focus away from comprehensive primary care provided by the public sector towards a public-private mix in public-health delivery, as now advocated by WHO and the World Bank, has caused concern among some health experts. For them, the public sector’s retreat from the comprehensive primary care that was sought in the Alma-Ata Declaration “is regrettable”¹⁷ and such advocacy for the new typology of health care in the developing world “is based more on faith than on evidence”.¹⁸

The direct provision of free health service by the public sector can be justified as relieving the poor, in particular, from the financial burden associated with illness; however, widespread “informal” charges in many publicly run hospitals and clinics undermine this objective. At the economy-wide level, the present health situation in many developing countries is different from what it was at the onset of the second generation of health systems reforms which sought primary health care systems led by the Government. Most countries have a much larger population than before, and the pressure on health budgets is thus much greater, particularly if a proper tax system or a social security system is not in place.¹⁹ Providing medical services to the increasing number of

¹³ Ibid. p. 16.

¹⁴ A minimal package of essential clinical services includes pregnancy-related care, family planning services, care for the common serious illnesses of young children, tuberculosis control and control of sexually transmitted diseases. See *World Development Report, 1993* ..., chap. 4. The provision of clinic- or hospital-based emergency care other than the minimal package would depend on day-to-day capacity and availability of resources, including drugs, medical staff and financing.

¹⁵ For the definition of DALY, see *World Development Report, 1993* ..., chap. 3.

¹⁶ The concept of DALY has invited some criticism. See, for example, Nora Ellen Groce, Mary Chamie and Angela Me, “Measuring the quality of life: rethinking the World Bank’s disability adjusted life years”, *International Rehabilitation Review*, vol. 49, Nos. 1-2 (June 1999), pp. 12-15.

¹⁷ Chris Simms, Mike Rowson and Siobhan Peattie, *The Bitterest Pill of All: The Collapse of Africa’s Health Systems* (London, Save the Children Fund, 2001), p. 16. See, also, *World Public Sector Report: Globalization and the State 2001* (United Nations publication, Sales No. E.01.II.H.2), p. 32.

¹⁸ Vicente Navarro, “Assessment of the World Health Report 2000”, *Lancet*, vol. 356, No. 4 (4 November 2000), p. 1601.

¹⁹ Santosh Mehrotra and Stephen W. Jarrett, “Improving basic health service delivery in low-income countries: ‘voice’ to the poor”, *Social Science and Medicine*, forthcoming.

patients with HIV/AIDS has placed added pressure on budgets. While many donor countries are doubling their efforts to convince politicians and the general public to increase assistance to developing countries, it will take some time to channel larger fiscal allocation to international assistance in health. It is therefore more pragmatic, at least in the short-to-medium term, to strengthen the tie between public-health authorities and private health providers in order to improve the effectiveness and fairness of the care system.²⁰

ROLE OF PUBLIC AND PRIVATE PROVIDERS IN HEALTH SERVICE DELIVERY

Private providers are involved in many aspects of health service delivery in developing countries. Developing countries, in general, have health systems that are more dependent on private financing and private provisions than developed countries are. From the financing aspect, patients in developing countries, much more so than their counterparts in developed countries, purchase medical treatment out of pocket from health service providers (table VII.1).²¹ While the Governments of Western Asian countries with large oil revenues finance a relatively larger portion of health expenditures, private expenditure on health in other developing countries is higher than in developed countries. In particular, the share of private expenditure in total health expenditure exceeds 60 per cent in Eastern and Southern Asia. Private physicians account for 55 per cent of the total physicians in developing countries, with the highest proportion in the sample countries in Asia (table VII.2). The large share of private providers is due to patients' demand, combined with a willingness to pay, or the lack of access to publicly run health systems, including public-health financing. At the same time, private providers are prominent in basic health-care provision and curative care, reflecting low capital requirements for performing such services.²²

This high utilization of private health providers has direct implications for promoting essential health-care delivery. Health services offered by private providers include treatment of communicable diseases—such as malaria and tuberculosis—and prenatal and child care, the core of “essential” health services. No matter what the cause is of this high dependency on the private sector in health delivery, Governments and health experts must understand the nature and functioning of private health providers in order to devise and implement more effective national health policies.

Theoretical and empirical bases for promoting public-private mixes in health service delivery

Normative arguments in favour of government control of or intervention in health service delivery, based on the concepts of efficiency (market failures) and equity, have been widely accepted.²³ The arguments do not, however, necessarily imply that a provision of health services should be predominantly public. The empirical basis for such arguments is mixed.

²⁰ April Harding, “Keystone module background paper: private participation in health services handbook”, Health, Nutrition and Population Department, World Bank, June 2001.

²¹ Because of the lack of attention to private health-care provision in the past among developing countries, the paucity of even basic data is a serious problem when examining the role of private health providers. Health data on private health provision at the national level, therefore, are only tentative. It should be noted further that free or near-free public services available in many developing countries might have overestimated the significance of the private sector in terms of expenditure. A World Bank's study of health care in five States of India, however, shows a similar relationship between the share of illness episodes that resulted in a visit to a private provider and the share of private expenditure in total health expenditure; that is to say, where public expenditure is low, patients use public providers less frequently. See World Bank, *India: Policy and Finance Strategies for Strengthening Primary Health Care Services*, report No. 13042-IN (Washington, D.C., 1995), chap. 6.

²² Harding, loc. cit.

²³ Humanitarian and philosophical principles constitute clearly part of justifications for caring for the sick and the disabled. The present chapter's position is that one does not need to appeal such moral principles.

Table VII.1.
INDICATORS OF NATIONAL EXPENDITURE ON HEALTH, BY REGION, 1998

	Total expenditure on health as proportion of gross domestic product ^{a,b} (percentage)	Private expenditure on health as proportion of total expenditure on health ^c (percentage)
Developing countries	5.4	48.5
<i>by region:</i>		
Latin America and the Caribbean	6.7	46.0
Africa	5.5	49.1
Western Asia	5.2	38.1
Eastern and Southern Asia	4.4	60.8
East Asia excluding China	4.1	58.4
South Asia	4.8	69.4
China	4.5	61.2
Eastern and Southern Asia excluding China	4.3	60.3
Economies in transition	6.0	29.7
Developed countries	9.9	26.6

Source: UN/DESA, based on WHO, *The World Health Report, 2001: Mental Health: New Understanding, New Hope* (Geneva, WHO, 2001), annex table 5.

^a Average weighted by countries' gross domestic products.

^b Total expenditure is the sum of public and private expenditure. Public expenditure "comprises the current and capital outlays of territorial government (central/federal authorities, regional/provincial/State authorities, and local/municipal authorities) plus social security schemes whose affiliation is compulsory for a sizeable share of the population and extrabudgetary funds earmarked for health services delivery or financing. They include grants and loans provided by international agencies, other national authorities and sometimes commercial banks". Private expenditure "comprises private insurance schemes and prepaid medical care plans, services delivered or financed by enterprises (other than contributions to social security and prepaid plans), mandated or not, outlays by non-governmental organizations and non-profit institutions serving mainly households, out-of-pocket payments, and other privately funded schemes not elsewhere classified, including investment outlays" (*The World Health Report, 2001* ..., p. 133).

^c Simple average.

Efficiency criterion²⁴

According to this criterion, the possibility of market failures (related to large externalities or public good aspects associated with consumption of health goods and services, the difficulties of obtaining appropriate information on the quality and contents of medical care, and the presence of monopoly or monopsony) justifies Governments' intervention, because, if left to the market, resources devoted to the health sector would not be at a socially desirable level, and the failure to achieve an efficient allocation of resources would result.²⁵

The theoretical justifications for government intervention based on the efficiency criterion provide guidelines as to neither the preferable method of intervention nor the "optimal" type of ownership of health services. Is it better for a society to have complete government control in delivery of health services, including public ownership of hospitals and health clinics, and the purchase of

²⁴ Efficiency referred to here is known as *Pareto efficiency* in the economics literature, and should be distinguished from (operational) efficiency, the term used in chapter VI. An allocation of resources is said to be Pareto-efficient if there is no alternative allocation that makes everyone at least as well off and makes someone strictly better off. The operational efficiency, on the other hand, refers roughly to the promotion of production or distribution methods that will produce the largest store of results for a given objective at the least cost.

²⁵ For theoretical discussions, see Anthony B. Atkinson and Joseph Stiglitz, *Lectures on Public Economics* (New York, McGraw-Hill, 1980).

medical supplies as well as the recruitment of doctors and other medical staff? Or should the Government leave logistic decisions to the private sector and focus on strategic decisions that affect national standards of health service delivery? When combating communicable diseases, should the Government be involved in direct provision or should it contract out to private practising physicians? The answers to these questions depend, among other factors, on the ability of the Government in this regard and the availability and quality of private health sector services. However, it is important to note that this theory does not exclude the possibility of a public-private mix in health service delivery. The choice, therefore, should be based more on empirical than on solely theoretical considerations.

No national-level studies, however, are available in developing countries to offer a definite answer to any of these questions. Perhaps owing to the success of primary health care systems based on public provision and advocated under the second generation of health systems reforms, health data remain exclusively focused on the public-health sector. Systematic efforts have yet to be undertaken to research public-private mixes in the health sector and the effects of such a mix on health outcomes in developing countries. Data on the extent and the impact of private health delivery on health outcomes at the national level are not widely available, except for very rough estimates such as those presented in tables VII.1 and VII.2. One must therefore rely on national-level evidence from developed countries regarding the relative effectiveness of public health-dominant systems versus public-private mixed systems.

As table VII.3 indicates, there appears to be no consistent difference between predominantly public delivery and public-private mixed delivery in respect of health outcomes.²⁶ While every country listed in the table has an

²⁶ Health outcomes depend not only on national health systems, but also on economic, social and possibly climatic conditions. The choice of countries in table VII.3, that is to say, countries located in the northern part of Western Europe, minimizes the differences in the latter group of factors and sheds a clear light on possible different effects of health systems on national health outcomes.

Table VII.2.
PRIVATE PHYSICIANS IN DEVELOPING COUNTRIES^a

	Total number of physicians per million population	Private physicians as proportion of total physicians (percentage)
Sub-Saharan Africa ^b	200	46
Asia ^c	343	60
Latin America and the Caribbean ^d	842	46
Middle East crescent ^e	402	35
Average ^f	383	55

Source: Kara Hanson and Peter Berman, "Private health care provision in developing countries: a preliminary analysis of levels and composition", *Health Policy and Planning*, vol. 13, No. 3 (September 1998), pp. 195-211, based on national and international sources.

- ^a Country data were collected at different points in time during the 1980s and 1990s and with different definitions of public and private physicians across countries and regions. The reported shares of private physicians are most likely underestimates because pharmacies and "traditional doctors" in these regions constitute an important proportion of medical providers, but are excluded owing to the lack of official data.
- ^b Comprising only Burundi, Kenya, Liberia, Malawi, Madagascar, Senegal, South Africa, Zambia and Zimbabwe.
- ^c Comprising only India, Indonesia, Malaysia, Papua New Guinea, the Republic of Korea and Thailand.
- ^d Comprising only Chile, Jamaica, Mexico, Panama and Paraguay.
- ^e Comprising Algeria, Jordan, Morocco, Oman, Pakistan, Tunisia and Turkey.
- ^f Average is weighted by populations of the four regions.

Table VII.3.
PERFORMANCE INDICATORS FOR HEALTH SYSTEMS OF SELECTED DEVELOPED COUNTRIES, 1999

Type of health service delivery system	Infant mortality rate (per 1,000 live births)	Under-five mortality rate (per 1,000 live births)	Life expectancy at birth	Health expenditure per capita (US dollars)
Mixed delivery				
Austria	4	5	78	2 162
Belgium	5	6	78	2 184
France	5	5	79	2 377
Germany	5	5	77	2 769
Netherlands	5	5	78	2 140
Average^a	4.8	5.2	78.0	2 326.4
Predominantly public delivery				
Denmark	5	6	76	2 732
Finland	4	5	77	1 722
Norway	4	4	78	2 953
Sweden	4	4	79	2 146
United Kingdom	6	6	77	1 597
Average^a	4.6	5.0	77.4	2 230.0

Source: April Harding, "Keystone module background paper: private participation in health services handbook" Health, Nutrition and Population Department, World Bank, June 2001, table 3.

^a Simple average.

established public system of health service delivery—as theory dictates—the degree to which the public sector dominates in health service delivery does not seem to significantly impact long-run outcomes of the delivery system.

Equity criterion

The equity argument posits that individuals or families often fail to protect themselves against illness or disabilities owing to short-sighted planning and the limitations of private insurance markets. As a result, the establishment of national insurance schemes (including health systems) is called for and transfer of resources among different economic and social groups through various taxes and mandatory contributions to social security funds is recommended. Economics does not offer a general answer as to the appropriate levels of resource transfers, taxation and mandatory contributions for different income groups, nor can it persuasively describe the contours of an equitable after-tax income distribution.

The argument in favour of income support (such as subsidies and free medical care) to the (relatively) poor does not, however, depend on the levels and schemes of resource transfers among income groups. The poor often do not have access to private insurance, nor the means to protect themselves from reduced income when they become ill. The equity criterion thus implies at minimum that the poor must receive more assistance than the rich, who have access to insurance or

enough assets to survive difficult times, and that the public sector is consequently justified in undertaking such resource transfers to the poor. In public health, this notion translates into the highest incidence of public spending on health for the poor and a lower incidence of public spending on health for the rich.

The question then is, whether higher spending on the health of the poor is in fact observed. From the equity point of view, the poorest quintile should receive the highest public spending per capita. However, the reality is the opposite in the majority of the sample countries. Data on public spending on health for different income groups in 11 developing countries show that only 3 countries—Argentina, Malaysia and Uruguay—follow this pattern, although Chile approaches it (see table VII.4). Other evidence also shows that many countries do not have policies that promote health service access for the poor and, even where such policies exist, providing subsidies to the poor is very difficult to implement.²⁷ Part of the reason is the extreme difficulty of identifying who qualify as “poor”—with weak tax systems, the authorities in many developing countries are not equipped with the means to differentiate levels of personal income. The Governments of these countries with lower public spending on the poor may have difficulties in reaching the poorest (once identified), owing to their physical locations, inadequate infrastructure and the lack of medical knowledge of the poor. However, the empirical evidence, at least in some developing countries, does not suggest that publicly funded health systems perform more equitably in reference to the provision of health service delivery to the poor.²⁸

²⁷ Simms, Rowson and Peattie, *op. cit.*

²⁸ Another reason is that public-health systems often finance greater benefits for the better off. See Gerald Bloom, “Equity in health in unequal societies: meeting health needs in contexts of social change”, *Health Policy*, vol. 57, No. 3 (September 2001), pp. 205–224.

Table VII.4.
PUBLIC SPENDING ON HEALTH BY INCOME QUINTILE
FOR SELECTED DEVELOPING COUNTRIES

Country	Poorest quintile	Second quintile	Third quintile	Fourth quintile	Richest quintile
Argentina ^a	1	0.62 ^b	0.62 ^b	0.62 ^b	0.18
Brazil ^c	1	2.25	3.75	3.13	2.50
Chile ^d	1	1.02 ^b	1.02 ^b	1.02 ^b	0.50
Ghana ^e	1	1.25	1.58	1.75	2.75
Indonesia ^f	1	1.17	1.58	2.25	2.42
Kenya ^g	1	1.21	1.57	1.57	1.71
Malaysia ^h	1	0.69 ^b	0.69 ^b	0.69 ^b	0.38
Mongolia ⁱ	1	1.11	1.06	1.09	1.34
South Africa ^j	1	1.40 ^b	1.40 ^b	1.40 ^b	1.06
Uruguay ^h	1	0.57	0.46	0.38	0.30
Viet Nami	1	1.33	1.75	1.83	2.42

Source: Deon Filmer, Jeffrey Hammer and Lant Pritchett, *Health Policy in Poor Countries: Weak Links in the Chain*, World Bank Policy Research Working Papers, No. 1879 (Washington, D.C., World Bank, October 1997), table 8.

^a 1991.

^b Distributions across these three quintiles are not distinguished.

^c 1990.

^d 1982.

^e 1994.

^f 1987.

^g 1992.

^h 1989.

ⁱ 1995.

^j 1993.

The normative and empirical discussions thus point out that there are no a priori reasons to deny working with the private sector to provide public-health services. Furthermore, given the fact that, under existing conditions, Governments in many developing countries have only limited financial and managerial ability, and that patients have to depend on private health delivery in any case when public support programmes are unavailable, one has to search out all options for improving health systems. The main focus in reforming health systems should thus be to examine the appropriate roles of Governments and the private sector in health service delivery and the proper actions to be undertaken by Governments to improve the accessibility and quality of health systems in both the public and private spheres, with a particular view towards serving the poor.

Public and private mixes in national health systems

Previous discussions have supported a public-private mix in health service delivery by challenging the notion of public delivery as the sole system of national health delivery in the conventional economic framework. The present section raises two practical questions. First, when private health service delivery is a norm in many developing countries, what actual roles do private health actors play in these countries' national health systems? Second, when the normative arguments do not preclude the involvement of private health delivery to enhance national welfare in terms of both efficiency and equity, how should Governments use "private forces" to advance national health status, given the existing active participation of the private sector?

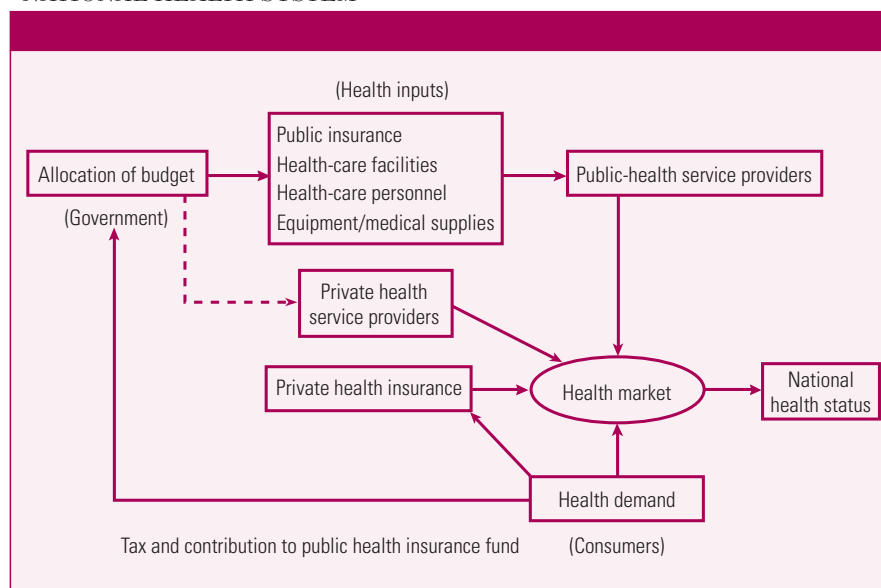
The role of the private sector in health service delivery

The role of private health service providers and their relation to public providers and health authorities can be understood in terms of the chain of decision-making by both types of providers and health clients. Decisions by public and private health providers and clients ("actors") and interactions among them make up a national health system (figure VII.2).

The upper section of figure VII.2 illustrates decisions made at different levels (ranging from the national Government to hospitals, clinics and health centres) of the public sector. A national Government decides total public-health spending on health, possibly with the approval of the national legislature. Given the total spending on health, the central Government, or other levels of governments (depending on how fiscal transfers between two different levels of governments are mandated), allocate the total budget to capital and recurrent expenditure categories, including medical supplies, salaries to health personnel, building of health facilities, publicly funded health insurance and implementation of various health programmes. At this stage, the national Government might decide to give technical and financial assistance to private providers if such channels exist as part of a national health system. Public-health providers—such as national and regional hospitals, clinics and health centres—undertake logistic decisions on staffing, maintenance and repair of building and equipment, and procurement of health supplies, and offer medical services to clients.

In the private sphere, consumers demand health services, pay taxes, make contributions to a social security fund (if such a fund exists) and buy private health insurance (if available). Consumer demand depends not only on indi-

Figure VII.2.
NATIONAL HEALTH SYSTEM



Source: UN/DESA.

vidual and community health status, but also on the quality of health care provided by public and private providers, effective prices—actual prices clients pay from their own pocket—and insurance coverage. Private health providers consist of for-profit medical entities, non-profit organizations and traditional medical practitioners. The interaction of demand for, and supply of, health service in the combined public and private health market determines the national health status.

The chain of decision-making in the public sector does not capture the various factors that permit the straightforward linkage from public-health spending to health status: higher spending does not necessarily translate into better national health status.²⁹ Many factors along the chain of decision-making impact the effectiveness of health policies. Given total spending on health, its composition has a significant impact on effectiveness of health policies: for example, larger spending on preventive and curative care of communicable diseases will help the poor, but may compromise capital upgrading of major hospitals. If, on the other hand, a large number of inpatient treatments at hospitals are financed through public spending, the poor—who often do not have access to hospitals—will be adversely affected. Once the decision on spending is made, how public-health entities are run, together with the demand for health and private health supply, has a significant impact on national health status. Simultaneously, a choice of “health production”, by which different combinations of health inputs—vaccines, drugs, micronutrients and hygiene—improve health in ways predicted by biological and medical facts, has a direct impact on the health of the population.

The role of the private sector had been assumed to be supplementary in providing primary health care. This is because the second generation of health reforms were oriented towards the public sector in practice and justified by public economics in theory. Consequently, many empirical studies look exclu-

²⁹ Emmanuel Ablo and Ritva Reinikka, *Do Budgets Really Matter?: Evidence from Public Spending on Education and Health in Uganda*, World Bank Policy Research Working Papers, No. 1926 (Washington, D.C., World Bank, June 1998).

sively at the private sector as a supplement to the public sector in providing primary (or “essential”, in the case of the third generation of health systems reforms) health care, even though the importance of the private sector turns out to be more significant than assumed.

In many of these studies, researchers identified several factors that turn patients away from public-health providers and towards private health providers. These factors include better and more flexible access to private facilities, shorter waiting periods, greater trust in private health workers, and the greater sensitivity of private workers to patients needs.³⁰ Patients appreciate better “customer service” at private facilities and, as a result, they tend to have more confidence in private providers.³¹

Patients are responsive to the quality of health service provided. While measuring the quality of care is always difficult, the phenomenon called “bypassing”—whereby patients do not visit a closest facility (public or private), but bypass it in favour of often more costly but better-equipped facilities—highlights the relation between demand by patients and quality supplied by health providers. In Sri Lanka, for example, only 29 per cent of all illness episodes were treated at the closest facility. Medical facilities called “minor public western”—typical facilities designed to be the first contact points in the primary health care system—were bypassed at the rate of 21 per cent, meaning that, out of 100 patients seeking medical treatments, 21 patients would not visit this type of facility and would instead seek medical treatment in another place.³² Out of the 21 patients who bypassed the minor public western, 50 per cent of them went to private western-style facilities, with the remaining proportion visiting traditional sources of medical treatment (called *Ayurvedic*) and major public hospitals.

Because of patients’ reliance on private providers, private medical workers play an important role even where the public-health sector is expected to be dominant. According to a study of five States in India, “private (health) providers are the major source of initial consultation for those using public hospitals”.³³ Inpatient treatments are performed predominantly in public hospitals in both urban and rural areas. Public outpatient facilities, an important part of the State-wide referral system, are expected to offer clinical consultation prior to hospitalization. However, a third to a half of all hospitalization episodes (depending on the State) experienced no clinical referral and, when clinical consultations were provided, private providers were the major source of initial clinical consultations. Thus private providers are significant players in India’s health system. The same study also finds that private medical providers, including non-governmental organizations, treated 69–91 per cent of the total number of illness reported and 73–93 per cent of children under age 5 who visited medical facilities. A study in El Salvador shows similar results, demonstrating that patients had little use for the first public sector contact for medical information and referral based at the community level.³⁴

Private health providers thus dominate the sphere of “ambulatory” care. This is because such care requires a relatively low cost of investing in facilities and medical training. As examined below, however, the predominance of the private sector in the first contact with a health system reflects, to some extent, the shortcoming of the public-health sector. Several empirical studies show that doctors in public hospitals are often absent from their offices and work in private facilities to earn extra income, and officially distributed drugs are sold illegally to patients or private distributors.³⁵ Such practices adversely affect the daily operations of

³⁰ “Private health care in developing countries: if it is to work, it must start from what users need”, *British Medical Journal*, vol. 323 (1 September 2001), pp. 463–464.

³¹ While the present chapter does not examine further the access to public-health facilities, including their locations, time of travel to these facilities and other non-medical expenses, this is another important factor that deters patients from using public providers, and that gives an advantage to traditional “private” providers.

³² Another major reason for bypassing is high prices. If a medical condition perceived by a patient is not serious, the patient tends to bypass the “private western”, an expensive but more sophisticated hospital. When the condition is serious, the same person tends to visit the private western because the quality of treatment matters most. See Deon Filmer, Jeffrey Hammer and Lant Pritchett, *Health Policy in Poor Countries: Weak Links in the Chain*, World Bank Research Working Papers, No. 1874 (Washington, D.C., World Bank, October 1997), sect. III.

³³ *India: Policy and Finance Strategies ...*, p. 94.

³⁴ Filmer, Hammer and Pritchett, *op. cit.*

³⁵ For examples, see Barbara McPake and others, “Informal economic activities of public health workers in Uganda: implications for quality and accessibility of care”, *Social Science and Medicine*, vol. 49, No. 7 (October 1999), pp. 849–865; and Reinhold Gruen and others, “Dual job holding practitioners in Bangladesh: an exploration”, *Social Science and Medicine*, vol. 54, No. 2 (January 2002), pp. 267–279.

public facilities. Short and irregular business hours, unavailability of doctors, and a shortage of drugs have resulted in a low utilization of public facilities and encouraged a self-reinforcing demand switch to the private sector.

Private health providers also affect the impact of policy changes. For example, when a Government increases official drug prices or introduces user fees, or public providers levy informal charges, demand for public-health services not only declines (owing to own-price effects) but also shifts away from them to private services (through a substitution effect). In Nigeria, 100 per cent of patients who are deterred by higher medical prices of public providers go to private practitioners. The corresponding rates for El Salvador and Ghana are 50 per cent and 60 per cent (with the remaining seeking “self-care”).³⁶ The private sector provides an alternative for those who have become unwilling or unable to pay higher medical bills and, as a result, the role of the private sector has become more significant.

A further example can be seen in the experiences of the United Republic of Tanzania. After the Government allowed private medical practice in 1991, the number of private providers jumped from 41 to 1,340 and the number of dispensaries (lower-level health facilities) rose from 36 to 1,313. This strengthened the Government’s efforts to improve the accessibility of the population to health facilities.³⁷ Deregulating drug distribution systems (as seen in Viet Nam (box VII.1)) however, have in some developing countries led to widespread, irrational use of drugs prescribed and sold by unqualified persons.³⁸

Thus, in many developing countries, the private sector has a large presence in health service delivery, even in areas in which the public sector is advocated as the major provider in theory and policy debates. While no systematic attempt has yet been made to examine the reasons for such a large presence, the dominance of the private sector seems to reflect the historically strong tie/trust between the local community and private medical practitioners, certified or not; more flexible and reliable access to such services; and a better understanding by private practitioners of local health conditions and needs. For a Government that wishes to improve the performance of its national health system, the private health sector can consequently be a vital resource towards this end.

New roles of the Government in managing private health service delivery

Despite the advantages and complementary roles of the private sector in public health, the private sector does not “lead the health sector in a direction likely to maximize its (the private sector’s) contribution to the health of the population”.³⁹ The Government, therefore, must take on the leading role. Owing to a lack of systematic evidence, beyond a few case studies, on how Governments interact with the private sector in practice, the examinations below are concerned with *possible* roles that Governments can be expected to play in the health market when the private sector is present, rather than the *actual* roles played by them.⁴⁰

The possible roles of the Government as regulator will need to be more sophisticated, requiring multifaceted intervention and coordination among the Government, public and private providers and consumers, so as to maximize the contribution of a health system to the population. The expected roles of the Government to further harness private activities in strengthening national health performance can be categorized under four areas: (a) understanding the

³⁶ Filmer, Hammer and Pritchett, *op. cit.* Larger presence of the private sector in the national health system tends to increase the degree of substitution, as patients can easily find private alternatives.

³⁷ The Private Hospitals (Regulation) Act enacted in 1977 had banned private health services for profit. See United Republic of Tanzania national Web site (<http://www.tanzania.go.tz/health.html>).

³⁸ Margaret Whitehead, Göran Dahlgren and Timothy Evans, “Equity and health sector reforms: can low-income countries escape the medical poverty trap?”, *Lancet*, vol. 358 (8 September 2001), pp. 833-836.

³⁹ Barbara McPake and Anne Mills, “What can we learn from international comparisons of health systems and health system reform?”, *Bulletin of the World Health Organization*, vol. 78, No. 6 (June 2000), p. 813.

⁴⁰ For a general analysis on the provision of public services when private services are available, from the economic welfare point of view, see Ann van Ackere, “Provision of public services when private alternatives exist”, *Socio-Economic Planning Sciences*, vol. 29, No. 2 (June 1995), pp. 113–124.

Despite the difficulties generally associated with measuring the magnitude of private activities in health service delivery, private pharmacy practice is relatively “measurable” in many developing countries. This is because services provided by private pharmacies or drug providers involve in many instances exchanges of “tangible” goods—drugs—and assessment of the quality of services can be approximated by examining types of drugs prescribed according to illness and the qualifications of providers. Where regulations exist, their effectiveness can be evaluated against the actual practice, making case studies on pharmacy practices comparatively easier to conduct.

The private sector has become a dominant actor in the provision of pharmaceuticals, and tendencies by patients in developing countries to engage in self-care—a traditional form of health care—have been increasingly associated with visits to pharmacies for advice. There are several reasons for this. First, freer flows of information about the availability of drugs and liberalization of drug distributions and “Western drug” imports have made drugs far more accessible to the citizen. Second, the introduction of user fees for public-health facilities necessitated by fiscal retrenchment in many developing countries since the late 1980s has made primary health care less accessible for the poor, turning them to self-care instead. Finally, pharmacies and drug providers, many of whom are also health professionals (including doctors), have strong incentives to sell drugs to patients in order to supplement their incomes. For patients who are often misinformed about the effectiveness of drugs, acquiring drugs, even though unnecessary and sometimes unsafe from a medical point of view, can provide “peace of mind” in some instances.^b

Viet Nam has experienced considerable changes in its health service delivery system in response to economic and institutional reforms since the 1980s. The Government of Viet Nam introduced a market-based policy (known as *Doi Moi*) in 1986 and health sector reforms have been an integral part of its overall reform efforts.^c Prior to 1989, health facilities in the country had provided free services (although patients paid for drugs) and communes had financed the operational costs of commune health centres and the salaries of village health workers. The liberalization policy, however, changed all aspects of the system. Since 1990, some health services have had to be paid for, and private practice, including drug vending, has been allowed (and has blossomed). Domestic production of pharmaceuticals also increased, from \$0.8 million in 1989 to \$107 million in 1997.^d The introduction of user fees affected the patterns of demand for health services and the country experienced a sharp increase in the uses of pharmacies and the number of drug vendors (see table). During the period 1993–1998, the change in rates of contact with pharmacies and vendors explained the largest portion of the increased overall rates. Moreover, it is now estimated that over half of total health expenditure in rural areas are accounted for by drug expenditures.

There are several reasons for this increased popularity of pharmacies and drug vendors. The real price of drugs is estimated to have declined by as much as 30 per cent, owing to liberalization of the economy in general and of drug distribution in particular, and access to and the quality of medicines have improved relative to the alternatives.^e There is no legislation restricting the importation of “Western medicines”, which are considered to be desirable, and the quality of services at com-

Box VII.1

PRIVATE PHARMACY PRACTICE IN VIET NAM^a

^a The case study reported here is based on Knut Lönnroth and others, “Risks and benefits of private health care: exploring physicians’ views of private health care in Ho Chi Minh City, Vietnam”, *Health Policy*, vol. 45, No. 2 (August 1998), pp. 81–97; Pravin K. Trivedi, “Patterns of health care utilization in Vietnam: analysis of 1997–98 Vietnam Living Standards Survey data”, *World Bank Health and Population Working Paper*, No. 2775 (February 2002); and Ivan Wolfers, “The role of pharmaceuticals in the privatization process in Vietnam’s health-care system”, *Social Science and Medicine*, vol. 41, No. 9 (November 1995), pp. 1325–1332.

^b A private physician in Viet Nam had said: “All mothers want their child to have antibiotics when the child has fever. I try to convince the mothers (not to use them) but they refuse.” Because of her advice, she had lost many patients, she said. See Lönnroth and others, loc. cit., p. 88.

^c For an overview of the country’s health sector and its development, see Gerald Bloom, “Primary health care meets the market in China and Vietnam”, *Health Policy*, vol. 44, No. 3 (June 1998), pp. 233–252.

^d World Bank, *Vietnam—Growing Healthy: A review of Vietnam Health Sector*, World Bank report, No. 22210-VN (Washington, D.C., 29 June 2001), p. 106.

^e Trivedi, loc. cit., p. 7.

Box VII.1 (continued)

ANNUAL HEALTH SERVICE CONTACT RATES PER CAPITA,
BY PROVIDER, IN VIET NAM, 1993 AND 1998

	1993	1998
Public hospital	0.32	0.60
Commune health centre	0.19	0.57
Other government facility	0.03	0.25
Private health facility	0.66	1.76
Pharmacy or drug vendor	2.14	6.78
Traditional practitioner	0.03	0.36
Other provider	0.01	0.00
Total visits	3.38	10.32

Source: World Bank, *Vietnam Growing Healthy: A Review of Vietnam Health Sector*, World Bank report, No. 22210-VN (Washington, D.C., 29 June 2001), table 3.1.

^f It should be noted that the “actual” quality of health services might not have declined. Because of users’ fees charged by public facilities, patients may consider that services at public facilities are not worth the money they pay.

^g Nicholas Prescott, “Poverty, social services and safety nets in Vietnam”, *World Bank Discussion Paper*, No. 376 (Washington, D. C., World Bank, October 1997), pp. 18-19.

^h Whitehead, Dahlgren and Evans, loc. cit., p. 835.

ⁱ *Vietnam, - Growing Healthy ...*, p. 110.

^j The objectives of the Policy are to assure a sufficient supply of quality drugs that meet the health needs of the population and to ensure rational and safe use of drugs during the period 2001-2015.

^k For details, see *Vietnam, Growing Healthy ...*, pp. 111-112.

mune health centres are perceived to be declining.^f Health-care workers who were in the public sector prior to 1990 and who have control over distribution of drugs have been allowed to privatize their activities; and citizens who have access to drug supplies—particularly those who have contact with overseas Vietnamese—have become vendors.

Because of the lack of effective regulation of registration and licensing requirements, however, health experts have seen a proliferation of unnecessary, and sometimes dangerous, prescribing of drugs by private vendors—a case of market failures owing to a lack of information. Such self-medication without formal medical consultation has been made possible by the private sellers^g and such unnecessary or irrational use of drugs now threatens public health. Antibiotic resistance levels in the country have increased and it is becoming difficult to control and prevent the spread of infectious diseases.^h The increased difficulty in the last few years of treating typhoid fever and containing its spread is an example of this problem.ⁱ

The pharmaceutical practice in Viet Nam is the result of liberalization without an adequate regulatory mechanism—be it legislation, monitoring or supervision. The Government of Viet Nam has recently formulated a National Drug Policy, whose pilot programmes are being set up in seven provinces and cities.^j Initiatives include, inter alia, strengthening quality assurance and the control system, development of a drug information system for health providers including pharmacists and drug vendors, building the administrative capacity of the central drug management authority, and revising training for health workers.^k However, effective regulation needs to be strengthened by communication between the public and private sectors. To supplement the current effort, the Government must educate the population through public campaigns on rational and safe use of drugs—particularly on the danger of misuse of antibiotics—and encourage the formation of professional associations of pharmacists and drug vendors.

role of the private sector in its own country and institutionalizing policy instruments, (b) expanding the effectiveness of health service regulation to assure the overall quality of care, (c) contracting out and (d) improving access of the poor to health care, including the exemption of fees.

Understanding the role of the private sector

Understanding the role of the private sector in the national health system requires not only collecting information about the current status and capabilities of existing private health providers, but also strengthening the dialogue between the health authorities and the private sector and setting an institutional framework within which health policy instruments operate. While developed countries, such as France and the United States, have established independent public or non-profit private organizations to collect information about health-care facilities and to often set medical standards,⁴¹ many developing countries do not have such organizations. To function properly, any market requires the collection and dissemination of information and the health market is no exception. The Government should take the leading role in funding and coordinating such efforts, but when financing or administrative capacity is limited, it can invite medical professional associations to initiate such efforts. Otherwise, there will be no opportunity to understand the existing condition of private medical practices and to advance coordination between the two sectors, and the health market will potentially become segregated by income groups or geographical areas.

Inviting professional associations to participate in policy formulation can also be a means of strengthening dialogue with the private sector. Wider participation of the private sector in designing and implementing health policies should enable policy makers to anticipate the likely response from private providers when a new regulation is enacted. In some countries, the fact that private providers form the first contact points of the health system allows them to gauge demand for health-care services better than government health officials. From the private providers' perspective, such dialogue will help them prepare for changes, and minimize the confusion often associated with them.⁴²

Private providers prefer predictable government actions. Ad hoc policy changes, and poor dissemination of information about changes, as well as a lack of policy instruments dealing with the private sector, often constitute a major source of confusion and unpredictability regarding government actions. Ongoing dialogue with the private sector helps strengthen the predictability of policy changes through better communication. The Government needs, however, to establish effective channels—institutions—through which policy instruments can be exercised. The institutions include a framework for direct regulation, support for self-regulating bodies (for example, professional associations), and licensing and accreditation systems. Governments in many developing countries are involved in direct provision of health goods and services and often do not have enough administrative resources to extend their regulatory capacity beyond existing areas. As an overextended Government often weakens the performance of its key functions, the Government may need to contract out direct provision to the private sector and to focus its resources in regulatory capacity-building, if it wishes to utilize the private sector effectively in the health system (see sect. on “Contracting out” below).

⁴¹ See Harding, *loc. cit.*, sect. 2.1.

⁴² Harding, *loc. cit.*, p. 9.

Expanding the effectiveness of health regulations

Traditionally, in the public-health sector, Governments have focused on the quality of inputs (health professionals, drugs, equipment and facilities), the quality, quantity, and price of health services, and the geographical distribution of these services in the public-health sector. Once the Government recognizes the presence of the private sector, however, it needs to introduce new types of regulation to ensure the quality of health services provided by the private sector.

The most common types of regulation applied to private providers consist of legal requirements: if health providers do not abide by laws, they are liable to punishment. These restrictions include certification, accreditation and licensing to ensure the quality of services. In less liberal economic systems, the Government also imposes price and capacity regulations, and market entry and exit restrictions. The difficulty lies, however, in enforcing regulations.

For example, in the Lao People's Democratic Republic, liberalization of the economy in general and deregulation in health service delivery in particular, since the late 1980s, has encouraged the expansion of health service delivery by private providers.⁴³ While self-medication has become a dominant form of health care since the deregulation, the Government has been building its regulatory capacity within the framework of the National Drug Policy enacted in 1993. It established a licensing system for pharmacies and set up a system of district-based drug inspectorates, each of which consists of a pharmacist, assistant pharmacists, nurses and other support staff. Owing to the lack of communication between the health authorities and private pharmacists, and inadequate enforcement of regulations, however, less than 10 per cent of drug vendors interviewed knew about various regulatory documents and only 20 per cent of them were aware of more than one regulatory document. While the drug inspectors inspected pharmacies and drug vendors on a regular basis, some of them were not familiar with the inspection system mandated by the Food and Drug Department of the Ministry of Public Health.⁴⁴ While no other data are readily available on the impacts of inadequate enforcement on health practices other than data on drug usage, it is likely that weak enforcement of health regulation leads to inadequate treatment and advice, particularly from "traditional healers" and retail or street drug sellers not only in the Lao People's Democratic Republic, but elsewhere as well.

The importance of the Government's assuring high-quality health delivery cannot be overemphasized. Consumers have a disadvantage in respect of judging the quality and contents of health goods and services, relative to health providers, and the attempt to gain adequate information involves large costs, including time—all of which are a source of market failure (see box VII.1). At the same time, enforcing regulation—through ongoing dialogue and monitoring—is itself a costly undertaking for the Government. Participation of health professional associations is of vital importance in this regard. Efforts to enforce regulation more effectively should be built on a mutual understanding between the regulator and the regulated and on outreach to private providers, including information dissemination, persuasion and education of the general population. Health professional associations can act as the bridge between the Government and the private sector, including consumers. The Government can also nurture the growth of associations by providing administrative assistance, and even subsidies or tax breaks by officially recognizing them as non-profit organizations.

⁴³ For a description of the development of health policies in the Lao People's Democratic Republic, see Bo Stenson and others, "Real world pharmacy: assessing the quality of private pharmacy in the Lao People's Democratic Republic", *Social Science and Medicine*, vol. 52, No. 3 (February 2001), pp. 393-404.

⁴⁴ Stenson and others, *loc. cit.*

Contracting out

Contracting out has become a favourite mode for social services delivery. Contracting out in health service delivery is an administrative process in which the health authorities contract with a private provider for service delivery in exchange for financial remuneration.⁴⁵ Contracting out not only releases the Government from direct production or provision of health goods and services, but also provides opportunities for the Government to learn ways to influence the behaviour of the private provider, an important step forward in capacity-building. While contracting out has many advantages in theory, there are many difficulties in practice.⁴⁶

The Government must first examine costs and benefits of direct provision (currently the dominant mode in health service delivery) and weigh them against the costs and benefits of contracting out to a private provider.⁴⁷ The objective of the health authorities is to minimize the costs of delivering goods or services of a given quantity and quality. The difficulty is that, while there is a potential for contracting out to cut expenditure for health inputs and service delivery, the costs associated with monitoring delivery may offset any anticipated savings. Additionally, the performance of clinical or hospital services is difficult to measure and, even if they are measurable, technical expertise is required. This is particularly so when, as is the case in many developing countries, the authorities do not have sufficient experience in dealing with the private sector.

For these reasons, non-clinical services are often easier to contract out to the private sector. Such non-clinical services include public-health outreach programmes, delivery of nutritional supplements (such as vitamins and iodine/iodized salt), education programmes for health workers and auxiliary services in health facilities (such as cleaning and catering). By contracting out these services, the health authorities should be able to accumulate the necessary experience to move on to more sophisticated forms, and to monitor their implementation.

Among clinical services, contracting out either to for-profit or to non-profit organizations to manage primary care facilities has great potential. Because many patients in developing countries rely on private providers (instead of public clinic centres) as the first contact to official referral systems, integrative arrangements through contracts should more effectively tie primary care facilities to hospitals. Private providers could be mandated, for example, to develop and manage facilities and the health authorities could standardize referral methods.

Contracting out requires that the Government plan, negotiate with a private provider, implement the contract and monitor the service contracted for (see box VII.2).⁴⁸ These are new skills that the Government must acquire. Once a service is contracted out, the Government needs to develop a strategy within which the private provider manages delivery of goods or services. Because no contract can spell out in advance all possible contingencies and actions required of the private provider in all situations (a contract is said to be innately “incomplete”), the Government has to instruct or negotiate with the provider to take certain actions under an unforeseeable circumstance once it occurs. Such strategic considerations include payment methods, price-setting mechanisms, mechanisms for the monitoring arrangement, and the terms of the contract. All these elements determine the “attractiveness” of the contract for private providers and, if the contract is not attractive enough, competent providers may not be interested. Even for non-governmental organizations, whose prime motives for service

⁴⁵ For a conceptual framework for the contracting out of health services based on developed countries' experiences, see Aidan R. Vining and Steven Globerman, “Contracting-out health care services: a conceptual framework” *Health Policy*, vol. 46, No. 2 (January 1999), pp. 77-96.

⁴⁶ In case of contracting out, the Government purchases a service from a private provider who uses its own resources. The Governments can also hire private persons as managers to run publicly owned health facilities with government employees; this is known as contracting in. Such forms of contract have been rarely undertaken, however, in developing countries.

⁴⁷ See Alexander S. Preker, April Harding and Phyllida Travis, “‘Make or buy’ decisions in the production of health-care goods and services: new insights from institutional economics and organizational theory”, *Bulletin of the World Health Organization*, vol. 78, No. 6 (June 2000), pp. 779-790.

⁴⁸ Harding, loc. cit.

Box VII.2

CONTRACTING OUT MEDICAL SERVICES IN ZIMBABWE

Contracting out has increasingly become a popular form of public-health provision, particularly in developed countries. The goal of contracting out is to create a “market” in which private providers compete for the Government’s funding to provide health goods and services, with the hope that such a contract will save societal resources, in general, and alleviate fiscal difficulties, in particular.

Owing to the complex nature of medical procedures, contracting out of medical services always involves difficulties in respect of writing the terms of the contract and monitoring compliance. Health authorities are thus required not only to have medical expertise, but also to be equipped with adequate regulatory machinery. Moreover, the Governments of developing countries in many cases have to face a lack of competition among medical providers. If a Government decides to contract out a large scale of medical operations (for example, management of a public hospital), it will most likely find only one or two potential contractors who are qualified to perform such services. In this case, the market structure in which private contractors compete is monopolistic or duopolistic and does not automatically ensure the efficient outcome that the Government hoped for.

In Zimbabwe, a long-standing contract exists between the Ministry of Health and a private general hospital with 400 beds run since the 1950s by the country’s leading coal producer, Wankie Colliery, pursuant to which the hospital provides clinical services as a district-level institution in Hwange.^a The hospital is an operating department of Colliery and was originally founded in 1923 to provide health care to company employees and their families.^b Under the contract with the Government, it has been providing treatment of “government responsibility” patients on a fee-for-service basis.^c At a government office located in the hospital, a government officer certifies applicants as eligible for “government responsibility status”. Patients are treated according to the medical recommendations made by hospital staff and the bill for services rendered is sent to the Ministry of Health. In theory, patients with government responsibility status are exempted from user’s fees. The hospital also admits “private” patients, who are charged separately and pay for services out of pocket.^d While the stipulations made at the time of the signing of the original contract during the 1950s are no longer clear, the lack of a public hospital in the district is considered to be the major rationale for the contract-out by the Government to this private hospital which is the largest in the district of Hwange. The region now has another Government-run hospital with 40 beds which provides clinical services to the population of the district, albeit with a limited range of facilities compared with those of the Colliery hospital.

The contract between the Ministry of Health and the Wankie Colliery hospital specifies departmental charges for outpatient attendance, inpatient days, X-ray and other laboratory tests per investigation, dental services per consultation and use of the operating theatre per minute. The Ministry of Health financed the capital costs of the rehabilitation of the hospital during the 1990s as well. The cost of the contract was 9.5 million Zimbabwe dollars (Z\$) in 1992–1993, while the recurrent budget for the whole district (excluding the contract payment and salaries of health

^a The case is based on Barbara McPake and Charles Hongoro, “Contracting out of clinical services in Zimbabwe”, *Social Science and Medicine*, vol. 41, No. 1 (July 1995), pp. 13–24.

^b The Government of Zimbabwe now owns 39.9 per cent of the company’s shares.

^c The hospital also contracts with several large companies in the region to provide care to their employees. The negotiated fees are cost-based and similar to those contracted with the Government (see Jack Needleman, Mukesh Chawla and Oliver Mudyarabikwa, “Hospital autonomy in Zimbabwe”, *Harvard School of Public Health*, July 1996).

^d In practice, however, all patients who apply for government responsibility status are certified because no clear guidelines have been provided regarding the basis on which patients are qualified for such status.

workers in Government-run facilities) was Z\$ 4 million. A health team from the provincial government visits the hospital on a regular basis.

Because of the absence of a formal monitoring and quality evaluation, a sensible way to evaluate the quality of services provided by the Colliery hospital under the contract would be to compare its performance relative to the Government-run hospital in the same district. The financial costs of inputs (unit costs of providing four types of clinical services) and labour inputs (staffing levels) show that the public hospital has more staff per bed (1.6 versus 0.4 in the private hospital), which reflects higher unit costs, except for outpatient services (see table).

There are two possible interpretations of these results. One is that the Colliery hospital is more efficient and the public hospital is overstaffed. At the same time, the public hospital is considerably smaller than the private one, preventing it from effectively exploiting economies of scale: for example, the larger the number of X-ray films taken, the lower the average fixed cost of operating the X-ray. The other interpretation is that the public hospital provides more secondary treatments, which are more expensive to administer. Unfortunately, the lack of case-mix information—types and numbers of various clinical treatments provided—makes it impossible to draw a clear conclusion. While it appears that the Colliery hospital treats more primary care patients, the hospital is sometimes used as a referral centre by the public hospital. The public hospital is at a disadvantage in terms of unit

Box VII.2 (continued)

RESOURCE COSTS OF A PUBLIC AND A PRIVATE HOSPITAL IN ZIMBABWE, 1993

	Public hospital		Private hospital
	Recurrent cost	Total cost ^a	Total cost ^a
Unit cost^b (Zimbabwe dollars)			
Service			
Inpatient day	141	246	108
Outpatient visit	19	27	87
Laboratory (per test)	30	34	14
X-ray (per film)	47	53	24
Staffing levels (number of persons)			
Category			
Medical	2		4
Nursing	31		98
Laboratory staff ^c	4		19
Administrative staff	3		14
General staff	25		21

Source: Barbara McPake and Charles Hongoro, "Contracting out of clinical service in Zimbabwe", *Social Science and Medicine*, vol. 41, No. 1 (July 1995), tables 5 and 6.

^a Recurrent cost plus capital cost.

^b Cost per patient. The unit cost of the private hospital is estimated based on charges levied by the hospital plus drug costs (26 per cent of the charges) while the two unit costs reported under the public hospital are based on expenditure allocated to departments and the number of patients receiving the services.

^c Including laboratory and radiography staff, pharmacists, technologists and technicians.

Box VII.2 (continued)

efficiency but it has only a limited range of procedures. Furthermore, one can argue that the lack of competitive pressure on the private hospital in the local health market makes it difficult to believe that the virtuous influence of competitive market forces is at work.

Nevertheless, the cost of the contract has come under scrutiny and a number of issues have been raised. They include, inter alia, the eligibility of patients for government responsibility status and the introduction of standardized accounting methods to calculate costs incurred by the hospital. The Government would like to exclude certain types of patients from government-responsibility status, based on income levels, access to insurance and possession of government health facility referral letters (which can be obtained only at Government-run primary care facilities). It proposes that, when those excluded fail to pay the bill, it would be the hospital's responsibility to cover the costs. The hospital insists, however, that provision of health service to the population is the Government's responsibility and costs must be covered by the Government.

On the issue of the standardized accounting methods, cost information incurred by the hospital is not available at present. The Government hopes that the introduction of the new methods would make billings more transparent. Such billing methods, however, have been known to create incentives for health providers to "over-perform" clinical services and prescribe high-cost drugs, thus necessitating a new way to monitor providers.

Under the existing contract, either party can terminate the contract within a three-month notice period. This option, however, is not realistic, given the relative size of the Colliery hospital in meeting health needs. Furthermore, the contract states that the Government will not develop "competing" health facilities in the region, thus tying the Government's hands.

The case of Zimbabwe demonstrates the difficulties of evaluating how a private provider complies with the terms of a contract. There are several lessons to be learned from this case study for those Governments seeking contracting out of clinical services to the private sector. First, if the Government does not have a viable alternative to the contracted party to deliver the services, the Government is in a vulnerable position when negotiating the contract. It may lock itself into the existing relationship and may need to commit itself to providing resources demanded by the contractor (the "hold-up" problem^e). Second, the lack of qualified government officials contributes to problems experienced under the contract. If contracting out is seen as a way to alleviate the inadequacy of skill levels in the Government, these problems are likely to be aggravated by the contracting out process. Third, the lack of adequate information on the operations of public and private hospitals makes it difficult (if not impossible) to identify the advantage or disadvantage of contracting out. If there are a number of potential contractors, such an information deficiency can be corrected to some extent through a competitive bidding process (tendering). However, the absence of such conditions—typical in many developing countries—does not encourage information-generation through the bidding process.^f

^e See Aidan R. Vining and Steven Globerman, "Contracting-out health care services: a conceptual framework", *Health Policy*, vol. 46, No. 2 (January 1999), pp. 77-96.

^f A similar study conducted in the United Republic of Tanzania did not find that public-health facilities were always less (operationally) efficient than non-governmental health facilities. See Lucy Gilson, "Management and health care reform in Sub-Saharan Africa", *Social Science and Medicine*, vol. 40, No. 5 (March 1995), pp. 695-710.

delivery are not profit, pricing mechanisms must cover average costs because a private provider that accepts a contract with unreasonably low costs of provision may not perform what the contract specifies must be done.⁴⁹

Improving access for the poor

This is perhaps the most challenging area for Governments. The poor spend a larger portion of their incomes on health care and face greater chances of further impoverishment from health payments.⁵⁰ Without a public scheme, the poor are pushed further into poverty by out-of-pocket health payments, and even some of the non-poor may be pushed below the poverty line by unexpected health-care expenses.

Lack of access to health facilities by the poor and the unavailability of financial schemes to the poor constitute only two aspects of the multidimensional nature of poverty: the goal of poverty reduction extends beyond improved access to health facilities and public financing schemes. In this regard, developing countries and development partners are required to pay attention to critical cross-cutting issues such as sustainable development, gender equality, HIV/AIDS and problems of the urban poor.⁵¹ These problems, however, are, beyond the scope of this chapter which solely examines the two above-mentioned specifically health-related problems concerning improving access for the poor within the framework of public-private interaction.

The targeting of free health care to particular groups, including the poor, is difficult to implement, owing to administrative shortcomings.⁵² Even if it is successfully implemented in a region, such a model is costly to scale to the national level. One method that has shown some success is the establishment under the auspices of the Government of local committees that bring together local leaders and health workers to determine the eligibility for exemptions in terms of income or types of medical treatment.⁵³ The method has an advantage over a nationwide programme because the administrative costs of identifying the poor in the community are less than those of a nationally administered method, and the involvement of local leaders is likely to help in understanding local needs. Non-governmental organizations based outside a community or country have also proved to be effective in assisting actual health delivery and reaching the poor because some communities display prejudice against the poor and tend to exclude them from community-based programmes.

The role of the Government in this schema is to show leadership, to develop clear goals for the committee, to mobilize local support and to provide technical assistance. Within clear guidelines, local committees can develop their capacity by learning through implementation. At the same time, the Government needs to monitor and evaluate the impact of such programmes on the poor. While such programmes have not yet been widely attempted, this is one area in which greater participation of local communities and non-governmental organizations, with the leadership and stewardship of the Government, can very likely expand public-health programmes to the poor.⁵⁴

Increasing reliance on private health care delivery through expanded private insurance coverage to employees in the wage sector can indirectly help the poor, through the freeing up of public funding. This is owing to the fact that employees in the wage sector belong to an upper part of income distribution in developing countries and tend to utilize private health providers more often than the poor. If insurance is extended to such employees, they will use private services more than before, thus freeing up public funds that go to public providers (see box VII.3).

⁴⁹ Competitive bidding, as discussed in chapter VI, is an effective means to ensure the quality of private provision of public services at the lowest cost possible. In many developing countries, however, the number of qualified health contractors is limited and thus competitive bidding may not be a viable option (unless a Government invites foreign contractors).

⁵⁰ Adam Wagstaff and Eddy van Doorslaer, "Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993-98", World Bank (February 2002).

⁵¹ See the report of the Secretary-General (A/56/229 and Corr.1 and Add.1) on the First United Nations Decade for the Eradication of Poverty (1997-2006), 31 July 2001.

⁵² The needs for targeting poverty and the difficulties associated with identifying the poor are examined in *Report on the World Social Situation, 1993* (United Nations publication, Sales No. E.93.IV.2), p. 143; and *Report on the World Social Situation, 1997* (United Nations publication, Sales No. E.97.IV.1 and corrigendum), pp. 87-88.

⁵³ Lucy Gilson and others, "Strategies for promoting equity: experience with community financing in three African countries", *Health Policy*, vol. 58, No. 1 (January 2001), pp. 37-67.

⁵⁴ The access of the poor to health services is a problem even in developed countries. New Zealand, where the indigenous population has comparatively poor health status, developed third-sector primary care organizations, based on community participation and community development. See Peter Crampon, Anthony Dowell and Alistair Woodward, "Third sector primary care for vulnerable populations", *Social Science and Medicine*, vol. 53, No. 11 (December 2001), pp. 1491-1502.

Box VII.3

PRIVATE HEALTH INSURANCE AND PUBLIC EXPENDITURE TO THE POOR: A SIMULATION STUDY OF JAMAICA^a

^a This box is based on Paul Gertler and Roland Sturm, "Private health insurance and public expenditure in Jamaica", *Journal of Econometrics*, vol. 77, No.1 (March 1997), pp. 237-257.

^b For a theoretical discussion, see Mireia Jofre-Bonet, "Health care: private and/or public provision", *European Journal of Political Economy*, vol. 16, No. 3 (September 2000), pp. 469-489.

^c The analysis here is more relevant for high- and middle-income developing countries where private health insurance is widely available.

^d It should be noted that a reduction in visits by richer people did not lead to the same magnitude of increase in visits by poorer people, owing to the non-linearity of the demand equations estimated.

Governments in developing countries are looking for ways to reduce their overall fiscal burden while improving the access of the poor to social services. Public-health expenditure is a targeted area, and one means that many health planners have come upon to alleviate financial pressure and channel more health resources to the poor is private health insurance.

The economic benefits of health insurance are based on an analysis of demand for health by different sectors of the population—for example, the rich and the poor.^b The rich are more willing to pay for the higher-quality services offered by private health providers. Because public care is free or less costly to the consumer than private services in most countries, health insurance reduces the cost differential between the public and private sectors, shifting demand for health services by the rich away from the public to the private sector. Expanding or mandating private health insurance to richer people is thus likely to reduce total public expenditure on health care and help health authorities better target public-health resources to the poor.

Jamaica, a middle-income developing country, has a universal health-care system and a private sector that offers higher quality of health care and health insurance.^c Based on the Jamaican Survey of Living Conditions conducted by the Statistical and Planning Institute of Jamaica in 1989 and 1990, researchers estimated the effects of health insurance on the demand for public and private health care. After adjusting for several factors that affect demand for health care (such as income, age, sex and education), they found that health insurance was associated with a significant drop in the number of visits to public-health providers and with a significant increase in visits to private providers. Insurance was associated with a 28 per cent reduction in preventive visits to public providers and a 114 per cent increase in preventive visits to private providers, leading to an overall 48 per cent increase in preventive visits. For curative visits, insurance simply shifted demand for care away from the public to the private sector—there was a 45 per cent reduction in visits to public providers and a 37 per cent increase in visits to private providers. When preventive and curative visits were combined, insurance was associated with an increase in total visits to private health providers and a decrease in visits to public providers.

These results allowed the researchers to simulate the effect of expanding or mandating private health insurance on public-health expenditures and on fiscal expenditures to the poor. They considered two scenarios. First, they expanded insurance to everyone in the wealthiest income quartile (top 25 per cent) and second, they extended insurance to everyone in the top half of the income distribution. It was estimated that expanding insurance to the top quartile would save about 13 per cent of total public-health expenditure, mostly achieved owing to a reduction in public curative care, while the share of the poor in total public visits would be 14 per cent higher, thus channelling more public resources to them. For the other scenario, it was estimated that total public-health savings would be 33 per cent, again mostly through reductions in curative visits, and the share of the poor in total public visits would rise by 25 per cent.^d

This analysis does not take into account possible effects of expanded insurance on the supply side of health care: increased demand for private care may increase service charges in the private sector, exercising downward pressures on demand for private care. Furthermore, once the rich are less associated with public care, they may no longer support the universal health system. Despite such shortcomings, the analysis here shows how demand-side considerations can lead to potentially counter-intuitive results.

While some may argue that such an approach will widen the gap between the rich and the poor in respect of receiving quality care, it is politically attractive because the reallocation of fiscal resources among different expenditure items is minimal and a greater involvement of the private sector—private health providers and insurers—in a national health system would be expected.

CONCLUDING REMARKS

There is a changing and often expanding role for the private sector in health service delivery and a new and enhanced role for the Government, particularly the Ministry of Health, in ensuring that the population is provided with health services. Most countries—developing and developed countries and economies in transition alike—have health systems with providers from both the public and private sectors, with the role of the private sector in many developing countries being larger than in transition and developed countries. The larger presence of the private sector in developing countries often challenges the principles and nature of public provision of health services envisaged by their Governments.

The strong presence of private health services in the developing world arises because of the weakness of public-health systems in many developing countries, people's increasing desire for better medical services and the growing ability of many people to pay for them (even in the poorest countries). A lack of financial and human resources and administrative capacity makes it difficult for many Governments to ensure that everyone—poor and rich people, rural and urban residents, and women and men—has fair access to a level of public-health service that is commensurate with the country's level of development. In many instances, the more affluent segments of society have better access to public-health facilities than the poor, with the result that private health facilities (including pharmaceutical vendors) may be the only places where the poor can seek medical advice and treatment. Patients' demand for private health services also reflects not only the advantages of private health facilities, which usually include better service and more flexible access, but also a general perception in many countries that the quality of private medical services is superior. In future, the demand for private health services in developing countries can be expected to increase along with disposable income since demand for quality health services is income-elastic.

The importance of the private sector in health provision in developing countries requires an examination of national economic and social policies beyond the conventional analysis of health-related technical issues. If a health authority fails to understand the factors affecting health demand and to take into account private demand and incentives, health policy will not be effective. In order to manage public health care effectively, policy makers are now required to devise a mixed package of controls and incentives: they need to monitor and regulate the quality and quantity of health services supplied by the private sector and, at the same time, to use private incentives so that they serve the public goal of providing essential health care as widely and as cost-effectively as possible.

Taking advantage of private activities requires novel legislation and regulations,⁵⁵ which, in turn, require new thinking regarding mechanisms and institutions for their implementation. At present, there are only a few developing

⁵⁵ Richard B. Saltman, "Regulating incentives: the past and present role of the state in health care systems", *Social Science and Medicine*, forthcoming.

countries that have in place models of legislation and regulation that take into account the complex interrelations between private and public health provision. The absence of such a system can have wide-ranging negative consequences. In Viet Nam, for example, because of the role assigned to the private sector, the unsafe use of antibiotics has become widespread. The Government has therefore formulated pilot plans that aim to strengthen drug-quality assurance and the drug control system through a drug information system for health providers. Such policy initiatives constitute, however, only an initial step towards promoting the safe use of pharmaceuticals: they need to be further strengthened by increasing dialogue and information exchange between the health authorities and private providers. In another example, the contract between the Government of Zimbabwe and a private hospital that has been servicing a local population for almost 50 years shows the benefits of integrating private providers into a government-organized national health system. This is a case of beneficial public-private cooperation but, at the same time, it demonstrates the pitfalls associated with private incentives and the difficulties created by an absence of alternative health providers who could, at least in theory, compete with the incumbent private provider for the contract.

The foregoing examples are illustrative, but the issues of health systems in general and public-private interaction in particular are products of a country's history and its economic and social environments. In large measure, the domestic economic and social environment determines the current level and form of the health system. For this reason, drawing general policy implications from worldwide cross-country studies on health systems, which combine developing and developed countries, can sometimes misguide the policy choices for particular countries. Developing countries, particularly the least developed countries, face health challenges that differ from those of more developed countries.

International and regional cooperation, in particular among developing countries, can play a useful role. This is because there is often a similarity among some, or sometimes many, developing countries in the same region or across regions. This can be a basis for a common platform on which comparable cost-effective health interventions and the regulatory institutions that are required for such interventions can be built. Countries can, through technical cooperation and dialogue, share their experiences in health system reforms, avoid common pitfalls and learn from each other's "best practices" in health systems. South-South or regional cooperation should contribute to a sense of ownership of the process of health reforms: dialogue among developing countries should maximize the extent to which local conditions can be incorporated without developing a sense of external imposition.

The New Partnership for Africa's Development (NEPAD) (see box III.1) is a prime example of a step towards creating a sense of ownership and a sharing of common development experiences in health development among African countries. In the health area, its objectives include, inter alia, to "empower the people of Africa to act to improve their own health and to achieve health literacy" and to "encourage cooperation between medical doctors and traditional practitioners".⁵⁶ These are both areas in which Governments can strengthen cooperation between the public and private sectors and among private health providers. In practical terms, empowering the people requires education on the rational use of drugs (in addition to such matters as safety of drinking water,

⁵⁶ NEPAD, sect. V.B, "Human resource development initiative, including reversing the brain drain" (iv), para. 126 (<http://www.nepad.org/home.asp>).

hygiene and nutrition), to be provided in schools and public-health campaigns. Establishing domestic and regional health sector-wide organizations should encourage cooperation between doctors and traditional practitioners and could contribute to the development of a drug information system for all health providers—both “modern” and traditional practitioners—under the supervision of a domestic or regional authority.

Health authorities are required to understand the health needs of their populations and to evaluate the status of their national health system, including the functions of the private health sector. In a situation where private health-care services are predominant, but appropriate regulations are not in place, a Government must undertake multifaceted interventions and ensure coordination among the health authorities, public and private health providers and consumers. Encouraging the formation of professional associations can be a first step. Once experience of dialogue and coordination with a particular segment of health providers has been gained, such experiences can be applied to other priority areas in health care. Regulation should be not a matter of top-down direction from the Government, but an ongoing interaction between the authority and private providers.

VIII PUBLIC-PRIVATE PARTNERSHIPS IN EDUCATION

Public-private cooperation in education offers promising new avenues for achieving economic and social development through the nurturing of human capital.

In many countries, the private educational sector pre-dated the State-run sector and the attempt by the State to provide universal primary and, later, secondary education. This was often supplied by religious bodies, self-help institutions or the for-profit private sector. As shown by the prominent position in all walks of society—such as politics, the military, the arts and industry—occupied by many of the products of prestigious and costly fee-paying educational institutes, the investment by an individual in a high-quality education can be readily justified on economic grounds.

Parents are often making a wise investment decision when they purchase from the private sector a higher-quality education at the primary and secondary levels than is available in public institutions, for they increase the likelihood that their children will earn a greater income over the course of their lives. Similarly, a student's entry into a private fee-paying university to obtain a high-class education from this institution can also be viewed as reflecting a rational investment decision in terms of time and money. The for-profit private sector has an incentive to provide a higher-quality education than could be obtained, at no direct cost to the student or his parent, from a non fee paying public institution.

Issues of equity arise: the rich are able to purchase for themselves and their children a higher-quality education than that offered to poorer members of society. Yet education is but one of the many goods and services—access to health, to food and to all the amenities of life, including education-enhancing expenditures, such as on foreign travel or on private tuition—that the wealthy can purchase in greater quantities and of a higher quality than the poor. Such goods and services can improve their human capital and, to this extent, contribute to widening inequality. Similarly, when individuals unite together in self-improvement schemes to raise their educational status, the aim is often to give themselves a better chance of well-paid employment. The challenge for society is to ensure that the poorer members of society are not denied access to a high-quality education. In many countries with a strong private sector, public funds are used to subsidize the attendance of poor and gifted children at private institutions, as in the Programa de Ampliación de Cobertura de la Educación Secundaria (PACES) in Colombia.¹

¹ PACES assigns vouchers by lottery and the lottery winners have benefited from higher educational attainment, primarily as a consequence of reduced grade repetition, higher test scores, and a lower probability of teen cohabitation or unemployment. The programme, moreover, has had a stronger positive effect on the education of girls. The net effect is that the benefits of voucher awards have been more than sufficient to offset costs. (See Joshua D. Angrist and others, "Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment", *NBER Working Paper, No. 8343* (Cambridge, Massachusetts, June 2001) (<http://www.nber.org/papers/w8343>).

² *World Economic and Social Survey, 2000* (United Nations publication, Sales No. E.00.II.C.1), p. 172.

³ *Ibid.*, chap. VI.

⁴ *Ibid.*; and Erich Gundlach, Jose Navarro de Pablo and Natascha Weisert, "Education is good for the poor", *Discussion Paper, No. 2001/137* (Helsinki, United Nations University, World Institute for Development Economics Research, 2001), pp. 1-15.

⁵ World Bank, "A chance to learn: knowledge and finance for education in sub-Saharan Africa", *Africa Region Human Development Series* (Washington, D.C., World Bank, 2001).

⁶ Full cost recovery from the recipients was not even attempted in Scotland, the first European country to turn itself into a modern literate society. The 1646 Education Act and its 1696 successor had imposed on the wealthy the duty to supply a school in the parish—but they could recover half their expenses from their tenants (*World Economic and Social Survey, 2000*, ..., box VI).

⁷ Emmanuel Jimenez "The public subsidization of education and health in developing countries: a review of equity and efficiency", *Research Observer*, vol. 1, No.1 (January 1986).

Given that there will always be a demand for a private education, whether from a for-profit institution, or, as with much religious-based education, from a not-for-profit institution, the case for encouraging its provision is strong. Moreover, as noted in the *World Economic and Social Survey, 2000*, a development strategy that increases the demand for skilled workers encourages them to invest in their own education.² Private education provides an alternative for parents and a yardstick against which to measure the performance of State-run institutions, and it enables some children to be educated at little cost to the State. The State has a regulatory and supervisory role in this sector to ensure that the children in private schools receive a quality education and are not, for instance, imbued with values incompatible with respect for human rights.

However—especially in the last 300 years during which some, and ultimately all, States tried to ensure the access of every child to at least the primary level of education—the private sector has never been expected to supply, without any assistance from government, all the education that is in the interests of the State as a whole. Many parents are too poor to afford such an education for their children and the recipients, while perhaps able to judge the private monetary returns, cannot be expected to calculate the other benefits, in terms of health and nutrition, scientific advance and overall literacy, that come to society at large from education. These are some of the principal reasons why, as shown in the *World Economic and Social Survey, 2000*, the State has perceived the provision of universal high-quality education, at least at the primary level, and progressively at the secondary level, to be one of its responsibilities.³

The present chapter looks at new ways in which the State is involving the private sector or using market mechanisms to ensure the provision of high-quality education. Some innovative experiments in developing countries indicate that, despite problems, public-private alliances may provide both alternative solutions and new understanding regarding how to design and implement effective educational policies. Key issues, concerns and challenges regarding the provision of education are examined at each of three levels: primary, secondary (technical and vocational) and tertiary.

PRIMARY EDUCATION

Of the three levels of education, quality basic education is widely acknowledged to yield the greatest social and economic returns through its positive effect on human capital development and economic growth.⁴ The need for government participation in this sector is firmly established.⁵ Reliance on the private sector, without any subsidy, would lead to the exclusion of the poor from this level of education and so has not been attempted.⁶ In many developing countries, universal primary education has still not been achieved, as shown by the gross enrolment rates (see table VIII.1).

The benefits of private sector involvement suggest that some demand for primary education can be efficiently met by the private sector, freeing resources for others who cannot afford to pay. In some developing countries, private schools are less costly than public schools and more effective in improving student performance.⁷ This raises the question why public sector spending on edu-

Table VIII.1.
GROSS ENROLMENT RATIOS, BY LEVEL, 1980-1997

	Primary			Secondary			Tertiary		
	1980	1992	1997	1980	1992	1997	1980	1992	1997
World total	95.9	99.2	101.8	46.5	51.8	60.1	12.3	13.8	17.4
Developed countries	100.9	101.0	102.7	89.4	93.9	100.1	36.2	44.5	51.6
Developing countries:	94.9	98.8	101.6	35.3	42.2	51.7	5.2	7.1	10.3
Sub-Saharan Africa	79.5	74.8	76.8	17.5	22.4	26.2	1.7	3.0	3.9
Arab States	79.0	81.4	84.7	38.5	52.2	56.9	9.6	11.4	14.9
Latin America/Caribbean	104.1	105.0	113.6	44.4	50.9	62.2	13.7	16.8	19.4
East Asia/Oceania	110.4	118.5	118.0	43.9	47.4	66.3	3.8	5.9	10.8
South Asia	75.9	90.3	95.4	27.6	39.8	45.3	4.3	5.7	7.2
Least developed countries	66.0	65.8	71.5	14.8	17.2	19.3	1.8	2.5	3.2

Source: UNESCO, *Statistical Yearbook*, 1999 (Paris, UNESCO, 1999).

cation has not yielded the desired outcomes of improved literacy rates, increased participation of girls, and a reduction in dropout rates; and highlights the fact that a focus on spending without systematic attention to institutional factors that improve the quality of education and enhance learning is likely to prove unproductive.

Cost recovery at public schools

What has been attempted, though, is the recovery from the parents of the children of some of the costs of providing education in public schools. Often the imposition of school fees is advocated when other direct costs such as the construction of school buildings and sports facilities have already been passed on to the community. However, the case for fees for primary and secondary schooling is largely based upon “excess demand”—the notion that, as the returns to education are high, there is a large unmet demand that people would pay to see satisfied. Yet it is the richer households that wish to consume more education even when the total cost of schooling rises.⁸ As rich households are likely to have a higher demand for education than poor ones, they would gain the most from some relaxation of the rationing ceiling that would occur if charges were to be imposed or increased.

When demand is deficient, these implications of imposing fees do not follow: increases in costs of education to the individual family would simply lead to a decline in enrolment. In periods of recession when household incomes are falling and when expected returns to schooling also decline, the demand for education is likely to fall, particularly among the poor. Evidence on differences in elasticity of demand for high-versus low-income groups, though scanty, suggests that elasticity is higher for the latter, implying that charges would be a greater disincentive to the poor.⁹ Enrolment rates have been seen to fall during recessions, as occurred in the United Republic of Tanzania where the primary

⁸ Christopher Colclough, “Education and the market: which parts of the neo-liberal solution are correct?”, *World Development*, vol. 24, No. 4 (1996), p. 592.

⁹ For some of the evidence, see Emmanuel Jimenez, loc. cit., pp. 116-117; Emmanuel Jimenez, *Pricing Policy in the Social Sectors: Cost Recovery for Education and Health in Developing Countries* (Baltimore, Maryland, Johns Hopkins University Press, 1987), pp. 80-81; and Emmanuel Jimenez, “Social sector pricing policy revisited: a survey of some recent controversies”, in *Proceedings of the World Bank Annual Conference on Development Economics* (Washington, D.C., World Bank, 1989), pp. 109-138.

gross enrolment ratio (GER) fell from 93 to 69 per cent during 1980-1986, a period of steep economic decline during which fees remained unchanged.

Nevertheless, even if there was evidence of parents' willingness to pay for their children's primary education, it might not be feasible to implement cost-recovery policies throughout the whole school system, particularly in the poorest schools where fees incurred by the parents absorb more of their income than in richer communities. Moreover, those who are less aware of the beneficial effects of education are likely to drop out more frequently in response to increases in fees than those who are cognizant of those beneficial effects. Finally, when secondary rather than primary schooling is linked with employment opportunities, the perceived probability of gaining entry to secondary schooling has an increasingly important influence upon the decision to send children to primary school.¹⁰ Policies that reduce access may then reduce demand for both primary and secondary schooling.

Experience has shown that in many countries the poor are incapable of paying the costs involved. Estimates for a sample of nine West African countries for the mid-1970s suggest that the public costs of primary schooling for families in the lowest 40 per cent of the income distribution who had two children at primary school would have meant their spending between 10 and 50 per cent of family income on their children's education.¹¹ In many parts of the world, such additional costs would be insupportable and reduce enrolment. This happened in Nigeria where primary enrolments had increased from 6.2 million in 1976 to 14.7 million in 1983 but had declined to 12.5 million by 1986 following the introduction of school fees in 1984.

The removal of fees in 1994 by the new Government in Malawi led to the increasing of enrolments from 1.9 million to 3 million during the course of the year.¹² Malawi also increased public expenditures on education between 1990 and 1995: from 3.4 to almost 6 per cent of gross national product (GNP). Furthermore, public spending on primary schooling increased from 42 to 59 per cent of the education budget over the same period.¹³

These examples show that, even where fees are very low, small changes in the size of the burden, whether brought about through an increase in fees or a reduction in the income with which to pay them, can have a large impact upon total enrolments. User charges reduce the income available to meet other basic needs and could force the withdrawal of children from school when incomes shrink. Thus, the impact of cost-recovery policies on welfare is a function of changes in household consumption as a whole.

Non-governmental and private sector involvement

The for-profit and not-for profit private sector is involved in the provision of some educational services at the primary level in the developing countries. The achievements of non-governmental organizations such as the Bangladesh Rural Advancement Committee (BRAC), a "national private development organization", suggest that local capability and entrepreneurship in education can flourish even in the rural communities of the poorest countries. BRAC has a regular staff of approximately 17,000 and more than 30,000 part-time teachers covering 50,000 villages. The majority of its clients are women. For the past 27 years, it has been making loans to the rural poor and marginalized

¹⁰ For instance, in Ghana, the distance from children's homes to the nearest middle and secondary schools appears to exert a significant negative effect on the probability of enrolment in primary schools.

¹¹ J. Meerman, "Cost recovery in a project context: some World Bank experience in tropical Africa", *World Development*, vol. 11, No. 6 (1983), pp. 503-574.

¹² Colclough, loc. cit, pp. 595-596.

¹³ Expenditures per child rose, but were insufficient to address serious qualitative problems—very large class sizes, poorly trained teachers and shortages of books and materials.

communities, and 1.2 million poor children now receive primary education through its education programme. Its annual budget, 60 per cent of which is self-generated, is now more than \$130 million. Among its latest initiatives has been to set up a new liberal arts university to meet local needs and aspirations.¹⁴

Particularly in developing countries, private sector involvement can help meet educational needs when government budgets and capacity to deliver are severely constrained.¹⁵ The Philippines, for example, has a long tradition of private education: 22 per cent of all students are in the private sector: 7 per cent at the elementary level, 31 per cent at the secondary level; and 77 per cent at the tertiary level.¹⁶ This sector is often associated with efficiency and higher levels of achievement. However, increasing public or private school enrolment may not have an immediate one-to-one effect on overall enrolment, particularly if students have simply been attracted by the move from one sector to the other. Thus, in countries where the private sector is active and provides a viable alternative to the public sector, substitutability between the private and public sectors is important in evaluating the net benefits of government expansion.

Chile's experiments with educational decentralization, de-linking financing from the provision of education through the use of vouchers, and the introduction of technology-based educational networks, suggest that partnerships with the private sector can help to extend the reach of educational services (see box VIII.1). The implications for equity have been less clear: the wealthy continued to take better advantage of the school system and to obtain a higher-quality education than many poorer people. If schools operate for profit, or even as non-profit private organizations, it is almost impossible to prevent them from deciding on location and the types of students they select. It would appear unrealistic, however, to expect any educational system to provide the same quality of education to all students and to remove all the advantages that accrue from having wealthy parents. The meaning of equity in the context of education is by no means simple. However, the Chilean case indicates that private sector involvement can help increase the availability and quality of the education provided to a large number of students, including poor students.

The continuing need for public sector intervention

The involvement of the private sector has not removed the need for continued and expanding public sector participation through the funding and building of capacity in the poorest countries, especially those where universal primary education has not been achieved. Reforms are also necessary to ensure that spending is more productive, that incentive systems for teacher performance are revised, and that educational attainments are improved.

Nevertheless, private participation in providing primary schooling may be a useful strategy, particularly in countries where private sector involvement has long been accepted. In such cases, school reform measures at the primary level must include building linkages between private and public schools in addition to organizational changes within schools in order to improve quality and productivity and to raise the performance of students. Experiments in community-building, such as the *Enlaces* programme, which links schools across Chile through a computerized network, and the educational programme of the Bangladesh Rural

¹⁴ World Bank, *Higher Education in Developing Countries: Peril and Promise*, report of the Task Force on Higher Education and Society (Washington, D.C., World Bank, 2000), pp. 85-86.

¹⁵ E. Jimenez and Yasuyuki Sawada, "Public for private: the relationship between public and private school enrollment in the Philippines", *Economics of Education Review*, vol. 20 (2001), pp. 389-399.

¹⁶ *Ibid.*, p. 390.

Box VIII.1

THE DECENTRALIZATION AND PRIVATIZATION OF EDUCATION IN CHILE

^a See William D. Savedoff, "Social services viewed through new lenses: agency problems in education and health in Latin America", Working Paper R-318 (Washington, D.C., Inter-American Development Bank, 1999), p. 10.

^b *Ibid.* pp 10-14.

^c Taryn Rounds Parry, "Achieving balance in decentralization: a case study of education decentralization in Chile", *World Development*, vol. 25, No. 2 (1997), pp. 211-225.

Chile's experiments with educational decentralization and privatization to remedy the problems of governance demonstrate the advantages of greater autonomy for schools in allocating resources, managing personnel, and increasing accountability to sponsors or clients.^a The Chilean system allocates resources to schools on the basis of the number of students who attend and it allows non-governmental schools to compete for students and public funds. Although 8.5 per cent of students still attend schools that are privately funded and run, Chile has a large and growing number of schools that are privately managed but financed from taxes, and hence are accessible to students from a wide range of socio-economic backgrounds. Publicly funded private schools operating with similar amounts of money were found to have higher test scores than the municipal schools even after controlling for the socio-economic background of students and selection effects. The advantage in test scores (71 per cent for privately operated schools and only 64 per cent for municipal schools) is partly a result of more motivated or more capable students seeking private schooling. Yet, even after controlling for these factors, a test score advantage remains—ranging from about 3 points for the private non-religious schools to more than 13 points for Catholic schools. Better test scores are associated with greater autonomy and clearer incentives in the non-municipal schools.

The organization of schools, financial autonomy, the introduction of innovations such as parent-teacher councils as a forum for monitoring, judging and holding schools accountable to parents, and the election of school directors were also found to improve school performance in Chile, Brazil and Venezuela.^b Education systems that enhanced incentives, rewarded outputs, increased accountability, and used contests between providers to generate information about the value of their services were found to be effective providers.

However, for the successful implementation of a decentralization strategy, the central government needs to develop new roles that support decentralization because local institutions generally lack the technical ability and the funds necessary to perform their new functions.^c Education decentralization in Chile began with the devolution of the administration of education from officials in the central government ministries to regional secretaries, and eventually led to the devolution to provincial departments of education. The successful implementation of these devolution policies helped to raise receptivity to decentralization and the devolution of responsibility to the local level of government. In addition, since school choice and public support of private education were already institutionalized features of Chile's education system, the reforms were built on a supportive foundation. Central government also adopted new roles to assist the transition and became responsible for providing funds on a per-student basis, giving support in kind such as food, textbooks and technical support to rural schools or schools with greater need, funding school improvements, administering national achievement tests and supervising schools on a regular basis.

Some questions have been raised about the effectiveness of policies of devolution and of encouraging the private sector. They appear not to have had the expected positive impact on education quality and have had a negative effect on equity. Improved monitor-

ing of school inputs and student performance and consistent financial support from the central government are needed to improve equity and raise the quality of education.

One study found that, despite educational decentralization and the rapid expansion of private schooling and increase in enrolments over the past decade, in practice, central control and monitoring by the Government had increased and there had not been a real devolution of power to local municipalities.^d Moreover, public choice and decentralization had not contributed to better information since local municipalities were too weak and were lacking in authority. Nor had students invariably gained equality of educational opportunity or better schooling. A survey of 726 households in Greater Santiago found evidence for social and economic stratification, indicating that market forces might exacerbate inequalities without necessarily generating clear gains in academic achievement. Parents continued to be ill-informed about differences in schools, non-academic factors played a major role in school selection, schools used entrance examinations to practice a form of selection of the best candidates, and parental wealth was a strong determinant of whether families were able to take advantage of choice programmes.

Another study found that “marketizing” education had increased school choice for a certain fraction of parents, but was unlikely to improve educational delivery for more than a small fraction of the school population.^e Moreover, even in the best of cases, 15 years of intense competition had improved the achievements recorded in public schools by only a small amount. Marketizing had not removed the gap in achievement between low- and high-income children, nor the gap in access to high-quality schools. The study thought that the quality problem in low-performing public schools was most effectively addressed not by competition, but by Ministry of Education intervention in building capacity.

These studies at the microlevel showed that the gap in access to quality education between the low- and high-income classes persisted. However, the overall picture of educational reform in Chile was one of greater availability of high-quality education. In the mid-1990s, 3 million students were attending over 15,700 schools, 2 million were enrolled in primary school, 653,000 in secondary school and 285,000 in higher-education institutions distributed between 34 universities, 133 technological centres and 53 professional institutes.

Other experiments in Chile to overcome inequality in access to education and resources include *Enlaces*, a pilot project started in 1993 to create a computer-learning network linking 180 primary and 62 secondary schools, train teachers, and supply educational software.^f *Enlaces* was converted into a national programme by the Government with political and financial support for incorporating all secondary schools and half of all primary schools by 2000. New partners such as the universities and industry have also been introduced. The major challenges it faces are scaling up, getting teachers to use the network effectively, and incorporating schools in rural communities lacking telecommunications facilities. Yet, *Enlaces* promises the benefits of learning networks like those in the United States of America for teaching mathematics, Globalnet, the European School Project (ESP) operated out of the University of Amsterdam, and the National Aeronautics and Space Administration (NASA) Spacelink.

Box VIII.1 (continued)

^d Varun Gauri *School Choice in Chile* (Pittsburgh, Pennsylvania, University of Pittsburgh Press, 1998).

^e Michael Carnoy and Patrick McEwan, “Does privatization improve education? The case of Chile’s national voucher plan” (1999), available at <http://www.stanford.edu/dept/SUSE/ICE/pdfs/Chilepaper.pdf>.

^f Michael Potashnik “Education and technology”, *Technical Notes Series*, vol. 1, No. 2 (Washington, D.C., World Bank, 1996).

Advancement Committee, indicate that, in addition to resources, both public and private initiatives to include communities traditionally isolated from education require commitment and innovation. Finally, public sector support in accessing resources, teacher training, and monitoring of output quality is essential to improving educational performance at the primary level.

THE SECONDARY LEVEL: VOCATIONAL AND TECHNICAL EDUCATION

The present section focuses on vocational and technical education rather than on general secondary schooling. Vocational and technical education is the secondary level of education that would appear most suited for public-private interaction, as it is the private sector that is interested in obtaining the specific skills that it needs for its operations to be profitable which vocational and technical schools can supply. The private sector can identify the skills that it needs and offer graduates of the programmes employment after they acquire them. As the costs of imparting specific technical skills are usually higher than the cost of a general education programme, private sector involvement in meeting some of the costs is also helpful. Furthermore, as the skills imparted can result in the student's achieving higher earnings, the for-profit educational sector has an incentive to supply the needs of students who are prepared to pay to acquire the skills that they cannot obtain from the public sector. For-profit institutes in developing and transition economies have supplied educational services not only to their own nationals, but even to students in developed countries (see box VIII.2).

The liberalization of economic activities on a global scale, together with a high rate of youth unemployment in developed, transition and developing countries, has led to a growing concern over how to meet the demand for new skills that the market requires.¹⁷ Diversified secondary school programmes have been introduced in many developing countries in Africa and Latin America to increase the relevance of graduates' skills to market needs, to broaden the academic curriculum, and to teach at the secondary level skills that were otherwise obtainable only at the higher level of education.¹⁸

In practice, in most developing countries, and in many developed countries, vocational education has been a residual form of education and is often perceived as leading to lower-status jobs, while standard secondary education leads to university. In addition, vocational education can be expensive for students because the costs are usually borne by them and their families while tertiary or higher education is usually subsidized. Finally, there has often been a mismatch between the supply of graduates and demand for labour at the secondary and tertiary levels. Thus, when a large supply of general high school and university graduates is available, employers are reluctant to employ workers with vocational training, since those with a general and broad education are often considered to have the academic training that would enable them to be more easily instructed. The need for flexibility in adapting to changes in technology and markets also makes employers more reluctant to employ those with vocational training. They are concerned that the latter are equipped with more traditional types of technical skills, not with the new skills that advances in the computer industry and in information and communication technologies (ICT) demand.

¹⁷ See World Bank, *World Development Report: Workers in an Integrating World* (New York, Oxford University Press, 1995).

¹⁸ J. Middleton, A. Ziderman and A. V. Adams, *Skills for Productivity: Vocational Education and Training in Developing Countries* (New York, Oxford University Press, 1993).

In many developing and transition countries, the for-profit provision of education has grown rapidly, catering for the needs of students who were discouraged by inadequate public provision and long waiting lines. These institutions are supplying a high-quality education not just to their own nationals but even to students in developed countries. Their services are promoted through advertising, including on the Internet.

Objetivo Universidade Paulista (UNIP), based in São Paulo, Brazil, began as a coaching class for pre-university courses in 1962 with 20 students and became the largest education company in the world in 1996 with over 500,000 students in almost 500 campuses around Brazil. The Centre for Open Distance Education for Civil Society (CODECS), Romania, was started by students on a United Kingdom of Great Britain and Northern Ireland open University Business School course, while a third company, Education Investment Corporation, Ltd (Educor), began in South Africa in 1943 as a “cramming” college for white students in Johannesburg and grew through the development of distance learning materials for teachers without high school diplomas. The company, which now has over 300,000 students in 127 campuses, has expanded into the North American market and funds itself almost entirely from fee income from students. Finally, the National Institute for Information Technology (NIIT) of India, which began as a computer training company in 1979, now has 400 centres in India and has moved into “edutainment” in centres based in family homes and schools. Through franchising, NIIT has expanded into 18 countries, including the United States of America. This is a for-profit company even though for-profit education is illegal in India.

These institutes can be analysed as businesses that seek to attract clients and deliver a high-quality good at a low cost in a competitive market. To build up a client base, the promotion of the institute’s name was extremely important and many companies spent 10 per cent of their revenues on marketing and promoting their name. In Zimbabwe, Speciss College sponsored national athletes, and a national basketball team, and ran competitions to promote its brand name.^b The promotion by NIIT of its name has been so successful that people talk about “doing a NIIT” when they mean “doing a computer course”.

Research and development (R&D) expenditures were focused on developing and promoting innovatory methods of teaching, learning, and course development to beat the competition. For instance, NIIT spent 0.7 per cent of turnover on pure R&D or about \$ 1 million. Both product and process innovations were sought, including the development of cost-cutting technologies and adjustments to the educational product. Similarly, quality control was promoted through standardization of the curriculum, total quality management and evaluation of faculty. Most of the companies started on a low budget, grew through internal investments and were able to fund later expansion and acquisition through rights issues.

Although they are for-profit institutions, private education companies have pursued several methods to promote equity. NIIT developed student loan schemes, as did Asociación Promotora de Institutos Tecnológicos Superiores (TECSUP) of Peru, and the University of Colombia. Richer students subsidized poorer ones through cross-subsidization of courses and campuses. Other methods employed to promote equity include strong social responsibility programmes, linking in with poorer schools, and offering free tuition to various disadvantaged groups and free legal and medical services to the poor.

The evidence, then, suggests that educational entrepreneurs do cater for a demand and are able to operate at a profit while still charging moderate fees and being accessible to many socio-economic groups. They also create educational chains that are efficient because they benefit from economies of scale, invest in R&D and provide consumers with the informational benefits of brand names. A strong argument can be made for modifying, if necessary, the regulatory environment to ensure that such educational companies can emerge and grow, and for extending the sources of finance so that more students can benefit from private educational opportunities.

Box VIII.2

SOME EXAMPLES OF FOR-PROFIT VOCATIONAL INSTITUTES^a

^a This box relies heavily on J. Tooley, *The Global Education Industry: Lessons from Private Education in Developing Countries* (Washington, D.C., International Finance Corporation, World Bank, 1999); and S.P. Heyneman, “The growing international commercial market for educational good”, *International Journal of Educational Development*, vol. 21, No. 4 (July 2001).

^b SPECISS is the acronym for the components of the George Laverdos “how-to-study” method: State, Preview, Explore, Comprehend, Involve, Systematize, Summarize.

Such shortcomings in the vocational and technical programmes are leading Governments to make new attempts to provide a relevant and useful education at this level. Experience has shown that high-quality vocational and technical programmes can be developed in partnership with the private sector and that they should link schooling with subsequent employment. Germany and Japan have well-developed systems that provide an ample supply of semi-professionals and skilled technicians for economic activity. The Japanese vocational system consists of company-sponsored training programmes as well as public and private *kosen* or vocational schools. The German apprenticeship system, a partnership between government and business to align the stratified educational system with needs anticipated by the market, is often considered an exemplary model for those youth not planning on a university education. Vocational education for German youth not holding a university degree was more important for obtaining initial high wages in 1994 than in 1984.¹⁹

¹⁹ L.P. Cooke, and S. Neuman and A. Ziderman, "Vocational schooling, occupational matching and labour market earnings in Israel", *Journal of Human Resources*, vol. 26, No. 2, pp. 256-281. "A comparison of initial and early life course earnings of the German secondary education and training system", *Economics of Education Review*, in press.

²⁰ A.M. Arriagada and A. Ziderman, *Vocational Secondary Schooling, Occupational Choice, and Earnings in Brazil*, Working Paper Series; No. 1037 (Washington, D.C., World Bank, 1992); Y. Chung, "The economic returns to technical and vocational education in a fast growing economy: a case study of Hong Kong", Ph.D. thesis, Stanford University, Palo Alto, California, 1990.

²¹ Benson Honig, "What determines success? Examining the human, financial, and social capital of Jamaican entrepreneurs", *Journal of Business Venturing*, vol. 13 (1998), pp. 371-394.

²² Arjun S. Bedi and Ashish Garg, "The effectiveness of private versus public schools: the case of Indonesia", *Journal of Development Economics*, vol. 61 (2000), pp. 463-494.

Technical and vocational education in developing countries

Evidence from studies on vocational education in a wide range of countries suggests that vocational and technical education at the secondary level may offer a promising way to provide skills for labour-market requirements. There is both a willingness to pay and a demand for technical and vocational skills when it is linked with obtaining a job. Vocational schooling has produced higher wages in Brazil and Hong Kong, Special Administrative Region (SAR) of China, and better returns on investment in Israel, than has general education.²⁰ An examination of the performance of 215 informal microentrepreneurs in Jamaica found that vocational training is strongly associated with the profitability of the business along with factors such as high socio-economic status and years of experience in the business.²¹ In Indonesia, after controlling for observable personal characteristics and school selection, it was found that graduates of private secondary schools performed better in the labour market than did graduates of public schools.²²

Public-private partnerships can be essential in determining the demand for the different skills and in ensuring that graduates are subsequently employed. Private participation in the provision and financing of vocational education services can be very helpful, particularly when the skills and training provided are linked with the demands of rapidly growing industries such as software development.

Mexico: reorganizing vocational education attracts private sector support

One vocational and technical education programme that has been successful and has attracted funding from the private sector is the Colegio Nacional de Educación Profesional Técnica (CONALEP) programme in Mexico. The Mexican Government launched this new vocational and technical education system in December 1978 to address the problems its diversified technical programmes had been experiencing. The country had a shortage of mid-level technical manpower which was attributed to the perception that technical and manual jobs were inferior to professional jobs which required an academic education. Completion rates in its vocational programmes were low (ranging from 12 to 34 per cent), largely because the programmes were used as a "wait-

ing bay” prior to the retaking of entrance examinations for transfer to other education programmes. Moreover, about 60 per cent of graduates from the diversified technical education programme proceeded to higher education, where tuition and fees were negligible. In addition, the fragmentation of programmes and the division of responsibility among many different authorities made effective management difficult.²³

CONALEP is semi-autonomous with a decentralized administration that enables it to respond to the changing needs of its clients (entrepreneurs in manufacturing and service sectors) and encourages their participation. Operational decisions, including curriculum adaptation, are delegated to local training centres. In addition, the programme emphasizes a practical and job market-oriented curriculum (20 per cent general theory, 20 per cent technical theory and 60 per cent technical practice) with a strong emphasis on evaluation, “hands on” experience, follow-up, and feedback leading to final degrees. Multimedia promotional activities also helped to attract qualified students and encourage significant financial support from the private sector (\$13 million in 1990 or about 14 per cent of total recurrent expenditures). Despite high tuition fees (as much as 12 per cent of direct recurrent training costs in 1991), students are motivated to work hard and remain in the programme. Finally, technical instructors for the programme with experience in industry were recruited and paid to teach on a part-time basis.

CONALEP has been successful, as seen by the higher labour-force participation rate of its graduates (89.8 per cent), when measured against a comparison group of students from upper-secondary diversified programmes (29.2 per cent).²⁴ CONALEP graduates found jobs faster than the comparison group. Placement rates compared favorably with those of the comparison group: 65 per cent of the graduates reported that they were working in the occupational category congruent with their field of training. This high rate of congruency is comparable with the figure of 78 per cent among apprentices in Germany, but significantly higher than the figure of 43 per cent for upper-secondary technical school graduates in Japan.²⁵ In 1994, average earnings of CONALEP graduates were higher than both lower secondary school graduates and upper secondary school graduates, aged 20-24 years.²⁶

The challenge CONALEP faces is that of adjusting to future needs. General subjects have been introduced recently to reduce narrow specialization and provide graduates with the option of either proceeding to higher education or entering the labour market.

While Mexico’s system of technical education can be applied in other developing countries, understanding the Mexican context is essential for successful replication. Mexico is a middle-income developing country with an adequate level of basic education and a large and dynamic industrial services base which generates substantial demand for technical skills and furnishes a sufficient number of proficient technicians and engineers to serve as instructors of practical skills.

The Philippines: the private sector plays a major role in providing skills

As previously mentioned, private education has traditionally played an important role in the Philippines and is crucial at the secondary, technical, vocational and higher education levels.²⁷ These sectors in the Philippines are responding to the need for world-class education and are competing in the world mar-

²³ Kye Woo Lee, “An alternative technical education system: a case study of Mexico”, *International Journal of Educational Development*, vol. 18, No. 4 (1998), pp. 305-317.

²⁴ CONALEP graduates who were not yet participating in the labour force were either studying (2.5 per cent) or at home (5.9 per cent) and were mostly female.

²⁵ K. Inoue, *The Education and Training of Industrial Manpower in Japan*, Staff Working Paper, No. 729 (Washington, D.C., World Bank, 1985).

²⁶ Lee, loc. cit., pp. 310-313.

²⁷ Emmanuel Jimenez and Yasuyuki Sawada, “Public for private: the relationship between public and private school enrollment in the Philippines”, *Economics of Education Review*, vol. 20 (2001), pp. 389-399; and A. Arcelo, *Investment Opportunities in Private Education in Developing Countries*, International Finance Corporation: Conference Proceedings (Washington, D.C., 1999), p. 22.

ket through international certification. For example, in the field of maritime education, four private institutions have been certified by the International Organization for Standardization (ISO), 9002 series, a distinction not achieved by any other public maritime school in the country.

The costs per capita of private secondary education are lower than those for public schools and private secondary schools also have a higher achievement rate than secondary schools in the public sector.²⁸ Consequently, through the Fund for Assistance to Private Education, called the “Service Contracting Scheme”, pupils are channelled to private secondary schools, with the Government paying their tuition fees. More than 200,000 students throughout the Philippines participate in this scheme. Thus, private education is a major sector in respect of producing highly qualified manpower for the Philippines.

China: preparing students for the new economy

Since 1978, when its programme of economic reform began, China has made great efforts to introduce vocational education at the senior secondary level to prepare young people with skills for employment in industry. It hoped that its vocational education programme would raise the efficiency of investment in education. Over this period, problems have been encountered and solutions attempted, as shown by the example of Shenzhen Special Economic Zone.

Compared with general education, vocational and technical education received one and a half times more government funding in terms of average recurrent expenditure per student, while those in specialized secondary technical schools received three times as much, as of 1993.²⁹ The Government encouraged school-business partnership and the enlisting of sponsors from all trades that might employ graduates. However, the response from companies was lukewarm and coordination mechanisms to link schools with employers were not established. Moreover, a high-quality education was difficult to achieve because of the lack of training equipment, teacher training, and resources for curriculum development. To raise quality, a higher vocational and technical education institute was introduced in 1993 which attracted 40 per cent of the students from the academic track along with 60 per cent from the vocational and technical track. This increased the motivation of vocational students and their teachers and reduced dropout rates. However, other vocational and technical schools found it more difficult to recruit students for their programmes.

Other problems arose from the difficulties of staying abreast of the requirements of newly emerging jobs in a constantly changing market environment. Vocational and technical schools in rural areas experienced difficulties teaching technical skills to students who lacked a general education. In the face of high worker mobility and lack of long-term job commitments, most employers found that their own training could prepare workers for whatever skills were needed. Therefore, graduates of vocational schools often did not work in the fields for which they had been educated. In the meantime, business and industry have built up a non-formal system to develop the human resources of their own staff.³⁰

²⁸ Arcelo, loc. cit.

²⁹ Jin Xiao, “Education expansion in Shenzhen, China: its interface with economic development”, *International Journal of Educational Development*, vol. 18, No. 1 (1998), pp. 3-19.

³⁰ Xiao, loc. cit.

New directions in vocational and technical education

China illustrates how the effectiveness of vocational education in terms of its quality and ability to lead to employment is linked with the ability of institutions, whether private or public, to coordinate with the private sector and to provide training that is relevant to its needs. In some of the transition economies and the poorest countries of sub-Saharan Africa, access to secondary and vocational education prevents students from dropping out at the primary level.

However, in the fast-moving economy, where demands for different skills are constantly changing, the old model of providing a vocational training for life is out of date. General skills must also be provided to ensure that students can adapt to suit labour-market requirements. For instance, computer literacy is prized by employers regardless of whether it has been obtained in general secondary rather than vocational schools, or whether the institution providing it was private or public. Moreover, to increase flexibility for students, vocational education can be strengthened through enrolments from the general track and by providing avenues for higher education so as to alter the perception that vocational education is a dead-end track. In addition, establishing successful general and vocational tracks requires attention to how these interface with each other and with primary and higher education.

HIGHER EDUCATION

The increasing importance of higher education

Just as secondary education, and in particular vocational and technical education, is changing to adapt to the new economy, so has tertiary education, once the preserve of the privileged elite or a small minority of very gifted students, undergone a radical transformation in terms of the quantity and nature of the educational services it provides.

In developed countries, high participation in tertiary education is fast becoming the norm as a result of rising aspirations, mass secondary education, awareness of the need for lifelong learning and of the returns to investment in skills, increased attention to extending access to previously underrepresented groups, and ease of access to flexible forms of study.³¹ Universities may be converging towards a uniform function characterized as the “entrepreneurial university”, a structure based on complex knowledge-producing and knowledge-using networks and constituencies that cut across the boundaries of academia, industry and government and focus on new missions of research and economic development.³² Moreover, the shift towards the “market” as a means of steering higher education is associated with an ideological shift, in which higher education is viewed as a private rather than a public good.³³ According to this reasoning, although higher education is a private good with positive externalities for society as a whole, the private returns are so great as to justify on economic grounds alone the individual’s making some or all of the investment needed to acquire it. To assist students in paying for their studies, Governments have arranged for loans to be extended to them.

Reforms have been introduced in many developed countries to promote market orientation and to make them better attuned to the new global economy.

³¹ Organisation for Economic Cooperation and Development, *Redefining Tertiary Education*, (Paris, OECD, 1998).

³² H. Etkowitz and others, “The future of the university and the university of the future”, paper presented at the Triple Helix Conference, 8-10 January 1998, New York.

³³ V. Lynn Meek, “Diversity and marketisation of higher education: incompatible concepts?”, *Higher Education Policy*, vol. 13, No. 1 (2000), pp. 23-39.

³⁴ Yamada Reiko, "University reform in the post-massification era in Japan: analysis of government education policy for the 21st century", *Higher Education Policy*, vol. 14 (2001), pp.277-291.

Japanese universities have introduced major reforms since 1991, following the deregulation of higher education. These have included curriculum reshaping, the introduction of self-monitoring, and a non-tenure track faculty system to transform research-oriented organizations into teaching-centered universities and to develop a knowledge base to deal with global competition.³⁴

The wide access to tertiary education for those who feel they can benefit from it stands in stark contrast to the situation in the developing countries, most of which are still striving to provide universal access to secondary education, and many of which have not yet achieved universal provision of primary education (see table VIII.1). Thus, the difference between the enrolment rates at the tertiary level are much greater than at the earlier levels—with an enrolment rate of over 50 per cent being the norm in the developed countries as against an average of about 10 per cent in the developing countries and 3 per cent in the least developed countries. The absolute number of the teaching staff in tertiary education in the developed countries exceeds that in all the developing countries.

The expansion of tertiary education in the developed countries has enabled them to maintain their position as the prime generators of research in the world. For instance, in 1995, 85 per cent of the new 770,000 research papers in the sciences, including the social sciences, were published in high-income countries. Their extensive and high-quality tertiary education institutes can be seen as an important part of their economic systems and a major explanation of their economic success in steadily producing new and improved products. Many of these institutes are private and students must pay high fees for attendance.

For many developing countries, expanding access, increasing the efficiency of the provision of educational services and making what is taught more relevant to development objectives, are among the objectives for the tertiary sector. An expanding tertiary sector can help the developing countries achieve sustained growth in the way that the tertiary sector has assisted the growth of the developed countries. Higher education improves people's ability to acquire and use information, deepens their understanding of the world, enriches their minds by broadening their experience, and improves the choices they make as consumers, producers and citizens. It increases their productivity and potential to achieve higher standards of living, improves their ability to create and to innovate and also fosters values necessary for civil society.³⁵ Given the importance of knowledge-generation, countries will benefit from encouraging the presence of an active intellectual community and establishing links that extend beyond national boundaries to allow information to flow freely.

Moreover, globalization and the internationalization of industry and R&D have further emphasized the need for strong systems of education that foster innovation and attract foreign direct investment (FDI).³⁶ The acceleration of knowledge-creation in developing countries can be seen from the doubling of the publication rate in China, Hong Kong SAR, Singapore, the Republic of Korea, and Taiwan Province of China, and rising patent applications from such countries as Brazil and India, where 42 and 66 per cent more patent applications, respectively, were filed in 1996 than in 1986.³⁷

Developing countries have relied on non-State, and sometimes for-profit institutions, to expand the provision of higher education. Increasing participation by the private sector in higher education in developing countries presents the challenges of maintaining equity and quality, of diversifying into science

³⁵ World Bank, *Higher Education in Developing Countries: Peril and Promise* (Washington, D.C., World Bank, 2000), pp. 37-45.

³⁶ J. Cantwell, *Multinational Corporations and Technological Innovation* (London, Basil Blackwell, 1989); and Richard R. Nelson, *National Innovation Systems, A Comparative Analysis* (New York, Oxford University Press, 1993).

³⁷ *Higher Education in Developing Countries: Peril and Promise ...*, p. 33, table 9. In the United States, the comparable figure was 71 per cent.

and technology-based courses, and of nurturing sustained institutional growth. Administrative reforms are critical to eliminating inefficiencies, reducing dependence on public sector financing, and improving accountability. Many of the changes have included devolving power to and strengthening the autonomous capability of institutions. In some cases, monitoring and standard-setting by the public sector along with reforms to decentralize and strengthen the private sector may be required to ensure higher overall quality. Given the rising costs of higher education, small countries may find it imperative to strengthen institutions of higher education through reforms to promote innovation and use new technologies creatively so as to link with other countries.

Expansion of private higher education in selected developing countries

The private sector has been involved in the expansion and modernization of tertiary education in the developing countries. From the 1980s onwards, private sector participation in tertiary education has risen. Sixty per cent of Brazilian students are enrolled in private institutions which constitute nearly 80 per cent of the country's higher education system; Indonesia has 57 public universities and more than 1,200 private ones and more than 60 per cent of students are enrolled in private institutions; and half of South Africa's students are enrolled in private institutions. Private universities have introduced innovations in the form of the semester system, standardized examinations and credit systems. Distance learning has expanded rapidly and the five largest programmes based in developing countries account for 10 per cent of enrolment growth in developing countries in the last two decades; with an enrolment of 2 million students in 1997.³⁸

However, the rapid expansion of private sector involvement has still not met the demand. In Turkey, for instance, private higher education grew rapidly with the establishment of the first non-profit private university in 1984 and eight more universities in 1992. Yet, public and private funding has not kept pace with the growth in student numbers: the number tripled between 1982 and 1996, but one third of all applicants were still not admitted to any type of programme.

Similarly, in Africa, many students who are qualified to attend a public higher education institute did not obtain a place, and this has been one factor accounting for the growth of private institutions.³⁹ Another factor has been the demand for a religious education. In East Africa and Nigeria, the number of Islamic institutions has increased. The private universities have also been able to satisfy their students' demand for linking university education with the needs of firms and employers. Students at private institutions tend to specialize in fields that have a greater rate of employability such as business administration, commercial design, hotel management and tourism. Some private universities have entered joint ventures with corporations/businesses to ease the financial difficulties of students.

With the economic problems they have been confronting, it has been difficult for African countries to maintain the quality of higher education. However, Makerere University in Uganda has been able to address the problem of providing good-quality education equitably without undue dependence on public resources. It implemented new financing strategies, installed new management structures and introduced demand-driven courses. More than 70 per cent of its

³⁸ *Higher Education in Developing Countries: Peril and Promise ...*, pp. 29-33.

³⁹ For information on private universities in Africa, see Kingsley Banya, "Are private universities the solution to the higher education crisis in sub-Saharan Africa?", *Higher Education Policy*, vol. 14, pp. 161-174.

students pay fees and more than 30 per cent of revenue is internally generated. One major use of the funds has been for staff salary structures and incentive schemes, with professors' salaries being raised. Makerere University's accomplishment is attributed, among other factors, to macroeconomic reforms that led to economic growth and increased disposable income, and thus to the ability to pay for an education. Furthermore, the Government respected the university's autonomy.⁴⁰

⁴⁰ Higher Education in Developing Countries: Peril and Promise ..., pp. 54-55.

China: using market principles in higher education

China's growing economy and the need for a more highly educated labour force have brought about changes in the tertiary sector. Its reforms tried to keep pace with the demand for higher education and rapidly changing labour-market requirements. Although for-profit institutions have not been used to supply higher education, China is relying on "quasi markets" to introduce internal competition and allowing non-State actors a greater role in the provision of higher education.⁴¹ Market orientation has also entailed the adoption of fees in education, the reduction in State provision, subsidies and regulations, increased attention to revenue-generation activities, the introduction of market-driven courses and curricula, more emphasis on parental choice, and a managerial approach to educational administration.

⁴¹ Ka Ho Mok, "Marketizing higher education in post-Mao China", *International Journal of Educational Development*, vol. 20 (2000), pp. 109-126.

The shift to a policy of decentralization in education began in the mid-1980s and, by the 1990s, economic reforms had devolved responsibilities for engaging in educational development to other non-State sectors. To mobilize local communities, enterprises, individuals and the market, the State promoted sponsorship at three levels (village, township, and county) and reduced State financing of teachers' salaries to no more than one third of the expenditure on school infrastructure, such as school buildings and furniture. However, not all teachers in China are employed by the State. Teachers working for *minban* (people-run) schools are paid by local school authorities, whose chief sources of funding are educational surcharges, tuition fees and local government taxes allocated to education.

User charges in education were introduced in the late 1980s and early 1990s and were legitimized by 1994. In Shanghai, the percentage of fee-paying students in higher educational institutions increased from 7.5 per cent in 1988 to 32.1 per cent in 1994. All students enrolled in higher education were expected to pay tuition fees by 1997, although those from poor families could apply for scholarships or subsidies from their universities/institutions.

Non-State institutions differentiate themselves from State-funded higher education institutions by specializing in courses geared to newly emerging market needs and are committed to serving the local communities in which they are located. *Minban* and publicly assisted education has been established to create more educational opportunities. Such colleges are partially supported by the State and fill the gap between existing demand and supply. Although the State has not granted *minban* colleges university status, the role of *minban* education was formally recognized in 1998.

The Government also attempted to enhance quality at the tertiary level by selecting 100 institutions of higher education to promote development in selected disciplines through the introduction of competition and rewards. Universities are assessed by quantifiable, objective criteria covering such mat-

ters as staffing, buildings, libraries, laboratories, research conducted, funds raised etc. to determine whether they are “qualified” to be included as top institutions and eligible for government funding and encouraged to share resources and facilities. Thus, local institutions can pool resources to create a “University City” to provide better facilities to students. In addition, a customer-oriented approach has been adopted. For example, departments with declining enrolments have repackaged their courses to make them more marketable. Quality control systems have been introduced. Finally, the Government is encouraging administrators, principals and presidents of schools and universities to search for additional funding for teachers’ salaries and to improve teaching and research facilities through commercial activities such as conferences, training courses, charging foreign participants, organizing tours to Chinese archaeological sites, assisting businesses in computerization, and offering preparatory courses for those who wish to pursue advanced degrees.⁴²

However, China has not effected a complete shift from centralized authority to markets in education. The private sector is still not allowed to engage in profit-making arrangements. Nevertheless, the Chinese experience suggests that public-private boundaries are merging and that the “public-private debate” is essentially related to the question “*how* people chose between public and private provision and *how* they establish the proper balance between them”.⁴³

CONCLUSION

Political and economic conditions and the inability of the public sector to meet the ever-increasing demand for education in many countries have led to the private sector’s assuming a greater share of the burden of education at all levels. The private sector cannot be expected to provide high-quality education and access to all students. Private sector participation at all levels, however, may help to reveal the preferences of students and can point to new and more efficient ways of delivering a quality education. Innovations like the open school, computer learning networks, and experiments in funding by some private organizations like NIIT in India and Educor in South Africa, and by non-governmental organizations, indicate that private participation in providing services to less privileged members of society may offer new ways of enlarging access.

Yet increasing rates of enrolment at the national level are not necessarily associated with higher-quality education or matching the education supplied with labour-market requirements. Therefore, government policies must be aimed at raising quality through standard-setting and training at all levels. Organization and management of education are critical and merely increasing spending will not necessarily enhance educational achievement.

The distinction between public and private institutions is becoming more blurred, and processes and practices adopted by both to achieve performance objectives point to convergence. The same kind of changes are being made by many different countries in their attempt to adapt to a global knowledge-based society. This is resulting in a degree of “internationalization” of education. Congruent with the growth of the private sector as an important provider of education at all levels is the commoditization of knowledge, and a rise in the importance of higher education and certification for entry into the formal sec-

⁴² K. H. Mok and K.Y. Wat, “Merging of the public and private boundary: education and the market place in China”, *International Journal of Educational Development*, vol. 18, No. 3 (1998), pp. 255-267.

⁴³ P. Wilding, “Privatization: an introduction and a critique”, in *Privatization*, Richard Parry, ed. (London, Kingsley, 1990).

tor. Employers demand more flexibility and more general skills. Therefore, public sector policies must focus on encouraging diversification through hybrid forms of education that include both general and specialized technical skills at the secondary and tertiary levels, in public and private organizations.

To achieve the objective of building an innovative and highly skilled labour force, education policy cannot be viewed in isolation from other national policies. The creation of employment opportunities is essential to providing capabilities for local problem-solving, particularly in poor and rural communities, so that the benefits of universal education can be realized. Public policy for education must be coordinated with overall strategies for development, including investments in infrastructure, communications, transportation, and credit markets, so as to enable entrepreneurship and industry to flourish, and to stem the migration of the most highly trained. In addition, for decentralization to be successful, competent leadership is required at all levels, to ensure that institutional links are established and accurate information is available for effective decision-making. Finally, given the importance of a strong national foundation in education for participation in international markets, the newly evolving role for the public sector in developing countries may resemble that of a venture capitalist and incubator, providing incentives to finance and building next-generation educational service institutions in previously undersupplied markets, either on its own, or in coordination with the private sector.

ANNEX

STATISTICAL TABLES

ANNEX

STATISTICAL TABLES

The present annex contains the main sets of data on which the analysis provided in the *World Economic and Social Survey, 2002* is based. The data are presented in greater detail than in the text and for longer time periods, and incorporate information available as of 31 May 2002.

The annex was prepared by the Development Policy Analysis Division of the Department of Economic and Social Affairs of the United Nations Secretariat. It is based on information obtained from the United Nations Statistics Division and the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, as well as from the United Nations regional commissions, the International Monetary Fund (IMF), the World Bank, the Organisation for Economic Cooperation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD) and national and private sources. Estimates for the most recent years were made by the Development Policy Analysis Division in consultation with the regional commissions and participants in Project LINK (see directly below). Data presented in this *Survey* may differ, however, from those published by these other organizations for a series of reasons, including differences in timing, sample composition, and aggregation methods (see also section on “Data quality” below for additional sources of data discrepancies). Historical data may differ from those in previous editions of the *Survey* because of updating and changes in the availability of data for individual countries.

Forecasts are based on the results of the April 2002 forecasting exercise of the above-mentioned Project LINK, an international collaborative research group for econometric modelling, which is coordinated jointly by the Development Policy Analysis Division and the University of Toronto. LINK itself is a global model that links together the trade and financial relations of 79 country and regional economic models, which are managed by over 60 national institutions and by the Division. The primary linkages are merchandise trade and prices, as well as the interest and currency exchange rates of major countries. The models assume that the existing or officially announced macroeconomic policies as of 15 April 2002 are in effect. The LINK system uses an iterative process to generate a consistent forecast for the world economy such that international trade flows and prices, among other variables, are determined endogenously and simultaneously. The one exception is the international price of crude oil, which is derived using a satellite model of the oil sector.^a The average price of the basket of seven crude oils of the Organization of the Petroleum Exporting Countries (OPEC) is estimated to drop by 5.5 per cent in 2002 and to rise by 5 per cent in 2003.

^a Additional information on Project LINK is available at: <http://www.un.org/analysis/link/index.htm>.

COUNTRY CLASSIFICATION

For analytical purposes, the *World Economic and Social Survey* classifies all countries of the world into one of three categories: developed economies, economies in transition and developing countries. The composition of these groupings is specified in the tables presented below. The groupings are intended to reflect basic economic conditions in countries. Several countries (in particular economies in transition) have characteristics that could place them in more than one category but, for purposes of analysis, the groupings were made mutually exclusive. Alternative groupings of countries may be appropriate at different times and for different analytical purposes.

The nature of each of the three categories may be given in broad strokes. The **developed economies** (see table A) on average have the highest material standards of living. Their production is heavily and increasingly oriented towards the provision of a wide range of services; agriculture is typically a very small share of output and the share of manufacturing is generally declining. On average, workers in developed countries are the world's most productive, frequently using the most advanced production techniques and equipment. The developed economies are often centres for research in science and technology. Governments of developed countries are likely to offer assistance to other countries and they do not generally seek foreign assistance.

The **economies in transition** are characterized by the transformation that they began at the end of the 1980s, when they turned away from centralized

Table A.
DEVELOPED ECONOMIES^a

Europe		Other countries	Major developed economies
European Union	Other Europe		
<p><i>Euro zone</i></p> Austria Belgium Finland France Germany Greece Ireland Italy Luxembourg Netherlands Portugal Spain	Iceland Malta Norway Switzerland	Australia Canada Japan New Zealand United States of America	Canada France Germany Italy Japan United Kingdom of Great Britain and Northern Ireland United States of America
<p><i>Other EU</i></p> Denmark Sweden United Kingdom of Great Britain and Northern Ireland			

^a Countries systematically monitored by the Development Policy Analysis Division of the United Nations Secretariat.

Table B.
ECONOMIES IN TRANSITION^a

Baltic States	Central and Eastern Europe	Commonwealth of Independent States
Estonia Latvia Lithuania	<p><i>Central Europe</i></p> Czech Republic Hungary Poland Slovakia Slovenia <p><i>South-Eastern Europe</i></p> Albania Bulgaria Croatia Romania The former Yugoslav Republic of Macedonia Yugoslavia	Armenia Azerbaijan Belarus Georgia Kyrgyzstan Republic of Moldova Russian Federation Tajikistan Turkmenistan Ukraine Uzbekistan

^a Countries systematically monitored by the Development Policy Analysis Division of the United Nations Secretariat.

administration of resource allocation as the main organizing principle of their societies towards the establishment or re-establishment of market economies. Some of these economies began this transformation while having many of the characteristics of developed economies and others had several characteristics of developing economies. However, for the purposes of the analysis in the *Survey*, their most distinguishing characteristic is their transitional nature.

The rest of the world is grouped together as the **developing economies**. This is a heterogeneous grouping, although one with certain common characteristics. Average material standards of living in developing countries are lower than in developed countries and many of these countries have deep and extensive poverty. Developing countries are usually importers rather than developers of innovations in science and technology and their application in new products and production processes. They also tend to be relatively more vulnerable to economic shocks.

Beginning with the *World Economic and Social Survey, 1997*,^b estimates of the growth of output in developing countries have been based on the data of 95 economies, accounting for 97-98 per cent of the 1995 gross domestic product (GDP) and population of all developing countries and territories. The countries in the sample account for more than 95 per cent of the GDP and population of each of the geographical regions into which the developing countries are divided, with the exception of sub-Saharan Africa for which the countries included in the sample account for at least 90 per cent of GDP and population.

The *Survey* uses the following designations of geographical regions for developing countries: Africa, Latin America and the Caribbean, and Asia and the Pacific (comprising Western Asia, China, East Asia and South Asia, including the Pacific islands).^c Country classification by geographical region is specified in table C below.

^b United Nations publication, Sales No. E.97.II.C.1 and corrigenda.

^c Names and composition of geographical areas follow those of "Standard country or area codes for statistical use" (ST/ESA/STAT/SER.M/49/Rev.3), with the exception of Western Asia, in which the Survey includes the Islamic Republic of Iran (owing to the large role of the petroleum sector in its economy). Also, "Eastern Europe", as used in this Survey, is a contraction of "Central and Eastern Europe"; thus the composition of the region designated by the term differs from that of strictly geographical groupings.

Table C.
DEVELOPING ECONOMIES BY REGION^a

	Latin America and the Caribbean	Africa	Asia and the Pacific		
			East Asia	South Asia	Western Asia
Net fuel exporters	Bolivia Colombia Ecuador Mexico Trinidad and Tobago Venezuela	Algeria Angola Cameroon Congo Egypt Gabon Libyan Arab Jamahiriya ^b Nigeria	Brunei Darussalam ^b Indonesia Viet Nam		Bahrain Iran (Islamic Republic of) Iraq Kuwait ^b Oman ^b Qatar ^b Saudi Arabia ^b Syrian Arab Republic United Arab Emirates ^b
Net fuel importers	Argentina Barbados Brazil Chile Costa Rica Cuba Dominican Republic El Salvador Guatemala Guyana Haiti Honduras Jamaica Nicaragua Panama Paraguay Peru Uruguay	Benin Botswana Burkina Faso Burundi Central African Republic Chad Côte d'Ivoire Democratic Republic of the Congo Ethiopia Ghana Guinea Kenya Madagascar Malawi Mali Mauritius Morocco Mozambique Namibia Niger Rwanda Senegal South Africa Sudan Togo Tunisia Uganda United Republic of Tanzania Zambia Zimbabwe	Hong Kong SAR ^c Malaysia Papua New Guinea Philippines Republic of Korea Singapore ^b Taiwan Province of China ^b Thailand China	Bangladesh India Myanmar Nepal Pakistan Sri Lanka	Cyprus Israel Jordan Lebanon Turkey Yemen

^a Countries systematically monitored by the Development Policy Analysis Division of the United Nations Secretariat

^b Net-creditor economy.

^c Special Administrative Region of China

The *Survey* also uses a geographical subgrouping of sub-Saharan Africa, which contains African countries south of the Sahara desert, excluding Nigeria and South Africa. The intent of this grouping is to give a picture of the situation in the large number of smaller sub-Saharan economies by avoiding any distortion that may be introduced by including the two large countries that dominate the region in terms of GDP, population and international trade.

For analytical purposes, developing countries are classified as **fuel exporters** or **fuel importers** because the ability to export fuel or the need to import fuel has a large effect on a country's capacity to import other goods and services—and therefore on the growth of output, as growth in developing countries is often constrained by the availability of foreign exchange. Fuels, rather than energy sources more broadly, are considered because fuel prices are more directly linked to oil prices, and oil prices are particularly volatile and often have a considerable impact on countries' incomes and capacity to import.

A country is defined as a **fuel exporter** if, simultaneously: (a) its domestic production of primary commercial fuel (including oil, natural gas, coal and lignite, but excluding hydro- and nuclear electricity) exceeds domestic consumption by at least 20 per cent; (b) the value of its fuel exports amounts to at least 20 per cent of its total exports; and (c) it is not classified as a least developed country.

A subgroup of the fuel-importing developing countries identified in some tables is the **least developed countries**. The list of least developed countries is decided by the General Assembly, on the basis of recommendations by the Committee for Development Policy. The Committee proposes criteria for identifying the least developed countries and makes recommendations regarding the eligibility of individual countries. The basic criteria for inclusion require being below certain thresholds with regard to per capita GDP, an economic vulnerability index and an “augmented physical quality of life index”.^d At present, the following 49 countries are on the list:

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen, Zambia.

A classification of **net-creditor** and **net-debtor** countries is used in some tables. This is based on the net foreign asset position of each country at the end of 1995, as assessed by IMF in its *World Economic Outlook*, October 1996.^e The **net-creditor** countries are signalized by footnote indicator ^b in table C.

Another group used in this *Survey* comprises the **heavily indebted poor countries** (HIPC), which are considered by the World Bank and IMF for their debt-relief initiative (the enhanced HIPC Initiative). The heavily indebted poor countries^f are: Angola, Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo (formerly Zaire), Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Guyana, Honduras, Kenya, Lao People's Democratic Republic, Liberia,

^d See report of the Committee for Development Policy 2000 on its second session (Official Records of the Economic and Social Council, 2000, Supplement No. 13 (E/2000/33)), chap. IV.

^e Washington, D.C., IMF, 1996.

^f See “Heavily Indebted Poor Countries (HIPC) Initiative: status of implementation”, report jointly prepared by the staffs of the World Bank and IMF for the joint session of the Development Committee (DC) and the International Monetary and Financial Committee (IMFC) on 29 April 2001.

Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nicaragua, Niger, Rwanda, Sierra Leone, Sao Tome and Principe, Senegal, Somalia, Sudan, Togo, Uganda, United Republic of Tanzania, Viet Nam, Yemen and Zambia.

DATA QUALITY

Statistical information that is consistent and comparable over time and across countries is of vital importance for monitoring economic developments, discussing social issues and poverty, or assessing environmental change. The multifaceted nature of these and other related issues calls for an integrated approach to national and international economic, environmental and social data.

The 1993 revision of the System of National Accounts (SNA)^g and the 1993 *Balance of Payments Manual*^h (the IMF Manual) constitute a major step forward in efforts to develop an integrated and harmonized system of statistics that reflect economic and social change. The SNA embodies concepts, definitions and classifications that are interrelated at both the macro- and microlevels. Concepts in the IMF Manual have been harmonized, as closely as possible, with those of the SNA and with the methodologies of IMF pertaining to banking, government finance and money statistics. In addition, through a system of satellite accounts, which are semi-integrated with the central framework of the SNA, it is possible to establish linkages between national accounts data and other statistical data, such as social statistics, health statistics, social protection statistics and tourism statistics.

Governments are increasingly reporting their data on the basis of these standards and, where available, such data are used in the statistics in this annex. However, inconsistency of coverage, definitions and data-collection methods among reporting countries mars some of the national and international statistics that are perforce used in this *Survey* and other international publications. Another perennial problem is late, incomplete or unreported data. In such cases, adjustments and estimations are possible, and are made in selected cases. In some areas, many developed countries report not only on an annual basis, but also quarterly or even more frequently. Considerable progress has been made by some developing countries and economies in transition in publishing annual and quarterly data on a timely and regular basis, but major lacunae have developed in other cases, particularly for economies in conflict.

One widespread source of inaccuracy arises from the use of out-of-date benchmark surveys and censuses or obsolete models and assumptions about behaviour and conditions. On the other hand, when statistical administrations seek to improve their estimates by using new sources of data and updated surveys, there can be discontinuities in the series. National income estimates are especially affected, sometimes being subject to revisions on the order of 10-30 per cent.

National accounts and related indicators mainly record market transactions conducted through monetary exchange. Barter, production by households, subsistence output and informal sector activities are not always recorded; together, the omitted items can constitute a large share of total activity and their omission can lead to a considerable underestimation of national output. As the degree of underestimation varies across countries, comparisons may give faulty

^g Commission of the European Communities, IMF, OECD, United Nations and World Bank, *System of National Accounts, 1993* (United Nations publication, Sales No. E.94.XVII.4).

^h IMF, *Balance of Payments Manual*, 5th ed. (Washington, D.C., IMF, 1993).

results. In addition, as the non-market sector is absorbed over time into the mainstream of production through increasing monetization, output growth will be overstated.

Weaknesses at the national level become major analytical handicaps when comparisons are made between countries or groupings of countries at a given time or over time. Missing, unreliable or incompatible country data necessitate estimation and substitution by international organizations if they are to retain consistent country composition of aggregated data over time. In particular, the absence of reliable GDP estimates for many developing countries and economies in transition requires the use of estimates in preparing country aggregations for many data series, as GDP weights often underlie such aggregations.

The veracity of estimates of output and of other statistical data of developing countries is related to the stage of development of their statistical systems. In Africa in particular, there are wide divergences in the values of the economic aggregates provided by different national and international sources for many countries. In addition, data for countries in which there is civil strife or war often provide only rough orders of magnitude. Finally, in countries experiencing high rates of inflation and disequilibrium exchange rates, substantial distortions can invade national accounts data.

The extent of economic activity not captured by national statistics and its evolution over time have become a concern in some countries, particularly economies in transition. In addition, the proliferation of new modes of production, transactions and entities has rendered the previous institutional and methodological framework for statistics inadequate. A comprehensive reform of national statistical systems has thus been under way in many economies in transition. As a result, important revisions to several data series have been released and further revisions of measures of past and current performance are expected.ⁱ

There are also problems with other types of statistics such as those on unemployment, consumer price inflation, and the volume of exports and imports. Cross-country comparisons of unemployment must be made with caution, owing to differences in definition among countries. For this reason in particular, table A.7 employs the standardized definitions of unemployment rates, where data are available (developed economies only). In a number of cases, then, data differ substantially from national definitions.

Consumer price indices are among the oldest of the economic data series collected by Governments, but they are still surrounded by controversy, even in countries with the most advanced statistical systems. This is attributable particularly to the introduction of new goods and changes in the quality of goods and consumer behaviour that are often not captured because of, inter alia, infrequent consumer-spending surveys and revisions to the sample baskets of commodities.

There are no clear-cut solutions to many of the problems noted above. Even when there are, inadequate resources allocated to the improvement of statistical systems and reporting can perpetuate statistical shortcomings. In this light, some of the economic and social indicators presented in this *Survey* should be recognized as approximations and estimations.

ⁱ See *World Economic and Social Survey, 1995* (United Nations publication, Sales No. E.95.II.C.1), statistical annex, section entitled "Data caveats and conventions".

DATA DEFINITIONS AND CONVENTIONS

Aggregate data are either sums or weighted averages of individual country data. Unless otherwise indicated, multi-year averages of growth rates are expressed as compound annual percentage rates of change. The convention followed is to omit the base year in a multi-year growth rate, for example, the 10-year average growth rate of a variable in the 1980s would be identified as the average annual growth rate in 1981-1990.

Output

National practices are followed in defining real GDP for each country and these national data are aggregated to create regional and global output figures. The growth of output in each group of countries is calculated from the sum of GDP of individual countries measured at 1995 prices and exchange rates. Data for GDP in 1995 in national currencies were converted into dollars (with adjustments in selected casesⁱ) and extended forward and backward in time using changes in real GDP for each country. This method supplies a reasonable set of aggregate growth rates for a period of about 15 years, centred on 1995.

ⁱ When individual exchange rates seemed unrealistic, alternative exchange rates were substituted, using averages of the exchange rates in relevant years or the exchange rate of a more normal year, adjusted using relative inflation rates since that time.

Alternative aggregation methodologies for calculating world output

The *World Economic and Social Survey* utilizes a weighting scheme derived from exchange-rate conversions of national data in order to aggregate rates of growth of output of individual countries into regional and global totals, as noted above. This is similar to the approach followed in some other international reports, such as those of the World Bank. However, the aggregations used by IMF in its *World Economic Outlook* and by OECD in its *Economic Outlook* rely on country weights derived from national GDP in “international dollars”, as converted from local currency using purchasing power parities (PPPs). The different weights arising from these two approaches are given in table D. The question which approach to use is controversial.

The reason advanced for using PPP weights is that, when aggregating production in two countries, a common set of prices should be used to value the same activities in both countries. This is frequently not the case when market exchange rates are used to convert local currency values of GDP. The PPP approach revalues gross expenditure in different countries using a single set of prices, in most cases some average of the prices in the countries being compared. By construction, these revalued GDP magnitudes are then related to a numeraire country, usually the United States of America, by assuming that GDP at PPP values for that country is identical with its GDP at the market exchange rate. The PPP conversion factor is then, in principle, the number of units of national currency needed to buy the goods and services that can be bought with one unit of the currency of the numeraire country.^k

^k Since a common set of international prices is used, the translation of purchasing power values relative to any numeraire country is defined, given the built-in transitivity property.

In principle as well as in practice, however, PPPs are difficult to calculate because goods and services are not always directly comparable across countries, making direct comparisons of their prices correspondingly difficult. It is particularly difficult to measure the output and prices of many services, such as health care and education.

Table D.
OUTPUT AND PER CAPITA OUTPUT IN THE BASE YEAR

	GDP (billions of dollars)		GDP per capita (dollars)	
	Exchange- rate basis 1995	PPP basis 1995	Exchange- rate basis 1995	PPP basis 1995
World	28 767	34 716	5 157	6 230
Developed economies	22 425	19 061	27 017	22 965
<i>of which:</i>				
United States of America	7 401	7 401	27 537	27 537
European Union	8 427	7 345	22 615	19 711
Japan	5 134	2 879	40 920	22 948
Economies in transition	785	2 327	1 913	5 666
Developing countries	5 557	13 328	1 281	3 072
By region:				
Latin America	1 689	3 037	3 569	6 418
Africa	463	1 321	685	1 952
Western Asia	735	1 253	3 449	5 878
Eastern and Southern Asia	2 669	7 717	897	2 594
China	700	3 237	574	2 654
By analytical grouping:				
Net-creditor countries	574	791	10 695	14 734
Net-debtor countries	4 983	12 537	1 163	2 926
Net fuel exporter countries	4 856	3 184	1 660	4 042
Net fuel importer countries	1 308	10 144	1 197	2 857
Memorandum items:				
Sub-Saharan Africa	128	452	314	1 111
Least developed countries	140	528	247	931

Source: UN/DESA.

One problem in employing PPP estimates for calculating the relative sizes of economies is that even the most recently completed set of PPP prices covers only a comparatively small group of countries. Initially, in 1985, there were PPP data for only 64 countries. Subsequent work under the auspices of the International Comparison Programme (ICP) has increased this number, but it remains far lower than the number of countries for which this *Survey* needs data.

However, certain regularities have been observed, on the one hand, between GDP and its major expenditure components when measured in market prices and, on the other, between GDP and its components measured in “international” prices as derived in the ICP exercises. On that basis (and using other partial data on consumer prices), a technique was devised to approximate PPP lev-

¹ See Robert Summers and Alan Heston, "The Penn World Table (Mark 5): an expanded set of international comparisons, 1950-1988", National Bureau of Economic Research (NBER) Working Paper, No. R1562, May 1991.

els of GDP and its major expenditure components for countries that had not participated in ICP. The results are known as the Penn World Tables.¹

Neither the PPP approach nor the exchange-rate approach to weighting country GDP data can be applied in a theoretically pure or fully consistent way. The data requirements for a global ICP are enormous, although coverage has grown in each round. Similarly, since a system of weights based on exchange trade rates presumes that those rates are determined solely by external transactions in goods and services and that domestic economies operate under competitive and liberal conditions, its application has been constrained by exchange controls, capital flows and price distortions in many countries. Moreover, there are a large number of non-traded goods and services in each country to which the "law of one price" does not apply. In theory, the global trend towards liberalization may make possible a more consistent application over time of the exchange-rate method. Even so, the methods are conceptually different and thus yield different measures of world output growth.

The differences for the periods 1981-1990 and 1991-2000 are shown in table A.1. The estimates employ the same countries and the same data for the growth rates of GDP of the individual countries in the two computations. The differences in the aggregate growth rates are purely the result of using the two different sets of weights shown in table D.

Table A.1 indicates that the world economy as a whole has grown faster when country GDPs are valued at PPP conversion factors, even though the growth rates for the main groupings of countries do not differ much when data are converted at PPP rather than at exchange rates. This is because the developing countries, in the aggregate, grew more rapidly than the rest of the world in the 1990s and the share of GDP of these countries is larger under PPP measurements than under market exchange rates. The influence of China is particularly important, given its high growth rate for nearly two decades.

International trade and finance

Trade values in table A.13 are based largely on customs data for merchandise trade converted into dollars using average annual exchange rates and are mainly drawn from IMF, *International Financial Statistics*. These data are supplemented by balance-of-payments data in certain cases. Estimates of the dollar values of trade include estimates by the regional commissions and the Development Policy Analysis Division, while forecasts for both volume and value of imports and exports largely rely on Project LINK.

For developed economies and economies in transition, the growth of trade volumes are aggregated from national data, as collected by the Economic Commission for Europe (ECE), IMF and the Development Policy Analysis Division. The unit values that are used to determine measures of the volume of exports and imports for groupings of developing countries are estimated in part from weighted averages of export prices of commodity groupings at a combination of three- and four-digit Standard International Trade Classification (SITC) levels, based on the United Nations External Trade Statistics Database (COMTRADE); the weights reflect the share of each commodity or commodity group in the value of the region's total exports or imports.

For tables covering years previous to 1993, it is important to note that as of 1 January 1993, customs offices at the borders between States members of the

European Union (EU), which used to collect and check customs declarations on national exports and imports, were abolished as the single European market went into effect. A new system of data collection for intra-EU trade, called INTRASTAT, was put in place. INTRASTAT relies on information collected directly from enterprises and is linked with the system of declarations of value added tax (VAT) relating to intra-EU trade so as to allow for quality control of the data. There nevertheless remains a discontinuity owing to the change in methodology.

The main source of data for table A.14 is the IMF Direction of Trade Statistics database, while tables A.15 and A.16 are drawn from the more detailed trade data in COMTRADE.

Total imports and exports comprise all 10 SITC sections (0 to 9).^m The following aggregations were used:

Total primary commodities refer to SITC sections 0 to 4:

- *Foods* comprise SITC sections 0 and 1, namely, food and live animals chiefly for food; and beverages and tobacco;
- *Agricultural raw materials* include SITC section 2 (crude materials, inedible, except fuels), except for divisions 27 and 28 (crude fertilizers and crude minerals, and metalliferous ores and metal scrap, respectively) and section 4 (animal and vegetable oils, fats and waxes);
- *Fuels* refer to SITC section 3 (mineral fuels, lubricants and related materials).

Total manufactures comprise sections 5 to 8:

- *Textiles* include divisions 65 (textile yarn, fabrics, made-up articles, not elsewhere specified or included, and related products) and 84 (articles of apparel and clothing accessories);
- *Chemicals* are SITC section 5;
- *Machinery and transport equipment* refer to SITC division 7;
- *Metals* include divisions 67 (iron and steel) and 68 (non-ferrous metals).

The IMF *Balance of Payments Statistics* is the main source of data for tables A.19 to A.22. The tables are based, therefore, on the definitions and methodologies as specified by the IMF *Balance of Payments Manual* mentioned earlier. Regional commissions, and official and private sources, as well as estimates by the Development Policy Analysis Division, were used to complement the IMF data. Whenever necessary, data reported in national currency were converted into United States dollars at the average market exchange rate in the period. Current-account transactions estimates are presented for the three country groupings specified in tables A, B and C above. Regional and subregional aggregates are sums of individual economy data. Accordingly, the current-account balance for the euro zone countries reflects the aggregation of individual country positions; it therefore does not exclude intra euro-zone transactions.

Table A.18 is, with the exception of data for OPEC in 2002, based on the International Energy Agency (IEA) *Monthly Oil Market Report*. The estimate of supply from OPEC in 2002 is based on production data for the first quarter of 2002 and information about OPEC production quotas. The country groups and regions used in this *Survey* differ from those used by IEA, and adjustments were made to take account of these differences.

^m See *Standard International Trade Classification, Revision 2*, Statistical Papers, No. 34 (United Nations publication, Sales No. E.75.XVII.6).

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I. GLOBAL OUTPUT AND MACROECONOMIC INDICATORS

Table A.1.
WORLD POPULATION, OUTPUT AND PER CAPITA GDP, 1980-2001

	Growth of GDP (annual percentage change)				Growth rate of population (annual percentage change)		Population (millions)		GDP per capita Exchange- rate basis (1995 dollars)	
	Exchange- rate basis (1995 dollars)		Purchasing power parity (PPP) basis		1981- 1990	1991- 2001	1980	2001	1980	2001
	1981- 1990	1991- 2001	1981- 1990	1991- 2001						
World	2.9	2.4	3.0	2.9	1.7	1.4	4 367	6 036	4 534	5 642
Developed economies	3.0	2.2	3.0	2.4	0.6	0.6	756	857	20 238	30 488
<i>of which:</i>										
United States	3.2	3.0	3.2	3.0	1.0	1.1	230	286	20 851	32 012
European Union ^a	2.3	1.9	2.4	2.0	0.3	0.3	355	377	17 628	25 779
Japan	4.1	1.2	4.1	1.2	0.6	0.3	117	127	27 462	43 109
Economies in transition^b	1.8	-1.9	2.0	-2.4	0.7	0.0	378	407	2 616	2 237
Developing countries	2.3	4.3	3.4	5.0	2.1	1.7	3 233	4 773	1 087	1 472
<i>by region:</i>										
Latin America	1.1	2.8	1.3	2.9	2.0	1.6	356	520	3 654	3 788
Africa	2.0	2.4	1.9	2.3	2.9	2.5	446	780	802	723
Western Asia	-2.8	2.3	-1.5	2.6	3.3	2.3	137	243	6 758	3 673
Eastern and Southern Asia	7.0	6.3	6.9	6.9	1.8	1.5	2 295	3 230	407	1 115
Region excluding China	6.6	5.0	5.9	4.8	2.1	1.8	1 296	1 945	592	1 278
<i>of which:</i>										
East Asia	7.0	5.1	6.3	4.8	1.9	1.6	411	592	1 322	3 134
South Asia	5.3	4.9	5.2	4.9	2.2	1.9	885	1 353	252	466
China	9.1	9.8	9.1	9.8	1.5	1.0	999	1 285	167	869
<i>by analytical grouping:</i>										
Net-creditor countries	1.6	4.1	0.9	3.7	3.1	1.9	37	61	10 624	11 656
Net-debtor countries	2.4	4.3	3.6	5.1	2.1	1.7	3 197	4 712	977	1 340
Net fuel exporters	-1.1	2.7	0.7	3.0	2.6	2.0	552	881	2 403	1 803
Net fuel importers	4.0	4.9	4.6	5.7	2.0	1.6	2 682	3 891	816	1 397
Memo items:										
Sub-Saharan Africa	1.8	2.4	1.2	2.1	3.1	2.7	261	474	388	332
Least developed countries	2.2	3.3	1.9	3.1	2.7	2.6	381	659	270	276

Source: UN/DESA.

^a Including the eastern *Länder* (States) of Germany from 1991.

^b Including the former German Democratic Republic until 1990.

Table A.2.
DEVELOPED ECONOMIES: RATES OF GROWTH OF REAL GDP, 1993-2002

Annual percentage change ^a											
	1993-2001	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^b	2002 ^c
Developed economies	2.4	0.9	2.9	2.3	2.7	3.0	2.5	2.8	3.4	1.0	1¼
United States	3.4	2.7	4.0	2.7	3.6	4.4	4.3	4.1	4.1	1.2	2½
Canada	3.3	2.3	4.7	2.8	1.7	3.9	3.6	4.5	4.4	1.5	2¼
Japan	1.1	0.4	1.0	1.6	3.5	1.8	-1.1	0.7	2.4	-0.5	-1
Australia	4.2	3.7	5.2	3.8	4.1	4.0	5.3	6.2	3.2	2.4	2¾
New Zealand	3.4	6.3	5.1	3.7	3.1	2.6	-0.4	4.1	3.8	2.5	2
EU-15	2.1	-0.4	2.8	2.4	1.6	2.5	2.8	2.6	3.4	1.6	1½
Euro zone	2.0	-0.8	2.4	2.2	1.4	2.3	2.7	2.7	3.5	1.5	1½
Austria	2.0	0.5	2.4	1.7	2.0	1.3	3.3	2.8	3.0	1.2	1½
Belgium	2.1	-1.5	2.7	2.6	1.2	3.6	2.2	3.0	4.0	1.0	1
Finland	3.6	-1.1	4.0	3.8	4.0	6.3	5.3	4.0	5.6	0.7	1½
France	2.0	-0.9	2.1	1.8	1.1	1.9	3.1	3.2	3.6	1.8	1½
Germany	1.4	-1.1	2.3	1.7	0.8	1.4	2.0	1.8	3.0	0.6	1
Greece	2.6	-0.9	1.5	1.9	2.4	3.6	3.4	3.4	4.1	4.0	3½
Ireland	8.2	2.7	5.8	9.7	7.7	10.7	8.6	10.9	11.5	6.8	3
Italy	1.7	-0.9	2.2	2.9	1.1	2.0	1.8	1.6	2.9	1.8	1¼
Luxembourg	5.9	8.7	4.2	3.8	3.6	9.0	5.8	6.0	7.5	5.1	3¾
Netherlands	2.8	0.6	3.2	2.3	3.1	3.6	4.1	3.7	3.5	1.0	1½
Portugal	2.4	-1.4	2.4	2.9	3.2	3.5	3.5	2.9	3.4	1.8	1
Spain	2.7	-1.2	2.3	2.7	2.4	3.5	3.8	3.7	4.1	2.8	2
Other EU	2.8	1.5	4.6	3.0	2.4	3.2	3.1	2.4	3.1	2.1	1¾
Denmark	2.5	0.0	5.5	2.8	2.5	3.0	2.8	2.1	3.0	1.2	1½
Sweden	2.2	-2.2	3.3	3.7	1.1	2.0	3.6	4.1	3.6	1.2	1¼
United Kingdom	3.0	2.5	4.7	2.9	2.6	3.4	3.0	2.1	3.0	2.4	2
Other Europe	1.9	0.5	2.2	1.6	1.9	2.8	2.3	1.4	2.8	1.5	2
Iceland	3.6	0.6	4.5	0.1	5.2	5.3	5.1	3.9	4.9	3.0	-1
Malta	4.1	4.5	5.7	6.2	4.0	4.9	3.4	4.1	5.2	-1.0	2¼
Norway	3.1	2.7	5.5	3.8	4.9	4.7	2.0	0.9	2.3	1.4	2¼
Switzerland	1.2	-0.5	0.5	0.5	0.3	1.7	2.4	1.6	3.0	1.5	2
Memo item:											
Major developed economies	2.3	1.1	2.8	2.2	2.8	3.0	2.3	2.7	3.4	0.9	1¼

Source: UN/DESA, based on IMF, *International Financial Statistics*.

^a Calculated as a weighted average of individual country growth rate of gross domestic product (GDP), where weights are based on GDP in 1995 prices and exchange rates. For methodology, see *World Economic Survey, 1992* (United Nations publication, Sales No. E.92.II.C.1 and Corr. 1 and 2), annex, introductory text).

^b Partly estimated.

^c Forecast, based in part on Project LINK.

Table A.3.
ECONOMIES IN TRANSITION: RATES OF GROWTH OF REAL GDP, 1993-2002

Annual percentage change ^a											
	1993-2001	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^b	2002 ^c
Economies in transition	0.0	-6.7	-7.2	-0.6	-0.1	2.2	-0.7	3.0	6.3	4.4	3½
Central and Eastern Europe and Baltic States	2.8	-1.9	3.6	5.5	4.1	3.5	2.7	1.3	3.9	2.9	2¾
Central and Eastern Europe	2.9	-1.2	4.0	5.7	4.1	3.3	2.6	1.4	3.9	2.7	2½
Albania	6.9	9.7	8.3	13.3	9.0	-7.0	8.0	7.3	7.8	6.5	6
Bulgaria	0.1	-1.4	1.8	2.8	-10.2	-7.0	3.5	2.4	5.8	4.0	3½
Croatia	2.8	-8.0	5.9	6.8	5.9	6.8	2.5	-0.4	3.7	3.2	2¾
Czech Republic	1.8	0.0	2.2	6.0	4.3	-0.8	-1.2	-0.4	2.9	3.6	3½
Hungary	3.1	-0.6	3.1	1.4	1.4	4.6	4.9	4.2	5.2	3.8	3½
Poland	4.8	3.8	5.1	7.1	6.0	6.9	4.8	4.1	4.0	1.1	1¼
Romania	0.9	1.6	3.9	7.1	4.0	-6.1	-5.4	-3.2	1.8	5.3	3½
Slovakia	3.6	-3.6	4.8	7.0	6.5	6.5	4.1	1.9	2.2	3.3	3½
Slovenia	4.1	2.9	5.3	4.2	3.5	4.5	3.8	5.2	4.6	3.0	3
The former Yugoslav Republic of Macedonia	-0.5	-9.0	-1.9	-1.2	0.7	1.5	2.9	2.7	5.1	-4.6	3
Yugoslavia	-2.7	-30.8	2.7	6.0	5.9	7.4	2.5	-19.3	5.0	5.5	5
Baltic States	0.9	-14.2	-4.7	2.2	4.1	8.5	4.6	-1.7	5.4	6.3	4
Estonia	2.4	-9.0	-2.0	4.3	3.9	10.6	4.7	-1.1	6.4	5.4	4
Latvia	1.5	-14.9	0.6	-0.8	3.3	8.6	3.9	1.1	6.6	7.6	5
Lithuania	-0.3	-16.2	-9.8	3.3	4.7	7.3	5.1	-4.2	3.9	5.9	3½
Commonwealth of Independent States	-2.0	-9.4	-13.7	-5.1	-3.5	1.0	-3.7	4.7	8.5	5.7	4¼
Armenia	3.4	-14.8	5.4	6.9	5.9	3.3	7.3	3.3	6.0	9.6	5½
Azerbaijan	-1.9	-23.1	-19.7	-11.8	1.3	5.8	10.0	7.4	11.1	9.9	8
Belarus	0.3	-7.6	-12.6	-10.4	2.8	11.4	8.4	3.4	5.8	4.1	2
Georgia	-0.8	-25.4	-11.4	2.4	10.5	10.8	2.9	2.9	1.8	4.5	5
Kazakhstan	-0.9	-9.2	-12.6	-8.2	0.5	1.7	-1.9	1.7	9.6	13.2	7
Kyrgyzstan	-3.0	-16.0	-20.1	-5.4	-7.1	9.9	2.1	3.6	5.0	5.3	4½
Republic of Moldova	-5.4	-1.2	-31.2	-1.4	-7.8	1.3	-6.5	-4.4	1.9	6.1	3½
Russian Federation	-1.8	-8.7	-12.7	-4.1	-3.5	0.8	-4.9	5.4	9.0	5.0	4
Tajikistan	-2.4	-11.0	-18.9	-12.5	-4.4	1.7	5.3	3.7	8.3	10.2	6
Turkmenistan ^d	-0.1	-10.0	-17.3	-7.2	-6.7	-11.3	5.0	16.0	17.6	20.5	15
Ukraine	-6.0	-14.2	-23.0	-12.2	-10.0	-3.0	-1.9	-0.4	5.8	9.0	5
Uzbekistan	1.5	-2.3	-4.2	-0.9	1.6	2.5	4.4	4.4	4.0	4.5	2½

Source: UN/DESA, based on data of Economic Commission for Europe (ECE).

^a Calculated as a weighted average of individual country growth rates of gross domestic product (GDP), where weights are based on GDP in 1995 prices and exchange rates.

^b Partly estimated.

^c Forecast, based in part on Project LINK.

^d The reliability of the figures for Turkmenistan is questionable owing to poorly documented deflation procedures.

Table A.4.
DEVELOPING ECONOMIES: RATES OF GROWTH OF REAL GDP, 1993-2002

Annual percentage change											
	1993-2001	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b
Developing countries^c	4.4	5.2	5.6	5.0	5.7	5.4	1.6	3.5	5.8	2.0	3¼
<i>of which:</i>											
Latin America and the Caribbean	2.9	3.5	5.3	1.4	3.7	5.2	2.0	0.4	3.9	0.3	¼
Net fuel exporter	2.6	2.2	3.6	-2.4	3.7	5.7	3.2	1.5	5.5	0.6	1½
Net fuel importer	3.0	4.1	6.1	3.0	3.8	4.9	1.5	0.0	3.3	0.2	-0
Africa	2.8	0.1	2.3	2.8	5.2	3.0	3.0	2.9	3.0	2.9	2¾
Net fuel exporter	2.7	-0.9	0.5	3.9	4.2	3.3	3.6	3.8	3.5	2.8	2
Net fuel importer	2.8	0.7	3.4	2.1	5.8	2.8	2.7	2.5	2.8	2.9	3¼
Western Asia	3.0	4.3	-0.8	4.0	4.6	5.5	4.1	0.7	6.3	-1.2	1¾
Net fuel exporter	3.2	3.1	-0.5	1.7	3.9	5.9	4.7	2.6	6.3	0.8	1
Net fuel importer	2.8	6.2	-1.3	7.5	5.8	4.9	3.3	-2.1	6.3	-4.4	2¾
Eastern and Southern Asia	6.1	7.6	8.4	8.1	7.3	6.0	0.5	6.3	7.1	3.7	5½
Region excluding China	4.9	5.9	7.0	7.3	6.5	5.0	-2.3	5.9	6.8	2.1	4½
<i>of which:</i>											
East Asia	4.8	6.5	7.6	7.6	6.7	5.1	-4.6	5.9	7.4	1.3	4½
South Asia	5.2	3.9	5.2	6.3	6.0	4.8	5.3	5.9	5.0	4.6	5½
Memo items:											
Sub-Saharan Africa (excluding Nigeria and South Africa)	2.9	-1.1	2.1	3.8	5.4	4.3	3.3	2.8	2.5	3.1	4
Least developed countries	3.8	0.7	2.0	4.9	5.0	4.4	4.1	3.9	4.7	4.7	4¾
Major developing economies											
Argentina	1.9	5.7	5.8	-2.8	5.5	8.1	3.9	-3.4	-0.5	-4.5	-10
Brazil	3.1	4.1	6.2	4.2	2.9	3.5	0.2	0.8	4.5	1.5	2½
Chile	5.2	6.0	5.4	9.9	7.0	7.6	3.9	-1.1	5.4	2.8	3½
China	9.4	13.5	12.6	10.5	9.6	8.8	7.8	7.1	8.0	7.3	7¼
Colombia	2.4	5.1	6.3	5.4	2.1	2.8	0.5	-4.3	2.7	1.6	2½
Egypt	4.1	2.0	2.3	4.7	5.0	5.5	5.6	6.0	3.2	2.5	¾
Hong Kong SAR ^d	3.9	6.1	5.3	4.7	4.8	5.2	-5.1	3.0	12.1	0.1	2¼
India	5.5	3.9	5.4	6.7	6.4	5.3	5.6	6.4	5.1	5.1	5¾
Indonesia	3.1	6.5	7.5	8.1	8.0	4.7	-13.1	0.1	4.8	3.3	3½
Iran (Islamic Republic of)	3.5	2.6	1.8	4.2	5.0	2.5	2.2	2.5	6.1	4.5	3½
Israel	3.7	3.4	6.6	7.1	4.5	2.1	2.2	2.2	6.0	-0.6	¾
Korea, Republic of	5.7	5.8	8.6	8.9	7.1	5.5	-5.8	10.7	8.8	3.0	6¼
Malaysia	5.4	8.3	9.2	9.5	8.2	7.7	-7.5	5.6	8.3	0.4	4½
Mexico	3.2	1.9	4.6	-6.2	5.5	6.8	4.8	5.2	6.9	-0.3	1¾
Nigeria	2.5	2.3	1.3	2.5	4.3	2.7	1.8	1.0	3.8	3.0	2¾
Pakistan	3.7	3.1	4.2	4.9	5.2	1.3	3.7	4.1	3.9	3.3	4½
Peru	4.4	4.8	12.8	8.6	2.5	6.7	-0.4	1.4	3.6	0.2	3
Philippines	3.6	2.1	4.4	4.8	5.5	5.2	-0.5	3.4	4.0	3.3	4½
Saudi Arabia	1.5	1.6	-2.7	-0.2	4.0	3.0	1.6	0.5	4.5	1.7	½
Singapore	6.4	9.9	10.1	8.9	7.0	7.8	0.3	5.9	10.3	-2.0	4
South Africa	2.5	1.3	2.7	3.4	4.3	2.6	0.8	2.1	3.4	2.0	2¼
Taiwan Province of China	5.0	6.3	6.5	6.1	5.6	6.8	4.6	5.4	5.9	-1.9	3½
Thailand	3.3	8.3	8.7	8.6	6.7	-1.3	-10.2	4.2	4.4	1.6	2¾
Turkey	2.2	8.1	-6.1	8.0	7.0	6.8	3.8	-5.1	7.1	-8.0	4
Venezuela	0.5	0.7	-3.0	3.1	-1.3	5.1	0.2	-6.1	3.2	2.7	-2

Source: United Nations.

^a Partly estimated.

^b Forecast, in part based on Project LINK.

^c Covering countries that account for 98 per cent of the population of all developing countries.

^d Special Administrative Region of China.

Table A.5.
DEVELOPED ECONOMIES: INVESTMENT, SAVING AND NET TRANSFER, 1985-2000

Percentage of GDP				
		Gross domestic investment	Gross domestic saving	Net financial transfer
Total ^a	1985	21.8	22.2	-0.4
	1990	22.9	22.7	0.2
	1995	21.5	22.2	-0.7
	2000	21.9	21.3	0.6
Major developed economies ^a	1985	21.7	21.1	0.5
	1990	22.6	22.4	0.2
	1995	21.5	22.0	-0.4
	2000	21.8	20.6	1.2
European Union (EU-15)	1985	14.9	17.3	-2.4
	1990	16.6	16.6	0.0
	1995	14.8	16.0	-1.2
	2000	15.3	16.0	-0.6
Germany ^b	1985	20.0	23.0	-3.0
	1990	22.7	26.0	-3.3
	1995	22.7	23.3	-0.6
	2000	22.2	22.6	-0.4
Japan	1985	28.3	31.7	-3.4
	1990	32.8	33.7	-0.9
	1995	28.2	29.6	-1.4
	2000	25.9	27.4	-1.4
United States of America	1985	20.2	17.4	2.7
	1990	17.6	16.4	1.2
	1995	18.1	17.0	1.1
	2000	20.7	17.0	3.7

Source: OECD, *National Accounts*.

^a National data converted to dollars for aggregation at annual average exchange rates.

^b Prior to 1991, data referring to Western Germany only.

Table A.6.
DEVELOPING ECONOMIES: INVESTMENT, SAVING AND NET TRANSFER, 1985-2000

Percentage of GDP												
	Gross domestic investment				Gross domestic saving				Net transfer of resources			
	1985	1990	1995	2000	1985	1990	1995	2000	1985	1990	1995	2000
All developing countries	23.2	24.9	27.7	24.5	23.8	25.6	26.9	26.6	-0.6	-0.8	0.9	-2.1
by region:												
Africa	20.1	19.3	19.5	19.9	20.2	18.7	17.7	20.5	-0.1	0.6	1.8	-0.6
Latin America	19.2	19.5	21.2	20.2	23.9	21.6	20.3	19.5	-4.7	-2.1	0.9	0.6
Eastern and Southern Asia (excluding China)	23.9	29.3	31.9	24.6	24.1	28.7	30.0	27.9	-0.2	0.6	2.0	-3.3
East Asia	24.8	32.0	34.1	25.1	28.5	32.9	32.7	31.0	-3.7	-0.9	1.3	-5.9
South Asia	22.5	23.8	24.9	23.2	17.7	20.1	20.9	20.0	4.7	3.7	4.0	3.2
Western Asia	20.9	23.5	22.8	20.0	19.2	24.3	22.9	26.0	1.6	-0.8	-0.1	-6.0
by analytical grouping:												
Net-creditor countries	21.2	22.4	24.8	21.6	26.4	30.4	31.6	32.3	-5.2	-8.0	-6.8	-10.6
Net-debtor countries	23.5	25.1	28.1	24.8	23.5	25.1	26.3	25.8	-0.1	0.1	1.8	-1.0
Net fuel export	21.8	23.0	22.7	20.5	24.0	26.0	24.7	26.5	-2.3	-3.0	-2.0	-6.0
Net fuel import	20.8	24.1	26.8	22.5	21.3	23.6	24.4	22.6	-0.6	0.5	2.4	-0.2
Memo items:												
Sub-Saharan Africa	16.4	16.7	17.9	17.3	14.0	12.9	14.8	11.4	2.5	3.9	3.1	5.9
Least developed countries	14.2	16.2	18.2	19.6	2.9	6.6	8.0	11.9	11.3	9.6	10.2	7.6
Selected developing countries												
Algeria	34.6	28.6	31.8	23.8	37.8	26.8	28.1	44.2	-3.2	1.8	3.7	-20.4
Argentina	17.6	14.0	17.9	15.9	23.1	19.7	17.6	15.3	-5.5	-5.7	0.4	0.6
Brazil	19.2	20.2	22.3	20.5	24.4	21.4	20.5	19.2	-5.2	-1.2	1.8	1.3
Chile	17.2	25.1	25.8	23.4	19.6	28.4	27.6	24.5	-2.4	-3.3	-1.8	-1.1
China	37.8	34.7	40.8	37.3	33.6	37.9	43.1	39.9	4.1	-3.2	-2.3	-2.7
Colombia	19.0	18.5	25.8	12.2	20.3	24.2	19.6	13.7	-1.3	-5.7	6.2	-1.4
Egypt	26.7	28.8	17.2	23.9	14.5	16.1	12.2	17.3	12.1	12.7	5.0	6.6
Hong Kong SAR ^a	21.6	27.4	34.8	27.6	31.1	35.8	30.5	32.3	-9.4	-8.5	4.3	-4.7
India	24.0	25.2	26.7	24.0	21.1	22.5	23.4	21.4	2.9	2.7	3.3	2.6
Indonesia	27.6	30.7	31.9	17.9	30.3	32.3	30.6	25.7	-2.7	-1.6	1.3	-7.8
Israel	19.4	25.1	25.3	19.3	5.7	14.4	10.5	12.4	13.6	10.7	14.8	6.9
Korea, Republic of	30.0	37.7	37.2	28.7	30.8	36.5	35.7	31.4	-0.7	1.2	1.5	-2.8
Malaysia	24.8	32.2	43.1	25.6	29.9	34.3	39.2	46.7	-5.0	-2.1	3.9	-21.1
Mexico	21.2	23.1	19.8	23.3	26.3	22.0	22.5	21.5	-5.1	1.1	-2.7	1.8
Morocco	27.1	25.3	20.7	24.4	18.1	19.3	14.1	18.2	9.0	6.0	6.7	6.1
Nigeria	9.0	14.7	16.3	22.7	12.6	29.4	18.4	34.0	-3.7	-14.6	-2.1	-11.3
Peru	18.4	16.5	24.8	20.1	24.9	18.4	19.1	18.2	-6.5	-1.9	5.7	1.9
Philippines	15.3	24.2	22.5	17.8	17.4	18.4	14.6	24.0	-2.1	5.8	7.8	-6.1
Singapore	42.5	36.6	34.6	31.3	40.6	43.6	50.2	49.8	1.9	-6.9	-15.6	-18.5
South Africa	15.0	11.8	18.2	15.0	23.8	17.6	19.1	18.0	-8.7	-5.8	-0.9	-3.0
Taiwan Province of China	19.1	23.1	25.3	22.8	32.9	28.2	27.0	24.8	-13.8	-5.1	-1.7	-2.0
Thailand	28.2	41.4	41.8	22.7	25.5	33.8	35.1	30.7	2.7	7.5	6.7	-8.1
Turkey	16.5	24.3	25.5	23.8	13.4	20.1	21.0	16.8	3.1	4.3	4.5	7.1
Venezuela	18.5	10.2	18.1	17.5	27.7	29.5	23.4	29.9	-9.2	-19.3	-5.3	-12.4

Source: United Nations, based on World Bank, *2002 World Development Indicators* (Washington, D.C., World Bank, 2002) and United Nations Secretariat estimates.

^a Special Administrative Region of China.

Table A.7.
DEVELOPED ECONOMIES, CENTRAL AND EASTERN EUROPE
AND THE BALTIC STATES: UNEMPLOYMENT RATES, 1993-2002

Percentage										
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b
Developed economies^c	8.0	7.9	7.5	7.6	7.3	6.9	6.5	6.0	6.3	7
United States	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.8	6
Canada	11.2	10.4	9.5	9.7	9.1	8.3	7.6	6.8	7.2	7½
Japan	2.5	2.9	3.2	3.4	3.4	4.1	4.7	4.7	5.0	5½
Australia	10.9	9.7	8.5	8.5	8.5	7.7	7.0	6.3	6.7	6¾
New Zealand	9.5	8.2	6.3	6.1	6.6	7.5	6.8	6.0	5.3	5¾
EU-15	10.7	11.1	10.7	10.8	10.6	9.9	9.0	8.1	7.7	8
Euro zone	10.8	11.5	11.3	11.5	11.5	10.8	9.8	8.9	8.4	8¾
Austria	4.0	3.8	3.9	4.3	4.4	4.5	4.0	3.7	3.6	4
Belgium	8.8	10.0	9.9	9.7	9.4	9.5	8.6	6.9	6.6	6½
Finland	16.3	16.6	15.4	14.6	12.7	11.4	10.2	9.7	9.1	9½
France	11.7	12.3	11.7	12.4	12.3	11.8	10.7	9.3	8.6	9
Germany	7.9	8.4	8.2	8.9	9.9	9.3	8.6	7.9	7.9	8½
Greece	9.7	9.6	10.0	9.8	9.8	11.1	12.0	11.4	11.2	10¾
Ireland	15.6	14.3	12.3	11.7	9.9	7.5	5.6	4.2	3.8	4½
Italy	10.2	11.1	11.6	11.7	11.7	11.8	11.2	10.4	9.5	9½
Luxembourg	2.6	3.2	2.9	3.0	2.7	2.7	2.4	2.4	2.4	2¾
Netherlands	6.5	7.1	6.9	6.3	5.2	4.0	3.2	2.8	2.4	3
Portugal	5.7	6.9	7.3	7.3	6.8	5.2	4.5	4.1	4.1	4½
Spain	22.7	24.2	22.9	22.2	20.8	18.8	15.8	14.0	13.0	12½
Other EU	10.3	9.5	8.6	8.3	7.2	6.4	6.0	5.4	5.0	5
Denmark	10.2	8.2	7.2	6.8	5.6	5.2	4.8	4.4	4.3	4¾
Sweden	9.1	9.4	8.8	9.6	9.9	8.3	7.2	5.9	5.1	5½
United Kingdom	10.5	9.6	8.7	8.2	7.0	6.3	5.9	5.4	5.0	5
Other Europe	4.7	4.4	4.1	4.3	4.2	3.4	3.0	2.9	2.7	2¾
Iceland	5.3	5.4	4.9	3.8	3.9	2.7	1.9	1.3	1.4	2½
Malta ^d	4.5	4.1	3.7	4.4	5.5	5.6	5.8	5.0	5.1	5¼
Norway	6.1	5.5	5.0	4.9	4.1	3.3	3.2	3.5	3.5	3¾
Switzerland	4.0	3.8	3.5	3.9	4.2	3.5	3.0	2.6	2.3	2¼
Memo item:										
Major developed economies	7.2	7.1	6.8	6.8	6.6	6.4	6.1	5.7	6.1	7

Table A.7 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b
Central and Eastern Europe^c										
Albania	22.0	18.0	17.6	15.9	17.6	18.6	18.2	16.9	15	15
Bulgaria	16.4	12.8	11.1	12.5	13.7	12.2	16.0	17.9	17.3	18
Croatia	16.6	17.3	17.6	15.9	17.6	18.6	20.8	22.6	23.1	22
Czech Republic	3.5	3.2	2.9	3.5	5.2	7.5	9.4	8.8	8.5	9
Hungary	12.1	10.9	10.4	10.5	10.4	9.1	9.6	8.9	8.0	8
Poland	16.4	16.0	14.9	13.2	10.3	10.4	13.1	15.1	17.4	18½
Romania	10.4	10.9	9.5	6.6	8.8	10.3	11.5	10.5	8.6	9
Slovakia	14.4	14.8	13.1	12.8	12.5	15.6	19.2	17.9	18.6	18½
Slovenia	15.5	14.2	14.5	14.4	14.8	14.6	13.0	12.0	11.5	11
The former Yugoslav Republic of Macedonia	27.7	30.0	36.6	38.8	41.7	41.4	43.8	44.9	46.0	46
Yugoslavia	24.0	23.9	24.7	26.1	25.6	27.2	27.4	26.6	27.9	27
Baltic States^c										
Estonia	5.0	5.1	5.0	5.6	4.6	5.1	6.7	7.3	7.2	7¼
Latvia	5.8	6.5	6.6	7.2	7.0	9.2	9.1	7.8	7.7	7½
Lithuania	3.4	4.5	7.3	6.2	6.7	6.9	10.0	12.6	12.9	12

Source: UN/DESA, based on data of OECD and Economic Commission for Europe (ECE).

^a Partly estimated.

^b Forecast, based partly on Project LINK.

^c Unemployment data are standardized by OECD for comparability among countries over time, in conformity with the definitions of the International Labour Office (see OECD, *Standardized Unemployment Rates: Sources and Methods* (Paris, 1985)); national definitions and estimates are used for other countries.

^d Not standardized.

^e Registered unemployment data are used for countries with economies in transition.

Table A.8.
DEVELOPED ECONOMIES: CONSUMER PRICE INFLATION, 1993-2002^a

Average annual percentage change										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 ^b
Developed economies	2.7	2.2	2.1	2.0	2.0	1.3	1.2	2.0	1.9	1½
United States	3.0	2.6	2.8	2.9	2.3	1.6	2.2	3.4	2.8	2
Canada	1.8	0.2	2.2	1.6	1.6	1.0	1.7	2.7	2.5	1¾
Japan	1.3	0.7	-0.1	0.1	1.8	0.7	-0.3	-0.7	-0.7	0
Australia	1.8	1.9	4.6	2.6	0.3	0.9	1.5	4.5	4.4	2¼
New Zealand	1.4	1.7	3.8	2.6	0.9	1.3	1.4	2.7	2.7	2¼
EU-15	3.5	2.9	2.8	2.3	2.0	1.5	1.2	2.3	2.5	2
Euro zone	3.9	3.0	2.7	2.3	1.8	1.3	1.1	2.3	2.6	2
Austria	3.6	3.0	2.3	1.8	1.3	0.9	0.6	2.4	2.7	1¾
Belgium	2.8	2.4	1.5	2.1	1.6	1.0	1.1	2.5	2.5	1¾
Finland	2.1	1.1	1.0	0.6	1.2	1.4	1.2	3.4	2.6	2
France	2.1	1.7	1.8	2.0	1.2	0.7	0.5	1.7	1.6	1½
Germany	4.4	2.8	1.7	1.4	1.9	0.9	0.6	1.9	2.5	2¼
Greece	14.4	10.9	8.9	8.2	5.5	4.8	2.6	3.2	3.4	3
Ireland	1.4	2.4	2.5	1.7	1.4	2.4	1.6	5.6	4.1	3¾
Italy	4.5	4.0	5.2	4.0	2.0	2.0	1.7	2.5	2.8	1¾
Luxembourg	3.6	2.2	1.9	1.4	1.4	1.0	1.0	3.1	2.7	1¾
Netherlands	2.6	2.8	1.9	2.0	2.2	2.0	2.2	2.5	4.5	3¾
Portugal	6.8	4.9	4.1	3.1	2.2	2.8	2.3	2.9	4.3	2¾
Spain	4.6	4.7	4.7	3.6	2.0	1.8	2.3	3.4	3.6	2¾
Other EU	2.0	2.4	3.1	2.1	2.6	2.7	1.5	2.6	2.0	1½
Denmark	1.3	2.0	2.1	2.1	2.2	1.9	2.5	2.9	2.3	1½
Sweden	4.6	2.2	2.5	0.5	0.5	-0.1	0.5	1.0	2.7	2¼
United Kingdom	1.6	2.5	3.4	2.4	3.1	3.4	1.6	2.9	1.8	1½
Other Europe	3.0	1.1	2.0	1.0	1.2	0.8	1.3	2.1	2.4	1½
Iceland	4.1	1.6	1.7	2.3	1.7	1.7	3.2	5.2	6.4	5½
Malta	4.1	4.1	4.0	2.5	3.1	2.4	2.1	2.4	2.9	3¾
Norway	2.3	1.4	2.5	1.3	2.6	2.3	2.3	3.1	3.2	1¾
Switzerland	3.3	0.9	1.8	0.8	0.5	0.1	0.7	1.6	1.9	1¾
Memo item:										
Major developed economies	2.6	2.0	1.9	1.9	2.1	1.3	1.1	1.9	1.6	1½

Source: UN/DESA, based on data of IMF, *International Financial Statistics*.

^a Data for country groups are weighted averages, where weights for each year are 1995 GDP in United States dollars.

^b Forecast, partly based on Project LINK.

Table A.9.
ECONOMIES IN TRANSITION: CONSUMER PRICE INFLATION, 1993-2002

Average annual percentage change										
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b
Economies in transition^c	838.3	412.6	145.1	41.1	38.3	21.9	50.6	19.6	14.6	12
Central and Eastern Europe and Baltic States^c	149.9	45.0	25.8	25.2	66.9	16.6	11.7	12.3	9.0	6½
Central and Eastern Europe^c	146.2	44.6	25.5	25.4	69.4	17.0	12.1	12.7	9.3	6½
Albania	85.0	21.5	8.0	12.7	33.1	20.3	-0.1	0.0	3.1	4
Bulgaria	72.9	96.2	62.0	121.7	1 058.3	18.7	2.6	10.2	7.4	8
Croatia	1 516.6	97.5	2.0	3.6	3.7	5.9	4.3	6.2	5.0	5
Czech Republic	20.8	10.0	9.1	8.9	8.4	10.6	2.1	3.9	4.7	3½
Hungary	22.6	19.1	28.5	23.6	18.4	14.2	10.1	9.9	9.2	6
Poland	36.9	33.2	28.1	19.8	15.1	11.7	7.4	10.2	5.5	3½
Romania	256.2	137.1	32.2	38.8	154.9	59.3	45.9	45.7	34.5	24
Slovakia	23.1	13.4	10.0	6.1	6.1	6.7	10.5	12.0	7.1	4
Slovenia	31.7	21.0	13.5	9.9	8.4	8.1	6.3	9.0	8.4	7
The former Yugoslav Republic of Macedonia	353.1	126.6	16.4	2.5	0.9	-1.4	-1.3	6.6	5.2	3
Yugoslavia	.. ^d	.. ^d	71.8	90.5	23.2	30.4	44.1	75.7	88.9	24
Baltic States	232.2	54.2	32.1	22.0	9.3	6.3	2.0	2.3	2.8	3½
Estonia	89.6	47.9	28.9	23.1	11.1	10.6	3.5	3.9	5.8	4½
Latvia	109.1	35.7	25.0	17.7	8.5	4.7	2.4	2.8	2.5	3½
Lithuania	410.1	72.0	39.5	24.7	8.8	5.1	0.8	1.0	1.3	3
Commonwealth of Independent States	1 321.0	670.4	232.4	52.8	17.3	25.8	79.1	24.8	18.5	16
Armenia	3 731.8	4 964.0	175.5	18.7	13.8	8.7	0.7	-0.8	3.0	3½
Azerbaijan	1 129.7	1 663.9	411.5	19.8	3.6	-0.8	-8.6	1.8	2.0	2
Belarus	1 190.9	2 219.6	709.3	52.7	63.9	73.2	293.7	168.9	61.0	50
Georgia	4 084.9	22 286.1	261.4	39.4	7.1	3.5	19.3	4.2	5.0	4
Kazakhstan	1 662.7	1 880.1	176.3	39.2	17.5	7.3	8.4	13.4	8.0	6½
Kyrgyzstan	1 208.7	278.1	42.9	31.3	23.4	10.3	35.7	18.7	7.0	6
Republic of Moldova	1 751.0	486.4	29.9	23.5	11.8	7.7	39.3	31.3	10.0	10
Russian Federation	875.0	309.0	197.4	47.8	14.7	27.8	85.7	20.8	18.6	16
Tajikistan	2 884.8	350.3	682.1	422.4	85.4	43.1	27.5	32.9	37.0	10
Turkmenistan	3 128.4	2 719.5	1 105.3	714.0	83.7	16.8	23.5	7.0	8.2	9
Ukraine	4 734.9	891.2	376.7	80.2	15.9	10.6	22.7	28.2	12.0	11
Uzbekistan	1 231.8	1 910.2	304.6	54.0	58.8	17.7	29.0	24.9	26.6	25

Source: UN/DESA, based on data of Economic Commission for Europe (ECE).

^a Partly estimated.

^b Forecast.

^c Excluding Yugoslavia in 1993 and 1994.

^d Annual rates of hyperinflation of over 1 trillion percentage points.

Table A.10.
DEVELOPING ECONOMIES: CONSUMER PRICE INFLATION, 1993-2002^a

Average annual percentage change										
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^b	2002 ^c
Developing countries by region:	270.6	139.5	23.2	14.2	9.7	10.7	6.5	5.4	5.8	4¼
Africa ^d	17.4	19.6	19.2	12.9	8.1	6.3	5.4	5.4	7.0	7½
Eastern and Southern Asia	8.0	11.6	9.5	6.7	4.6	9.1	2.4	1.4	3.0	0
Region excluding China	5.7	7.1	6.8	6.2	5.3	12.7	3.8	1.8	3.7	3¾
<i>of which:</i>										
East Asia	5.3	6.2	5.8	5.3	4.6	13.0	3.4	1.1	3.7	3½
South Asia	6.8	10.1	10.3	9.0	7.5	11.6	4.9	4.1	3.6	4½
Western Asia	26.0	39.7	37.8	31.2	28.9	27.8	22.3	18.3	17.7	19½
Latin America and the Caribbean	839.3	408.5	40.8	20.1	11.3	8.2	7.5	7.0	5.6	4½
Memo items:										
Sub-Saharan Africa (excluding Democratic Republic of the Congo, Nigeria and South Africa)	24.0	32.7	22.0	20.8	12.1	8.8	9.5	10.0	10.4	12¼
Least developed countries ^d	23.0	25.3	21.4	19.7	12.1	14.5	11.8	5.8	6.4	7¾
Major developing economies										
Argentina	10.6	4.2	3.4	0.2	0.5	0.9	-1.2	-0.9	-1.1	½
Brazil	1 928.0	930.0	66.0	15.8	6.9	3.2	4.9	7.0	6.9	4½
China	14.6	24.2	16.9	8.3	2.8	-0.8	-1.4	0.3	1.0	¾
Hong Kong SAR ^e	7.4	8.7	9.1	6.3	5.8	2.9	-4.0	-3.7	-1.6	1½
India	6.4	10.2	10.2	9.0	7.2	13.2	4.7	4.0	3.4	4¼
Indonesia	9.7	8.5	9.4	8.0	6.7	57.6	20.5	3.7	12.6	9½
Israel	10.9	12.3	10.0	11.3	9.0	5.4	5.2	1.1	1.1	2½
Korea, Republic of	4.8	6.2	4.5	4.9	4.4	7.5	0.8	2.3	4.1	3¼
Malaysia	3.5	3.7	3.5	3.5	2.7	5.3	2.7	1.5	1.6	1¾
Mexico	9.8	7.0	35.0	34.4	20.6	15.9	16.6	9.5	6.4	4¾
Saudi Arabia	1.1	0.6	4.9	1.2	0.1	-0.4	-1.6	-0.8	-0.5	1
South Africa	9.7	8.9	8.7	7.4	8.6	6.9	5.2	5.3	7.4	6
Taiwan Province of China	3.0	4.1	3.7	3.1	1.8	2.6	0.2	-1.9	0.6	1½
Thailand	3.4	5.0	5.8	5.8	5.6	8.1	0.3	1.5	1.7	1½
Turkey	66.1	106.3	88.1	80.3	85.7	84.6	64.9	54.9	54.4	54¼

Source: UN/DESA, based on data of IMF, *International Financial Statistics*.

^a Weights used are GDP in 1995 dollars.

^b Partly estimated.

^c Forecast, based in part on Project LINK.

^d Excluding Democratic Republic of the Congo.

^e Special Administrative Region of China.

Table A.11.
MAJOR DEVELOPED ECONOMIES: FINANCIAL INDICATORS, 1993-2001

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Short-term interest rates^a <i>(percentage)</i>									
Canada	3.8	5.5	5.7	3.0	4.3	5.1	4.8	5.8	2.2
France ^b	8.7	5.7	6.4	3.7	3.2	3.4	2.7	4.2	4.3
Germany	7.5	5.3	4.5	3.3	3.2	3.4	2.7	4.1	4.4
Italy	10.2	8.5	10.5	8.8	6.9	5.0	3.0	4.4	4.3
Japan	3.1	2.2	1.2	0.5	0.5	0.4	0.1	0.1	0.1
United Kingdom	5.5	4.8	6.0	5.9	6.6	7.1	5.1	5.7	4.9
United States	3.0	4.2	5.8	5.3	5.5	5.4	5.0	6.2	3.9
Long-term interest rates^c <i>(percentage)</i>									
Canada	7.8	8.6	8.3	7.5	6.4	5.5	5.7	5.9	5.8
France	6.9	7.4	7.6	6.4	5.6	4.7	4.7	5.5	5.0
Germany	6.3	6.7	6.5	5.6	5.1	4.4	4.3	5.2	4.7
Italy	11.3	10.6	12.2	9.4	6.9	4.9	4.7	5.6	5.2
Japan	3.7	3.7	2.5	2.2	1.7	1.1	1.8	1.7	1.4
United Kingdom	7.9	8.0	8.3	8.1	7.1	5.4	4.7	4.7	4.8
United States	5.9	7.1	6.6	6.4	6.4	5.3	5.6	6.0	5.0
General government financial balances^d <i>(percentage)</i>									
Canada	-7.6	-5.6	-4.3	-1.8	0.8	0.9	2.7	3.3	2.9
France	-6.0	-5.6	-5.6	-4.1	-3.0	-2.7	-1.6	-1.3	-1.4
Germany	-3.2	-2.5	-3.2	-3.4	-2.7	-2.1	-1.4	1.5	-2.7
Italy	-9.4	-9.1	-7.6	-6.5	-2.7	-2.8	-1.9	-0.3	-1.4
Japan ^e	-1.6	-2.3	-3.6	-4.2	-3.4	-6.0	-6.7	-8.3	-7.8
United Kingdom	-8.0	-6.8	-5.8	-4.4	-2.0	0.4	1.3	4.3	0.9
United States	-5.0	-3.6	-3.1	-2.2	-0.9	0.4	1.0	1.9	0.5

Sources: UN/DESA, based on IMF, *International Financial Statistics*; OECD, *Economic Outlook*; J.P. Morgan; and EUROPA (EU online), *European Economy*.

^a Money market rates.

^b From January 1999 onward, representing the three-month Euro Interbank Offered Rate (EURIBOR), which is an Interbank deposit bid rate.

^c Yield on long-term government bonds.

^d Surplus (+) or deficit (-) as a percentage of nominal GNP or GDP.

^e The 1998 outlays would have risen by 5.4 percentage points of GDP if account had been taken of the assumption by the central Government of the debt of the Japan Railway Settlement Corporation and the National Forest Special Account.

Table A.12.

SELECTED ECONOMIES: REAL EFFECTIVE EXCHANGE RATES, BROAD MEASUREMENT, 1993-2001^a

1990 = 100									
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Developed economies									
Australia	85.6	89.8	87.6	96.3	97.9	90.1	92.6	87.0	83.0
Austria	108.1	109.8	112.7	111.1	108.0	108.9	107.4	104.3	106.1
Belgium	106.7	110.4	113.6	112.2	108.0	109.3	109.0	103.4	103.5
Canada	88.9	88.6	92.2	91.5	92.6	91.0	89.5	89.0	84.5
Denmark	104.5	104.9	108.0	108.3	106.3	109.3	110.0	105.1	87.4
Finland	74.2	79.5	85.4	84.3	82.0	81.0	78.8	73.0	128.2
France	103.7	103.2	104.1	104.1	99.5	101.5	98.5	91.7	110.2
Germany	101.4	100.3	105.5	102.4	96.6	97.7	95.3	91.4	107.5
Greece	108.2	106.6	108.4	113.6	115.3	112.0	114.9	113.2	144.6
Ireland	96.3	97.7	98.0	100.4	101.1	98.7	96.0	90.2	73.0
Italy	80.9	79.3	75.8	83.5	84.0	84.5	82.7	81.2	91.8
Japan	121.3	126.1	127.2	108.7	103.3	100.9	110.5	116.8	94.1
Netherlands	104.0	104.1	105.7	103.6	99.3	101.3	101.6	98.9	115.8
New Zealand	93.5	100.1	107.6	117.9	120.9	105.5	100.9	92.2	121.9
Norway	99.9	98.9	101.3	100.8	102.8	98.4	97.7	94.5	85.7
Portugal	108.1	104.6	104.5	105.9	105.0	105.0	105.0	101.4	68.2
Spain	83.7	79.9	83.3	83.5	80.0	80.3	78.7	76.9	91.6
Sweden	81.7	83.8	90.9	95.7	91.7	90.8	87.6	87.7	81.7
Switzerland	105.2	111.6	118.5	116.6	109.3	112.1	111.2	108.5	105.8
United Kingdom	91.7	92.6	89.7	92.3	106.3	110.5	109.0	110.4	73.7
United States	103.1	100.3	95.7	100.2	106.5	114.5	114.5	117.9	182.6
Developing economies									
Argentina	115.1	111.6	109.2	113.2	120.9	123.3	125.3	127.9	132.0
Brazil	82.4	94.4	100.7	99.0	105.3	104.2	77.4	93.6	84.5
Chile	113.9	114.0	120.5	126.8	135.4	129.1	125.3	135.2	128.2
Colombia	110.3	118.5	117.3	121.8	132.9	126.4	113.5	109.3	110.2
Ecuador	129.0	137.6	135.1	137.2	148.6	152.9	115.1	102.2	144.6
Hong Kong SAR ^b	111.2	114.0	112.5	120.8	131.1	137.5	125.4	121.1	121.9
India	75.4	77.8	75.7	74.2	81.1	78.1	77.5	82.9	85.7
Indonesia	101.3	100.0	98.5	103.3	96.5	47.8	72.5	71.0	68.2
Korea, Republic of	87.3	85.8	87.6	90.0	84.5	66.1	73.0	79.0	73.7
Kuwait	147.5	148.6	140.2	147.9	156.3	162.8	165.7	173.0	182.6
Malaysia	109.3	106.2	106.0	111.2	108.7	83.5	84.9	86.9	93.1
Mexico	116.7	112.2	79.0	89.9	102.9	102.6	112.8	126.4	133.2
Morocco	104.2	104.9	108.2	112.1	111.6	116.3	118.5	121.5	119.7
Nigeria	93.9	141.5	58.5	79.5	91.5	100.1	99.7	100.6	112.1
Pakistan	98.7	104.8	105.1	105.8	110.6	111.1	106.4	102.9	97.8
Peru	91.2	97.9	98.4	102.6	106.6	106.5	97.2	99.0	103.3
Philippines	97.4	104.3	103.5	114.8	107.9	83.5	88.7	87.4	94.7
Saudi Arabia	102.8	99.8	96.3	103.5	114.9	126.3	129.9	140.7	153.5
Singapore	105.9	108.9	110.1	115.0	117.0	113.6	109.2	109.0	109.9
South Africa	102.7	98.5	97.1	90.8	97.4	86.2	82.9	84.4	75.9
Taiwan Province of China	97.7	96.4	97.4	95.0	96.2	87.5	82.6	87.2	82.6
Thailand	100.0	99.2	96.3	99.9	93.9	82.1	85.8	86.4	83.5
Turkey	93.0	73.1	76.2	74.8	78.9	78.7	78.1	88.1	77.8
Venezuela	104.2	109.5	139.5	119.4	139.8	158.0	169.6	180.2	198.0

Source: Morgan Guaranty Trust Company, *World Financial Markets*.

^a Indices based on a "broad" measure currency basket of 22 OECD currencies and 23 developing-economy currencies (mostly Asian and Latin American). The real effective exchange rate, which adjusts the nominal index for relative price changes, gauges the effect on international price competitiveness of the country's manufactures due to currency changes and inflation differentials. A rise in the index implies a fall in competitiveness and vice versa. The relative price changes are based on indices most closely measuring the prices of domestically produced finished manufactured goods, excluding food and energy, at the first stage of manufacturing. The weights for currency indices are derived from 1990 bilateral trade patterns of the corresponding countries.

^b Special Administrative Region of China

II. INTERNATIONAL TRADE

Table A.13.

WORLD TRADE: CHANGES IN VALUE AND VOLUME OF EXPORTS AND IMPORTS, BY MAJOR COUNTRY GROUP, 1993-2002

Annual percentage change										
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b
Dollar value of exports										
World	0.1	13.5	19.4	4.3	3.5	-2.3	3.9	12.3	-4.2	1¾
Developed economies	-2.6	12.5	18.9	2.6	2.3	0.3	2.2	7.8	-3.7	1
<i>of which:</i>										
North America	4.7	11.2	14.6	6.4	9.3	-0.7	5.0	13.0	-6.8	-1
Western Europe	-6.9	13.7	22.5	3.0	-1.5	1.8	-0.3	3.9	0.2	2¼
Japan	6.6	9.6	11.6	-7.3	2.5	-7.9	8.6	14.3	-15.8	-2
Economies in transition	5.6	17.5	29.1	8.0	2.2	-2.1	-1.0	27.0	5.8	4¼
Central and Eastern Europe and Baltic States ^c	8.8	16.3	30.1	5.7	6.5	13.5	-1.2	14.0	11.3	8
Commonwealth of Independent States	1.9	19.0	27.9	10.9	-1.8	-17.0	-1.0	39.0	0.2	¼
Developing countries	6.3	15.5	19.5	7.6	6.4	-6.5	7.7	22.7	-6.4	3¼
Latin America and the Caribbean	9.4	16.4	20.9	10.2	10.4	-2.4	5.6	19.4	-5.7	2
Africa	-9.6	2.7	12.5	19.7	2.5	-15.0	10.3	25.3	-6.5	2
Western Asia	-1.0	6.6	12.3	13.6	-5.7	-24.1	25.1	44.2	-7.2	¾
Eastern and Southern Asia	10.7	16.8	21.3	5.0	4.0	-6.9	6.5	18.4	-9.8	2½
China	7.1	33.1	22.9	1.6	20.8	0.5	6.1	27.7	6.7	11
Memo items:										
Fuel exporters	-3.4	5.9	15.9	19.5	0.5	-9.9	14.4	33.2	-10.1	¼
Non-fuel exporters	9.0	18.5	21.3	4.4	6.7	-4.7	4.7	7.0	0.6	2¼
Dollar value of imports										
World	-1.2	13.3	19.4	4.8	2.8	-2.3	5.4	10.8	-4.0	2
Developed economies	-5.8	13.4	18.0	3.6	2.6	1.9	5.2	11.3	-3.4	-¼
<i>of which:</i>										
North America	8.7	13.7	11.3	6.2	10.3	4.6	10.9	18.8	-5.9	-2½
Western Europe	-13.1	13.0	20.7	2.3	0.0	3.8	1.4	7.0	-1.3	2
Japan	3.6	13.9	22.0	4.0	-3.0	-17.2	11.2	14.6	-7.0	-5¼
Economies in transition	0.8	13.0	33.4	13.9	9.0	0.5	-8.0	13.0	10.9	9
Central and Eastern Europe and Baltic States ^c	14.1	14.1	37.0	16.5	6.7	13.0	-2.5	12.0	9.0	9
Commonwealth of Independent States ^d	-21.3	10.2	24.4	6.7	15.9	-19.0	-24.0	16.0	15.6	8¾
Developing countries	9.7	13.0	21.0	6.3	4.3	-10.2	4.4	19.0	-6.3	4¼
Latin America and the Caribbean	11.6	18.6	11.6	9.7	16.2	5.2	-3.7	16.3	-8.1	-1¼
Africa	-4.9	5.8	21.2	2.0	6.0	-1.0	1.0	7.4	2.4	2¼
Western Asia	6.3	-7.9	23.1	9.3	0.6	-6.4	-0.3	12.3	-7.3	3
Eastern and Southern Asia	10.0	18.4	24.8	5.3	2.0	-20.0	7.6	20.0	-10.9	4¼
China	27.9	12.2	11.6	7.6	2.5	-1.5	18.2	35.0	8.2	12
Memo items:										
Fuel exporters	-1.6	3.9	9.5	7.8	7.1	-5.7	7.3	23.1	2.9	4
Non-fuel exporters	12.6	15.4	23.8	5.8	3.7	-12.0	2.8	17.4	-15.7	2

Table A.13 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a	2002 ^b
Volume of exports										
World	4.3	10.5	9.4	4.8	9.3	3.6	5.1	12.1	-1.2	2¼
Developed economies	2.5	9.5	7.3	4.2	9.2	4.0	4.4	10.8	-0.9	1½
<i>of which:</i>										
North America	5.3	9.0	9.1	6.2	10.9	3.7	6.4	10.6	-5.1	-1¼
Western Europe	2.8	11.4	7.6	3.8	7.7	5.4	3.9	11.0	2.1	2
Japan	-2.4	1.7	3.3	0.6	9.6	-3.7	2.7	11.0	-10.3	4¾
Economies in transition	5.7	2.7	13.7	6.0	-0.9	6.9	4.0	13.0	8.8	5¾
Central and Eastern Europe and Baltic States ^c	8.9	0.2	16.7	4.5	0.8	15.0	7.0	20.0	11.6	6¾
Commonwealth of Independent States	1.9	5.8	10.0	7.9	-2.9	0.2	2.0	7.0	5.8	4¾
Developing countries	8.7	14.1	13.7	6.5	9.9	1.9	7.2	15.0	-3.2	3¾
Latin America and the Caribbean	10.3	9.2	9.9	9.3	12.8	7.8	6.6	11.6	-1.3	3¾
Africa	-0.9	11.7	7.3	8.2	5.2	-0.9	2.1	2.5	0.8	3
Western Asia	7.3	8.1	6.0	9.0	-0.7	-1.5	0.6	9.7	0.8	2¾
Eastern and Southern Asia	10.6	14.5	16.6	5.8	9.3	0.1	10.0	17.0	-7.5	2
China	6.8	31.0	18.9	2.4	26.3	4.1	7.4	26.0	7.7	11¼
Memo items:										
Fuel exporters	2.6	5.7	9.0	15.1	4.9	1.2	7.5	17.6	1.6	4¾
Non-fuel exporters	9.1	15.0	16.5	5.9	11.3	2.9	7.1	13.4	-0.7	-1¼
Volume of imports										
World	4.9	10.5	7.8	6.1	9.0	3.0	5.3	12.5	-0.5	2
Developed economies	1.1	11.1	7.0	4.9	8.7	5.9	6.1	11.0	-0.3	½
<i>of which:</i>										
North America	9.6	12.0	7.2	5.6	13.3	10.3	10.4	15.6	-2.7	-1½
Western Europe	-2.8	10.0	5.9	4.4	7.6	6.1	3.4	9.2	1.6	2½
Japan	2.9	13.6	12.5	3.5	2.7	-10.0	9.5	6.3	-4.3	-5¼
Economies in transition	0.8	9.6	9.9	13.8	9.0	2.0	-6.0	15.0	11.0	8¼
Central and Eastern Europe and Baltic States ^c	14.3	13.0	11.4	17.9	7.6	10.0	5.0	15.0	9.0	8
Commonwealth of Independent States	-21.5	1.3	6.0	2.4	13.6	-15.0	-28.0	14.0	16.0	9
Developing countries	15.3	9.5	9.7	8.5	10.2	-4.7	4.0	16.3	-2.2	5
Latin America and the Caribbean	10.8	14.4	4.2	8.4	23.1	7.2	-6.9	9.3	-1.0	-½
Africa	-2.1	2.0	10.8	3.8	6.3	2.0	1.5	5.7	6.0	1¾
Western Asia	12.7	-11.1	11.3	11.8	6.4	-2.6	2.3	14.5	-5.3	2½
Eastern and South Asia	17.4	14.8	12.5	8.2	8.4	-12.7	6.9	18.6	-7.8	5½
China	36.4	9.1	0.1	11.4	9.4	6.0	18.6	33.4	11.1	13
Memo items:										
Fuel exporters	4.1	-0.2	-1.0	11.2	13.8	-0.2	-0.4	12.0	5.0	7½
Non-fuel exporters	20.2	11.9	11.6	8.7	10.1	-6.7	10.3	9.0	-6.3	3½

Source: United Nations, based on data of United Nations Statistics Division, ECE, ECLAC and IMF.

a Partly estimated.

b Forecast.

c As of 1993, transactions between the Czech Republic and Slovakia are recorded as foreign trade.

Table A.14.
DIRECTION OF TRADE: EXPORTS (F.O.B.), 1990-2001

		Destination ^a											
		World ^b	Devd.	EU	US	Japan	EIT	Devg.	LAC	Africa	SSA	WA	ESA
		Bn. \$	Percentage										
World^b	1990	3 381.7	72.1	43.7	14.5	6.1	..	22.8	3.8	2.7	1.1	3.5	12.8
	1995	5 078.2	65.1	37.5	14.7	5.8	4.3	29.0	4.9	2.3	0.8	3.2	18.5
	2000	6 371.8	66.7	35.8	18.6	5.4	4.1	28.4	5.7	2.0	0.7	3.3	17.5
	2001	6 043.1	66.1	35.6	18.2	5.3	4.4	28.5	5.9	2.0	0.6	3.3	17.3
Developed economies (Devd.)	1990	2 444.4	76.4	50.3	12.4	4.2	..	19.9	3.9	2.8	1.0	3.3	9.9
	1995	3 427.8	70.6	45.4	12.4	3.9	3.5	24.9	5.1	2.4	0.7	3.1	14.3
	2000	4 028.4	71.9	44.1	15.4	3.2	3.8	23.8	6.2	2.0	0.5	3.2	12.4
	2001	3 869.6	71.3	44.2	15.0	3.1	4.4	23.6	6.3	2.2	0.6	3.3	11.9
<i>of which:</i> European Union (EU)	1990	1 488.4	81.8	65.9	7.0	2.1	..	13.2	1.8	3.5	1.2	3.4	4.4
	1995	2 018.3	77.4	62.4	6.7	2.1	5.3	15.7	2.5	3.0	0.9	3.5	6.8
	2000	2 284.7	78.9	62.1	9.3	1.8	6.1	14.3	2.4	2.6	0.7	3.8	5.5
	2001	2 251.5	77.5	60.7	9.4	1.8	6.9	14.6	2.6	2.7	0.7	3.7	5.6
United States (US)	1990	393.1	63.9	26.3	-	12.4	..	34.6	13.7	2.0	0.5	3.4	15.5
	1995	583.5	57.3	21.2	-	11.0	1.1	41.5	16.5	1.7	0.3	3.5	19.8
	2000	772.0	55.6	21.3	-	8.4	0.9	43.4	21.7	1.4	0.3	3.1	17.3
	2001	730.9	55.6	21.8	-	7.9	1.0	43.4	21.8	1.7	0.4	3.1	16.8
Japan	1990	287.7	58.6	20.4	31.7	-	..	40.1	3.4	1.9	0.9	3.5	31.3
	1995	443.0	47.7	15.9	27.5	-	0.5	51.7	4.2	1.7	0.7	2.2	43.7
	2000	478.2	50.9	16.4	30.1	-	0.6	48.5	3.9	1.0	0.3	2.3	41.3
	2001	406.0	50.6	16.0	30.2	-	0.6	48.4	4.1	1.1	0.4	2.8	40.4
Economies in transition (EIT)	1995	205.7	50.6	41.6	3.9	1.8	35.6	13.0	1.6	1.3	0.2	3.9	6.2
	2000	284.8	58.2	49.1	5.0	1.2	28.2	13.2	1.8	1.3	0.3	4.9	5.3
	2001	274.9	59.4	50.9	4.7	1.3	26.2	13.9	2.4	1.3	0.3	5.2	5.0

Table A.14 (continued)

		Destination ^a											
		World ^b	Devd.	EU	US	Japan	EIT	Devg.	LAC	Africa	SSA	WA	ESA
		Bn. \$	Percentage										
Developing countries (Devg.)	1990	831.3	61.3	23.4	22.2	12.2	..	32.5	4.0	2.5	1.4	4.0	21.9
	1995	1 442.3	54.1	18.1	21.9	10.9	1.6	41.2	5.2	2.4	1.2	3.4	30.2
	2000	2 056.1	57.7	17.6	26.7	10.1	1.1	39.6	5.1	2.1	1.0	3.2	29.2
	2001	2 030.9	57.3	17.7	25.9	9.9	1.3	39.7	5.5	2.2	1.1	3.1	28.8
<i>of which:</i>													
Latin America and the Caribbean (LAC)	1990	128.0	71.9	24.5	38.9	5.6	..	24.7	16.5	1.5	0.4	2.1	4.6
	1995	228.5	68.0	16.7	44.4	3.9	0.9	29.1	20.6	1.3	0.4	1.3	5.9
	2000	369.1	75.0	11.7	58.4	2.2	0.7	22.7	17.5	0.8	0.2	0.9	3.5
	2001	367.0	72.1	12.1	53.8	2.2	1.0	25.1	19.0	0.9	0.2	1.0	4.1
Africa	1990	98.7	71.0	50.6	14.8	3.0	..	14.2	1.1	7.0	5.2	2.3	3.7
	1995	102.6	65.8	47.0	13.2	3.0	1.4	24.0	1.9	10.6	7.9	3.0	8.5
	2000	139.8	70.4	47.8	16.8	2.1	1.1	27.0	3.4	9.3	7.0	3.5	10.8
	2001	152.9	70.9	48.2	17.1	2.2	1.1	26.5	3.3	9.2	6.9	3.3	10.7
<i>of which:</i>													
Sub-Saharan Africa (SSA)	1990	28.1	75.0	49.9	16.9	3.4	..	21.2	1.7	11.8	9.2	1.3	6.4
	1995	30.1	69.1	46.2	17.6	3.7	1.6	27.2	1.2	13.9	9.9	2.2	9.9
	2000	43.5	61.6	37.6	18.1	2.2	1.5	35.4	2.1	12.0	8.9	1.8	19.5
	2001	51.8	64.8	39.4	19.6	1.6	1.4	32.5	2.0	11.0	8.1	1.4	18.1
Western Asia (WA)	1990	149.4	59.7	25.4	13.7	17.7	..	31.0	3.0	2.9	0.9	10.6	14.6
	1995	169.6	50.3	22.8	10.3	15.1	3.4	34.4	1.6	3.0	0.8	9.9	19.8
	2000	277.6	52.9	20.6	14.0	16.1	1.7	38.6	1.0	2.5	0.7	7.6	27.5
	2001	266.9	52.7	20.0	14.3	16.2	1.9	37.9	1.1	2.7	0.8	7.5	26.6
Eastern and Southern Asia (including China) (ESA)	1990	455.2	56.8	16.5	21.9	14.3	..	39.1	1.5	1.7	1.0	2.8	33.1
	1995	941.6	50.2	14.5	19.5	12.7	1.4	47.2	2.4	1.7	0.8	2.7	40.4
	2000	1 269.7	52.4	15.4	21.4	11.9	1.1	46.0	2.6	1.5	0.6	2.8	39.1
	2001	1 244.1	52.2	15.2	21.3	11.8	1.3	46.0	2.7	1.7	0.7	2.8	38.8

Source: UN/DESA, based on IMF, *Direction of Trade Statistics*.

^a Owing to incomplete specification of destinations in underlying data, shares of trade to destinations do not add up to 100 per cent.

^b Including data for economies in transition; before 1994, data for economies in transition are highly incomplete.

Table A.15.
COMPOSITION OF WORLD MERCHANDISE TRADE: EXPORTS, 1990-2000

Billions of dollars and percentage															
Exporting country group	Total exports (billions of dollars)			Primary commodities											
				Total			<i>of which:</i>								
	Food						Agricultural raw materials			Fuels					
	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000
World (billions of dollars)	2 848.5	4 906.4	6 118.5	797.5	990.1	1 193.9	268.8	413.9	390.4	119.2	176.0	152.2	372.7	331.4	583.8
World (percentage share)	-	-	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developed economies	1 865.1	3 338.6	3 826.6	45.1	51.6	44.9	63.0	65.8	64.3	62.2	60.3	58.7	23.0	31.3	29.6
Economies in transition^a	124.6	194.7	272.0	6.1	6.5	7.4	3.5	3.7	3.6	5.3	6.8	7.4	8.2	9.1	9.3
Developing countries	858.9	1 973.0	2 019.9	48.8	41.9	47.6	33.5	30.5	32.1	32.5	32.9	33.9	68.8	59.6	61.1
Africa	92.5	111.4	117.5	8.5	7.1	7.7	4.1	4.0	3.0	5.1	4.1	3.4	13.7	12.1	12.0
Latin America Eastern and Southern Asia	154.3	237.6	366.8	11.0	10.7	11.6	14.5	12.6	14.0	7.3	8.5	10.2	9.3	8.5	9.6
Western Asia	459.1	862.6	1 263.4	13.4	13.1	12.3	13.1	12.2	13.1	19.0	19.1	19.0	12.3	11.1	10.1
	153.0	163.9	276.6	16.0	11.1	16.1	1.9	1.8	1.9	1.1	1.1	1.3	33.6	27.9	29.4
Memo items:															
Sub-Saharan Africa	29.7	33.5	40.0	2.6	2.4	2.6	2.6	2.6	2.3	3.1	2.7	2.8	2.3	2.1	2.8
Least developed countries	58.4	24.2	35.5	2.9	1.5	1.8	2.0	1.3	1.1	3.0	1.7	1.7	3.9	1.5	2.2

Table A.15 (continued)

Exporting country group	Manufactures														
	Total (billions of dollars)			<i>of which:</i>											
				Textiles			Chemicals			Machinery and transport			Metals		
	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000
World (billions of dollars)	1 992.0	3 797.8	4 774.7	178.2	325.9	368.9	236.4	455.4	548.6	953.1	1 890.6	2 562.2	152.7	267.0	262.7
World (percentage share)	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	100.0	100.0
Developed economies	73.3	72.0	66.5	42.1	42.2	36.0	81.0	80.2	78.7	79.7	77.7	69.9	65.2	63.0	60.0
Economies in transition^a	3.7	3.3	3.6	2.1	4.1	4.4	3.6	4.3	3.7	3.7	1.4	2.3	8.5	14.4	16.5
Developing countries	23.0	24.7	29.8	55.7	53.7	59.6	15.4	15.5	17.6	16.5	20.9	27.9	26.3	22.5	23.5
Africa	1.1	0.9	0.5	2.5	2.5	2.3	1.4	1.0	0.6	0.3	0.2	0.1	6.2	3.2	0.8
Latin America	3.3	3.3	4.5	3.4	4.3	6.9	2.9	2.8	3.0	2.6	2.8	4.6	9.4	7.9	7.8
Eastern and Southern Asia	17.3	19.2	23.3	47.3	43.4	46.5	8.2	9.5	11.7	13.2	17.3	22.5	8.7	9.6	12.9
Western Asia	1.3	1.3	1.5	2.5	3.4	3.9	2.9	2.2	2.4	0.4	0.5	0.7	2.0	1.9	2.0
Memo items:															
Sub-Saharan Africa	0.5	0.2	0.2	0.5	0.5	0.5	0.3	0.1	0.1	0.2	0.0	0.0	2.2	0.8	0.5
Least developed countries	1.6	0.2	0.3	1.6	1.3	2.4	1.6	0.1	0.1	1.6	0.0	0.0	2.6	0.2	0.2

Source: UN/DESA, based on COMTRADE.

^a Data for 1995 onward including trade flows between the States of the former Union of Soviet Socialist Republics (USSR). Prior to 1992, these flows were considered internal.

Table A.16.
COMPOSITION OF WORLD MERCHANDISE TRADE: IMPORTS, 1990-2000

Billions of dollars and percentage															
Importing country group	Total imports (billions of dollars)			Primary commodities											
				Total			of which:								
	Food						Agricultural raw materials			Fuels					
1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000	
World (billions of dollars)	2 848.5	4 906.4	6 118.5	797.5	990.1	1 193.9	268.8	413.9	390.4	119.2	176.0	152.2	372.7	331.4	583.8
World (percentage share)	-	-	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developed economies	1 941.6	3 381.7	4 306.6	68.6	72.3	72.7	66.2	71.3	72.3	66.0	67.9	66.2	69.0	75.3	74.7
Economies in transition^a	128.9	193.4	243.1	5.5	5.3	4.6	8.2	6.0	4.8	3.9	2.6	3.1	4.2	6.2	4.9
Developing countries	778.0	1 331.3	1 568.8	25.9	22.4	22.7	25.6	22.7	22.9	30.1	29.5	30.7	26.8	18.5	20.4
Africa	98.8	112.7	88.6	3.0	2.6	1.9	4.9	3.6	3.2	3.7	3.1	2.1	1.4	1.4	1.1
Latin America Eastern and Southern Asia	110.7	233.9	334.3	4.4	4.5	5.1	4.7	4.6	5.6	3.9	4.5	5.2	4.5	4.8	5.0
Western Asia	467.3	834.7	953.6	15.2	12.4	12.0	10.9	10.5	9.7	19.8	19.4	20.2	18.3	10.8	10.9
Western Asia	101.2	150.0	192.3	3.3	2.8	3.6	5.2	4.0	4.4	2.8	2.6	3.2	2.7	1.5	3.4
Memo items:															
Sub-Saharan Africa	29.6	39.6	34.4	1.0	1.0	0.9	1.5	1.3	1.2	0.8	1.0	0.8	0.7	0.7	0.7
Least developed countries	27.4	35.7	36.3	1.0	1.0	0.8	1.6	1.4	1.3	1.7	1.0	1.1	2.7	0.5	0.5

Table A.16 (continued)

Importing country group	Manufactures														
	Total (billions of dollars)			<i>of which:</i>											
				Textiles			Chemicals			Machinery and transport			Metals		
1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000	
World (billions of dollars)	1 992.0	3 773.2	4 722.7	178.2	321.3	361.3	236.4	468.0	560.2	953.1	1 881.2	2 533.6	152.7	258.7	256.5
World (percentage share)	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	100.0	100.0
Developed economies	68.0	68.1	69.6	69.5	68.1	68.5	61.6	67.3	67.8	66.8	66.5	68.7	63.9	66.8	68.5
Economies in transition^a	4.2	3.6	3.8	2.6	4.9	5.1	4.4	4.1	4.5	5.1	3.1	3.3	4.4	3.2	3.9
Developing countries	27.9	28.4	26.6	27.9	27.0	26.5	34.0	28.6	27.7	28.1	30.4	28.0	31.7	30.0	27.6
Africa	3.6	2.2	1.3	2.5	2.4	2.1	4.5	2.5	1.5	4.0	2.3	1.3	3.2	2.0	1.2
Latin America	3.8	4.9	5.6	2.1	4.0	5.8	5.9	5.7	6.6	4.0	5.4	5.7	3.4	3.2	4.1
Eastern and Southern Asia	16.9	18.2	16.6	19.8	16.9	15.1	19.4	17.5	16.6	16.9	19.9	18.0	20.0	21.4	19.0
Western Asia	3.6	3.1	3.0	3.5	3.6	3.4	4.1	3.0	3.0	3.2	2.8	2.9	5.0	3.4	3.3
Memo items:															
Sub-Saharan Africa	1.1	0.8	0.5	0.8	0.7	0.6	1.1	0.8	0.5	1.3	0.8	0.5	0.7	0.6	0.3
Least developed countries	1.0	0.7	0.5	1.2	3.7	3.7	0.9	3.1	3.1	1.1	0.7	0.5	2.2	0.5	0.5

Source: UN/DESA, based on COMTRADE.

^a Data for 1995 onward including trade flows between the States of the former Union of Soviet Socialist Republics (USSR). Prior to 1992, these flows were considered internal.

Table A.17.
INDICES OF PRICES OF PRIMARY COMMODITIES, 1993-2002

	Non-fuel commodities ^a							Manufactured export prices ^b	Real prices of non-fuel commodities ^c	Memo item: crude petroleum ^d
	Food	Tropical beverages	Vegetable oilseeds and oils	Agricultural raw materials	Minerals and metals	Combined index				
						Dollar	SDR			
1993	139	52	86	121	110	111	81	97	72	60.5
1994	153	91	107	140	124	131	92	99	83	57.5
1995	162	92	118	161	149	144	96	110	82	62.4
1996	173	78	113	145	131	138	97	106	82	75.1
1997	167	104	112	130	131	138	102	99	88	69.2
1998	144	86	120	116	110	120	90	95	80	45.5
1999	118	68	92	104	108	103	77	91	71	64.7
2000	125	59	71	104	121	105	81	87	76	102.2
2001	127	46	66	104	110	101	81	85	75	85.6
1998 I	157	104	119	117	114	129	97	96	84	48.6
1998 II	149	86	123	117	112	123	93	95	81	46.9
1998 III	137	78	119	115	109	115	87	95	77	46.3
1998 IV	133	75	121	114	105	113	82	97	73	40.1
1999 I	126	73	105	110	99	107	78	95	71	40.3
1999 II	114	69	96	105	103	101	76	93	69	57.9
1999 III	116	61	82	101	112	101	76	93	68	75.1
1999 IV	117	70	84	101	117	104	76	94	70	85.4
2000 I	118	66	79	101	123	105	78	89	74	95.0
2000 II	121	61	76	102	119	104	79	88	74	99.3
2000 III	127	56	67	106	122	106	82	86	78	109.4
2000 IV	132	52	63	104	119	106	83	84	80	104.9
2001 I	134	50	61	109	118	107	84	87	77	88.7
2001 II	127	48	60	107	114	102	82	84	77	96.5
2001 III	127	44	73	106	105	101	80	84	76	90.6
2001 IV	119	42	70	95	101	94	76	83	72	67.2
2002 I	119	47	71	93	107	96	78	..	..	72.2

Sources: UNCTAD, *Monthly Commodity Price Bulletin*; United Nations, *Monthly Bulletin of Statistics and OPEC Bulletin*.

^a All non-fuel commodity indices are based on 1985.

^b Index of prices of manufactures exported by developed countries (1990 base year).

^c Combined index of non-fuel commodity prices in dollars deflated by manufactured export price index.

^d Index of composite price of the seven crudes OPEC basket.

Table A.18.
WORLD OIL SUPPLY AND DEMAND, 1993-2002

Millions of barrels per day										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 ^a
World oil supply^b										
Developed economies	16.8	17.6	18.0	18.4	18.6	18.4	18.1	18.5	18.3	18.3
Economies in transition	8.2	7.5	7.3	7.3	7.4	7.5	7.7	8.1	8.7	9.3
Developing countries	41.1	41.9	43.3	44.8	46.7	48.0	46.7	48.6	48.2	47.3
OPEC ^c	27.0	27.3	27.7	28.4	29.9	30.8	29.4	30.8	30.2	29.0
Non-OPEC developing countries ^c	14.1	14.6	15.7	16.4	16.8	17.1	17.3	17.8	18.0	18.3
Processing gains ^d	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8
World total supply^e	67.4	68.4	70.1	72.0	74.3	75.5	74.1	76.9	77.0	76.7
World oil demand^f										
World total demand	67.6	68.9	69.9	71.6	73.1	73.5	75.3	75.9	76.0	76.4

Source: United Nations, based on International Energy Agency, *Monthly Oil Market Report*, various issues.

^a Estimate.

^b Including crude oil, condensates, natural gas liquids (NGLs), oil from non-conventional sources and other sources of supply.

^c Ecuador is included through 1992 and in non-OPEC developing countries starting in 1993. Neutral zone is included. Gabon is excluded starting in 1995.

^d Net volume gains and losses in refining process (excluding net gain/loss in the economies in transition and China) and marine transportation losses.

^e Totals may not add up because of rounding.

^f Including deliveries from refineries/primary stocks and marine bunkers, and refinery fuel and non-conventional oils.

III. INTERNATIONAL FINANCE AND FINANCIAL MARKETS

Table A.19.
WORLD BALANCE OF PAYMENTS ON CURRENT ACCOUNT, BY COUNTRY GROUP, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000 ^a	2001 ^b
Developed countries	41.7	15.0	49.6	35.5	70.2	-42.4	-206.3	-308.6	-265.7
<i>of which:</i>									
Euro area	20.7	20.5	56.3	80.6	100.8	63.6	25.1	-18.4	24.8
Japan	131.6	130.3	111.0	65.9	94.4	120.7	106.9	116.9	87.8
United States	-82.5	-118.2	-109.9	-120.9	-139.8	-217.4	-324.4	-444.7	-423.0
Developing countries^c	-90.5	-71.6	-95.4	-71.3	-45.3	-12.2	69.9	122.0	97.3
Net fuel exporters	-46.4	-45.5	-14.8	18.1	0.9	-51.4	15.3	91.6	47.4
Net fuel importers	-44.1	-26.1	-80.7	-89.3	-46.2	39.2	54.7	30.4	49.8
Net-creditor countries	0.7	9.8	21.8	37.6	37.6	9.4	43.1	86.2	79.8
Net-debtor countries	-91.2	-81.4	-117.3	-108.9	-83.0	-21.6	26.8	35.9	17.5
Economies in transition	-4.1	2.2	-3.7	-12.1	-25.0	-28.5	-1.6	26.8	12.9
<i>of which:</i>									
Central and Eastern Europe	-11.6	-3.0	-7.2	-16.8	-18.8	-19.3	-23.3	-18.7	-18.4
Commonwealth of Independent States	7.2	5.2	4.3	6.1	-4.4	-6.7	23.8	47.0	33.0
World residual^d	52.9	54.4	49.5	47.8	0.2	83.2	138.0	159.7	155.5
<i>of which:</i>									
Trade residual	-77.7	-98.1	-116.6	-101.9	-119.4	-78.6	-50.7	-25.4	-1.1

Source: United Nations, based on data of IMF and other national and international sources.

Note: Aggregates for major country groupings may not add up owing to rounding.

^a Partially estimated.

^b Preliminary estimate.

^c Ninety-five economies.

^d Unreported trade, services, income and transfers, as well as errors and timing asymmetries in reported data.

Table A.20.

CURRENT-ACCOUNT TRANSACTIONS: DEVELOPED ECONOMIES, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
All developed economies^b									
Goods: exports (f.o.b.)	2 552.8	2 871.1	3 434.8	3 528.7	3 615.9	3 643.9	3 710.2	3 968.3	3 829.2
Goods: imports (f.o.b.)	-2 453.5	-2 777.1	-3 312.1	-3 436.1	-3 520.5	-3 617.3	-3 821.7	-4 204.0	-4 039.0
Trade balance	99.3	94.0	122.7	92.6	95.4	26.6	-111.4	-235.7	-209.8
Net services, income and current transfers	-57.7	-78.9	-73.0	-57.1	-25.2	-69.1	-94.9	-72.8	-55.9
<i>of which:</i>									
Net investment income	10.1	0.4	5.1	11.8	21.6	8.6	-7.5	16.7	19.3
Current-account balance	41.7	15.0	49.6	35.5	70.2	-42.4	-206.3	-308.6	-265.7
Major developed economies									
Goods: exports (f.o.b.)	1 893.1	2 117.6	2 477.7	2 537.5	2 626.7	2 626.2	2 684.1	2 886.9	2 758.2
Goods: imports (f.o.b.)	-1 816.2	-2 049.5	-2 396.5	-2 494.7	-2 586.0	-2 632.0	-2 811.1	-3 156.2	-3 012.2
Trade balance	76.9	68.1	81.1	42.8	40.7	-5.7	-127.0	-269.3	-254.1
Net services, income and current transfers	-64.6	-79.6	-81.6	-55.3	-29.9	-56.3	-95.1	-70.0	-53.6
<i>of which:</i>									
Net investment income	35.3	30.8	26.3	41.7	42.1	38.4	12.2	37.6	49.3
Current-account balance	12.3	-11.5	-0.5	-12.5	10.8	-62.1	-222.1	-339.3	-307.7
Euro area									
Goods: exports (f.o.b.)	1 160.7	1 324.0	1 653.1	1 688.3	1 668.0	1 766.5	1 757.2	1 791.5	1 815.1
Goods: imports (f.o.b.)	-1 085.8	-1 234.0	-1 527.3	-1 540.2	-1 515.7	-1 615.5	-1 652.5	-1 731.5	-1 712.4
Trade balance	74.9	90.0	125.8	148.1	152.3	150.9	104.8	60.0	102.8
Net services, income and current transfers	-54.2	-69.5	-69.5	-67.5	-51.5	-87.4	-79.6	-78.4	-78.0
<i>of which:</i>									
Net investment income	-25.3	-31.9	-32.5	-31.1	-23.7	-45.5	-36.3	-32.5	-31.8
Current-account balance	20.7	20.5	56.3	80.6	100.8	63.6	25.1	-18.4	24.8
Japan									
Goods: exports (f.o.b.)	352.7	385.7	428.7	400.3	409.2	374.0	403.7	459.5	383.3
Goods: imports (f.o.b.)	-213.2	-241.5	-296.9	-316.7	-307.6	-251.7	-280.4	-342.8	-313.0
Trade balance	139.4	144.2	131.8	83.6	101.6	122.4	123.3	116.7	70.3
Net services, income and current transfers	-7.8	-13.9	-20.7	-17.7	-7.2	-1.7	-16.5	0.2	17.5
<i>of which:</i>									
Net investment income	41.2	40.9	45.0	53.6	55.7	56.6	49.8	57.6	63.2
Current-account balance	131.6	130.3	111.0	65.9	94.4	120.7	106.9	116.9	87.8
United States									
Goods: exports (f.o.b.)	458.8	504.9	577.1	614.0	680.3	672.4	686.9	774.9	723.3
Goods: imports (f.o.b.)	-589.4	-668.7	-749.4	-803.1	-876.5	-917.1	-1 030.0	-1 224.4	-1 147.5
Trade balance	-130.6	-163.8	-172.3	-189.1	-196.2	-244.7	-343.1	-449.6	-424.2
Net services, income and current transfers	48.1	45.6	62.4	68.2	56.4	27.3	18.7	4.9	1.1
<i>of which:</i>									
Net investment income	27.6	21.1	25.1	25.5	13.6	-1.2	-8.5	-9.6	-12.4
Current-account balance	-82.5	-118.2	-109.9	-120.9	-139.8	-217.4	-324.4	-444.7	-423.0

Source: United Nations, based on data of IMF and national sources.

^a Preliminary estimate.

^b Figures may not add up owing to rounding.

Table A.21.
CURRENT-ACCOUNT TRANSACTIONS: ECONOMIES IN TRANSITION, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000 ^a	2001 ^b
Economies in transition^c									
Goods: exports (f.o.b.)	149.8	172.4	219.0	235.4	247.4	236.9	233.0	292.1	304.2
Goods: imports (f.o.b.)	-155.1	-168.7	-220.7	-252.4	-272.3	-264.7	-233.5	-262.2	-290.7
Trade balance	-5.2	3.7	-1.7	-17.0	-24.9	-27.9	-0.5	29.9	13.6
Net services, income and current transfers	1.2	-1.5	-2.0	4.9	-0.2	-0.7	-1.1	-3.1	-0.7
<i>of which:</i>									
Net investment income	-5.7	-6.5	-7.8	-9.8	-13.8	-18.4	-15.2	-15.3	-12.9
Current-account balance	-4.1	2.2	-3.7	-12.1	-25.0	-28.5	-1.6	26.8	12.9
CIS									
Goods: exports (f.o.b.)	81.9	95.4	116.1	126.8	126.4	107.1	107.7	147.4	146.0
Goods: imports (f.o.b.)	-74.4	-81.7	-99.8	-112.6	-117.9	-98.5	-73.2	-84.3	-96.7
Trade balance	7.5	13.8	16.3	14.3	8.5	8.6	34.4	63.1	49.3
Net services, income and current transfers	-0.3	-8.6	-12.0	-8.2	-12.8	-15.3	-10.7	-16.1	-16.3
<i>of which:</i>									
Net investment income	..	-1.8	-3.3	-5.9	-9.4	-13.0	-9.4	-9.6	-6.4
Current-account balance	7.2	5.2	4.3	6.1	-4.4	-6.7	23.8	47.0	33.0
<i>of which:</i>									
Russian Federation									
Goods: exports (f.o.b.)	57.6	67.8	82.9	90.6	89.0	74.9	75.7	105.6	103.1
Goods: imports (f.o.b.)	-46.8	-50.5	-62.6	-68.1	-72.0	-58.0	-39.5	-44.9	-53.8
Trade balance	10.8	17.4	20.3	22.5	17.0	16.9	36.1	60.7	49.4
Net services, income and current transfers	-3.3	-8.9	-12.8	-10.7	-15.0	-16.2	-11.4	-14.3	-14.3
<i>of which:</i>									
Net investment income	..	-1.7	-3.1	-5.0	-8.4	-11.6	-7.9	-7.0	-4.0
Current-account balance	7.5	8.4	7.5	11.8	2.1	0.7	24.7	46.4	35.0
Baltic countries									
Goods: exports (f.o.b.)	3.9	4.3	5.8	6.7	8.3	8.7	7.5	9.4	10.5
Goods: imports (f.o.b.)	-4.2	-5.1	-7.7	-9.4	-11.4	-12.4	-10.8	-12.4	-13.7
Trade balance	-0.3	-0.9	-1.9	-2.7	-3.1	-3.8	-3.3	-3.0	-3.2
Net services, income and current transfers	0.6	0.8	1.2	1.3	1.2	1.3	1.2	1.5	1.6
<i>of which:</i>									
Net investment income	..	..	..	-0.1	-0.3	-0.3	-0.4	-0.5	-0.6
Current-account balance	0.4	-0.1	-0.8	-1.4	-1.9	-2.4	-2.1	-1.5	-1.7

Table 21 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000 ^a	2001 ^b
Central and Eastern Europe^c									
Goods: exports (f.o.b.)	64.1	72.7	97.1	101.8	112.7	121.1	117.8	135.3	147.8
Goods: imports (f.o.b.)	-76.4	-81.9	-113.2	-130.4	-142.9	-153.8	-149.5	-165.5	-180.3
Trade balance	-12.4	-9.2	-16.1	-28.6	-30.2	-32.7	-31.7	-30.2	-32.5
Net services, income and current transfers	0.8	6.3	8.8	11.8	11.4	13.3	8.4	11.5	14.1
<i>of which:</i>									
Net investment income	-5.7	-4.7	-4.5	-3.9	-4.1	-5.1	-5.4	-5.3	-5.9
Current-account balance	-11.6	-3.0	-7.2	-16.8	-18.8	-19.3	-23.3	-18.7	-18.4
Central Europe									
Goods: exports (f.o.b.)	47.5	55.5	76.3	80.9	90.7	98.9	97.0	111.0	122.0
Goods: imports (f.o.b.)	-56.6	-61.5	-85.3	-99.6	-110.3	-119.9	-118.5	-130.5	-140.3
Trade balance	-9.1	-6.0	-8.9	-18.8	-19.6	-21.0	-21.5	-19.5	-18.3
Net services, income and current transfers	-0.9	3.3	6.2	7.6	7.3	8.1	3.4	4.5	5.5
<i>of which:</i>									
Net investment income	-5.2	-4.2	-3.8	-3.0	-3.2	-4.1	-4.2	-4.0	-4.5
Current-account balance	-10.0	-2.7	-2.8	-11.1	-12.3	-12.9	-18.1	-15.0	-12.8
Southern and Eastern Europe									
Goods: exports (f.o.b.)	16.6	17.1	20.8	21.0	22.0	22.2	20.8	24.3	25.8
Goods: imports (f.o.b.)	-19.9	-20.4	-27.9	-30.8	-32.6	-33.9	-31.0	-35.0	-40.0
Trade balance	-3.3	-3.2	-7.1	-9.8	-10.6	-11.7	-10.2	-10.7	-14.2
Net services, income and current transfers	1.7	3.0	2.7	4.2	4.1	5.2	5.0	7.0	8.6
<i>of which:</i>									
Net investment income	-0.5	-0.6	-0.7	-0.9	-0.8	-1.1	-1.2	-1.2	-1.4
Current-account balance	-1.6	-0.3	-4.5	-5.7	-6.5	-6.4	-5.2	-3.7	-5.6

Source: UN/DESA, based on data of IMF and ECE.

^a Partially estimated.

^b Preliminary estimate.

^c Figures may not add up owing to rounding.

Table A.22.
CURRENT-ACCOUNT TRANSACTIONS: DEVELOPING ECONOMIES, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000 ^a	2001 ^b
Developing countries^c									
Goods: exports (f.o.b.)	1 035.9	1 190.2	1 432.2	1 574.7	1 683.1	1 556.2	1 690.2	2 087.2	1 954.8
Goods: imports (f.o.b.)	-1 052.4	-1 189.7	-1 436.6	-1 548.5	-1 634.2	-1 476.4	-1 527.5	-1 855.9	-1 757.4
Trade balance	-16.4	0.4	-4.4	26.3	48.9	79.8	162.7	231.2	197.3
Net services, income and current transfers	-74.0	-72.0	-91.1	-97.5	-94.2	-92.0	-92.7	-109.2	-100.1
<i>of which:</i>									
Net investment income	-62.1	-67.1	-81.9	-89.0	-87.6	-97.2	-98.5	-103.7	-91.0
Current-account balance	-90.5	-71.6	-95.4	-71.3	-45.3	-12.2	69.9	122.0	97.3
Net fuel exporters									
Goods: exports (f.o.b.)	275.5	294.6	347.5	408.5	433.7	377.3	451.7	606.8	560.9
Goods: imports (f.o.b.)	-247.8	-261.1	-284.3	-309.0	-346.7	-351.8	-357.0	-425.5	-426.9
Trade balance	27.7	33.4	63.2	99.4	87.0	25.5	94.7	181.3	134.1
Net services, income and current transfers	-74.1	-78.9	-77.9	-81.4	-86.1	-77.0	-79.4	-89.7	-86.6
<i>of which:</i>									
Net investment income	-21.7	-25.2	-23.7	-25.5	-22.8	-24.1	-26.2	-30.3	-30.9
Current-account balance	-46.4	-45.5	-14.8	18.1	0.9	-51.4	15.3	91.6	47.4
Net fuel importers									
Goods: exports (f.o.b.)	760.5	895.6	1 084.7	1 166.3	1 249.4	1 178.9	1 238.6	1 480.4	1 393.8
Goods: imports (f.o.b.)	-804.6	-928.6	-1 152.3	-1 239.4	-1 287.5	-1 124.6	-1 170.5	-1 430.4	-1 330.5
Trade balance	-44.1	-33.0	-67.5	-73.2	-38.1	54.3	68.0	49.9	63.3
Net services, income and current transfers	0.0	6.9	-13.1	-16.2	-8.1	-15.0	-13.3	-19.5	-13.4
<i>of which:</i>									
Net investment income	-40.4	-41.9	-58.2	-63.5	-64.8	-73.1	-72.3	-73.4	-60.1
Current-account balance	-44.1	-26.1	-80.7	-89.3	-46.2	39.2	54.7	30.4	49.8
Net-creditor countries									
Goods: exports (f.o.b.)	261.6	290.9	344.0	379.7	385.8	321.8	363.0	475.0	416.7
Goods: imports (f.o.b.)	-222.5	-243.5	-288.9	-297.4	-313.0	-277.9	-287.5	-347.0	-302.5
Trade balance	39.1	47.4	55.0	82.3	72.8	43.9	75.5	128.0	114.2
Net services, income and current transfers	-38.4	-37.6	-33.2	-44.7	-35.2	-34.6	-32.4	-41.8	-34.5
<i>of which:</i>									
Net investment income	12.0	9.8	14.2	12.8	18.5	15.7	17.0	17.4	16.4
Current-account balance	0.7	9.8	21.8	37.6	37.6	9.4	43.1	86.2	79.8
Net-debtor countries									
Goods: exports (f.o.b.)	774.4	899.3	1 088.3	1 195.0	1 297.3	1 234.4	1 327.2	1 612.2	1 538.0
Goods: imports (f.o.b.)	-829.9	-946.2	-1 147.7	-1 251.1	-1 321.2	-1 198.5	-1 240.0	-1 508.9	-1 454.9
Trade balance	-55.5	-46.9	-59.4	-56.0	-23.9	35.8	87.2	103.2	83.1
Net services, income and current transfers	-35.7	-34.5	-57.9	-52.9	-59.1	-57.4	-60.3	-67.3	-65.6
<i>of which:</i>									
Net investment income	-74.1	-77.0	-96.0	-101.8	-106.1	-112.9	-115.5	-121.1	-107.4
Current-account balance	-91.2	-81.4	-117.3	-108.9	-83.0	-21.6	26.8	35.9	17.5

Table 22 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000 ^a	2001 ^b
Totals by region:									
Latin America									
Goods: exports (f.o.b.)	166.8	193.8	236.0	262.8	292.0	287.8	304.4	365.6	351.9
Goods: imports (f.o.b.)	-175.5	-207.8	-234.9	-260.6	-308.6	-327.2	-315.7	-366.4	-359.1
Trade balance	-8.8	-13.9	1.0	2.2	-16.6	-39.4	-11.2	-0.9	-7.2
Net services, income and current transfers	-36.7	-37.2	-38.8	-41.1	-49.1	-49.9	-44.5	-46.0	-45.3
<i>of which:</i>									
Net investment income	-35.9	-37.7	-42.1	-44.5	-49.3	-53.3	-53.3	-54.4	-56.0
Current-account balance	-45.5	-51.1	-37.8	-38.8	-65.7	-89.2	-55.7	-46.9	-52.4
Africa									
Goods: exports (f.o.b.)	91.8	95.7	112.0	124.2	126.4	106.1	116.0	151.4	143.4
Goods: imports (f.o.b.)	-90.0	-95.9	-112.6	-113.5	-119.1	-119.1	-115.4	-123.5	-124.9
Trade balance	1.8	-0.2	-0.6	10.7	7.3	-12.9	0.6	27.9	18.5
Net services, income and current transfers	-7.7	-9.8	-12.0	-8.3	-11.3	-7.9	-9.3	-16.7	-13.3
<i>of which:</i>									
Net investment income	-11.5	-11.3	-11.6	-12.5	-10.9	-9.4	-11.0	-12.8	-11.6
Current-account balance	-6.0	-10.0	-12.6	2.4	-4.0	-20.8	-8.7	11.2	5.2
Western Asia									
Goods: exports (f.o.b.)	148.2	156.9	176.9	214.2	217.8	179.0	219.7	300.9	277.2
Goods: imports (f.o.b.)	-149.8	-137.9	-164.7	-178.3	-187.4	-186.9	-183.9	-215.6	-205.6
Trade balance	-1.6	19.0	12.2	35.8	30.4	-7.9	35.8	85.3	71.6
Net services, income and current transfers	-26.3	-27.8	-21.0	-31.3	-27.7	-12.1	-23.1	-30.0	-29.8
<i>of which:</i>									
Net investment income	1.5	-3.1	0.2	0.5	1.8	2.4	-0.4	-3.3	-2.5
Current-account balance	-28.0	-8.8	-8.8	4.5	2.7	-20.1	12.6	55.2	41.8
Eastern and Southern Asia									
Goods: exports (f.o.b.)	629.3	743.8	907.4	973.5	1 046.9	983.3	1 050.1	1 269.3	1 182.3
Goods: imports (f.o.b.)	-637.0	-748.3	-924.5	-996.0	-1 019.1	-843.2	-912.5	-1 150.4	-1 067.9
Trade balance	-7.8	-4.5	-17.0	-22.5	27.8	140.0	137.6	119.0	114.4
Net services, income and current transfers	-3.3	2.8	-19.2	-16.8	-6.2	-22.1	-15.8	-16.4	-11.7
<i>of which:</i>									
Net investment income	-16.3	-15.1	-28.4	-32.4	-29.3	-36.8	-33.8	-33.3	-20.9
Current-account balance	-11.1	-1.7	-36.3	-39.3	21.6	117.9	121.8	102.5	102.8

Source: UN/DESA, based on data of IMF and official national and other sources.

^a Partially estimated.

^b Preliminary estimate.

^c Ninety-five economies. Figures may not add up owing to rounding.

Table A.23.
NET IMF LENDING TO DEVELOPING COUNTRIES: BY FACILITY, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Regular facilities	-0.2	-0.8	12.5	-2.6	13.0	14.1	-9.8	-6.5	17.6
Repayment terms:									
3¼-5 years (credit tranche) ^a	-0.2	0.1	12.4	-1.4	13.6	11.2	-9.6	-5.8	18.5
3½-7 years (SFF/EAP) ^b	-1.5	-1.4	-1.6	-1.3	-0.7	-0.1	0.0	0.0	0.0
4½-10 years (Extended Fund Facility) (EFF)	1.5	0.5	1.8	0.1	0.2	3.1	-0.2	-0.7	-0.9
Concessional facilities	0.2	0.9	1.5	0.2	-0.1	0.2	0.1	-0.2	0.0
in order created:									
Trust Fund ^c	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SAF ^d	-0.1	-0.2	-0.1	-0.4	-0.3	-0.2	-0.2	-0.1	-0.1
ESAF/PRGF ^d	0.4	1.1	1.6	0.5	0.2	0.4	0.2	-0.1	0.1
Additional facilities^e	-0.2	-0.9	-1.6	-0.7	-0.9	-0.7	0.7	0.0	0.0
in order created:									
Compensatory financing ^f	-0.2	-0.9	-1.6	-0.7	-0.9	-0.7	0.7	0.0	0.0
STF ^f			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	-0.2	-0.7	12.5	-3.1	12.0	13.7	-9.0	-6.7	17.6
Memo items:									
Selected characteristics of higher-conditional lending agreements									
Number initiated during year	13	26	18	20	14	15	16	18	12
Average length (months)	24	25	23	29	33	29	32	28	22
Total amount committed	3.0	6.6	23.2	5.2	38.4	29.5	13.0	22.1	24.2

Source: Data of IMF, *International Financial Statistics and IMF Survey*.

- ^a Primarily standby arrangements. Includes Supplemental Reserve Facility (SRF) (created December 1997) for use when a sudden and disruptive loss of market confidence causes pressure on the capital account and on reserves, creating a large short-term financing need (higher-cost and shorter-term than regular drawings); adds to commitments under standby or extended arrangements for up to one year, with drawings in two or more tranches. Also includes emergency assistance for natural disasters and, since 1995, post-conflict situations.
- ^b Enhanced Access Policy (EAP) (1981-1992) provided resources from funds borrowed by IMF from member States on which the Fund paid a higher interest rate than the remuneration paid to countries that had a net-creditor position with the Fund. Thus, users of Supplementary Financing Facility (SFF) and EAP resources paid a higher interest rate than on drawings from ordinary resources, which are at below-market interest rates.
- ^c Mainly using resources from IMF gold sales, the Trust Fund lent during 1977-1981 under 1-year adjustment programmes; eligibility was based on maximum per capita income criteria; loans had 10-year maturities, with repayments beginning in the sixth year; the interest rate was 0.5 per cent per year.
- ^d Structural Adjustment Facility (SAF) and Enhanced Structural Adjustment Facility (ESAF) (the first financed mainly from Trust Fund reflows and the second from loans and grants) made loans to IDA-eligible countries with protracted balance-of-payments problems; funds were disbursed over 3 years (under Policy Framework Paper arrangements), with repayments beginning in 5.5 years and ending in 10 years; the interest rate was 0.5 per cent. On 22 November 1999, the facility was renamed the Poverty Reduction and Growth Facility (PRGF) and now supports policy reforms contained in Poverty Reduction Strategy Papers (PRSPs).
- ^e Compensatory Financing Facility (CFF) from 1963 to 1988; Compensatory and Contingency Financing Facility (CCFF) from August 1988; CFF again from February 2000 (same terms as credit tranche).
- ^f See description in table A.24 below.

Table A.24.

NET IMF LENDING TO ECONOMIES IN TRANSITION: BY FACILITY, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Regular facilities	0.1	0.2	4.4	3.7	2.1	3.0	-3.0	-3.1	-0.7
Repayment terms:									
3¼-5 years (credit tranche)	0.1	0.5	4.9	1.2	-0.0	-0.8	-3.1	-3.2	-0.6
3½-7 years (SFF/EAP)	0.0	-0.3	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0
4½-10 years (Extended Fund Facility)	0.0	0.0	-0.5	2.6	2.2	3.9	0.1	0.2	-0.0
Concessional facilities (ESAF)	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Additional facilities									
Compensatory financing	0.0	-0.7	-0.6	-0.2	0.1	2.9	0.1	-0.0	-2.8
STF	2.0	2.8	0.9	0.0	-0.0	-0.5	-0.8	-1.1	-0.8
Total	2.1	2.3	4.8	3.7	2.4	5.6	-3.6	-4.1	-4.1
Memo items:									
Selected characteristics of higher- conditionality lending agreements									
Number initiated during year	9	8	12	12	7	6	4	5	9
Average length (months)	18	18	13	28	21	32	19	28	25
Total amount committed	1.6	2.1	9.2	13.2	2.1	3.4	5.6	0.3	1.5

Source: Data of IMF, *International Financial Statistics*.

Note: The Systemic Transformation Facility (STF), created in April 1993 and closed to new drawings in December 1995, assisted economies in transition with severe balance-of-payments problems arising from discontinuance of trade arrangements under planning. For members that had not yet had a standby arrangement, drawings could be made in two tranches in support of a written statement of policy reform intentions, the second 6-18 months after the first, assuming satisfactory progress towards an upper credit tranche. See table A.23 above for description of other facilities.

Table A.25.
NET ODA FROM MAJOR SOURCES, BY TYPE, 1981-2000

Donor group or country	Growth rate of ODA ^a (1999 prices and exchange rates)		ODA as percentage of GNP	Total ODA (millions of dollars)	Percentage distribution of ODA by type, 2000					
	1981- 1990	1991- 2000			Bilateral			Multilateral		
			2000	2000	Grants ^b	Technical cooperation	Loans	United Nations	IDA	Other
Total DAC countries	2.84	-0.18	0.22	53 737	61.5	23.8	5.6	9.7	6.8	16.4
Total EU	3.69	-0.77	0.32	25 277	63.3	20.2	-1.6	8.6	5.6	25.2
Austria	3.55	2.51	0.23	423	61.5	20.6	-0.7	4.7	6.1	28.4
Belgium	0.37	-0.90	0.36	820	58.2	27.0	..	6.0	6.2	29.6
Denmark	4.20	3.67	1.06	1 664	86.9	11.0	1.1	15.1	8.2	15.3
Finland	15.18	-4.74	0.31	371	59.0	19.1	-0.5	16.7	13.7	11.1
France ^c	5.95	-3.27	0.32	4 105	75.9	31.3	-7.0	3.0	5.8	22.2
Germany	1.44	-1.55	0.20	5 030	53.6	32.6	-0.2	7.7	7.6	31.3
Greece	..	..	0.27	226	42.9	9.7	0.4	7.1	0.9	48.2
Ireland	1.18	14.87	0.20	235	66.0	..	..	9.4	3.4	21.3
Italy	14.87	-7.61	0.30	1 376	38.2	2.0	-10.8	14.7	0.0	57.9
Luxembourg	20.58	17.46	0.71	127	73.2	1.6	..	7.9	3.1	15.0
Netherlands	1.69	2.32	0.84	3 135	74.4	18.5	-2.9	11.5	6.3	10.7
Portugal	..	5.00	0.26	271	118.1	33.2	-52.0	2.2	4.8	26.9
Spain	..	5.70	0.22	1 195	50.5	9.0	9.8	4.2	2.6	33.0
Sweden	2.85	-0.14	0.80	1 799	67.9	3.9	1.1	13.8	8.3	8.9
United Kingdom	-1.54	1.76	0.32	4 501	56.9	15.2	3.2	8.0	5.7	26.1
Australia	0.25	0.84	0.27	987	76.8	41.2	..	5.6	7.5	10.1
Canada	2.91	-2.48	0.25	1 744	67.9	20.2	-1.4	7.1	7.8	18.5
Japan	4.40	1.95	0.28	13 508	42.0	18.0	30.3	9.7	8.5	9.5
New Zealand	-2.33	3.45	0.25	113	75.2	36.3	..	7.1	4.4	13.3
Norway	4.80	1.73	0.80	1 264	75.0	8.8	0.7	16.5	2.5	7.2
Switzerland	5.81	2.52	0.34	890	68.3	11.2	2.2	8.8	9.3	11.5
United States	0.42	-2.14	0.10	9 955	81.3	43.4	-6.9	12.5	7.7	5.4
Arab countries^d										
of which:										
Saudi Arabia	..	..	..	295	—	43.7	—	—	56.3	—
Kuwait	..	..	..	165	—	99.4	—	—	0.6	—
Other developing countries:^d										
Korea, Republic of	..	..	..	212	—	61.8	—	—	38.2	—
Taiwan Province of China			..	..	—	..	—	—	100.0	—

Source: UN/DESA, based on OECD, *Development Co-operation: 2001 Report, DAC Journal*, vol. 3, No. 1 (2002).

Note: See table II.4 for estimates for 2001.

^a Average annual rates of growth, calculated from average levels in 1979-1980, 1989-1990 and 1999-2000.

^b Including technical cooperation.

^c Excluding flows from France to the Overseas Departments, namely, Guadeloupe, French Guiana, Martinique and Réunion.

^d Bilateral ODA includes all grants and loans; multilateral ODA includes United Nations, IDA and "other", including technical cooperation.

Table A.26.

REGIONAL DISTRIBUTION OF ODA FROM MAJOR SOURCES, 1989-2000

Millions of dollars, two-year average										
Donor group or country	All developing countries		of which:							
			Latin America		Africa		Western Asia		Eastern and Southern Asia ^a	
	1989-1990	1999-2000	1989-1990	1999-2000	1989-1990	1999-2000	1989-1990	1999-2000	1989-1990	1999-2000
Total ODA^b (net)	52 334.4	51 544.2	5 049.0	5 493.0	21 893.3	15 848.2	3 854.5	1 740.9	14 339.4	16 255.0
DAC countries, bilateral	35 805.4	36 954.0	3 988.6	4 043.0	14 048.8	10 316.5	2 395.5	995.8	9 874.3	11 868.3
Australia	729.5	743.9	0.7	0.7	82.8	40.0	2.5	1.3	602.5	603.0
Austria	250.2	300.3	11.0	22.9	57.8	46.5	45.9	22.1	83.3	88.1
Belgium	451.9	456.8	32.5	49.1	271.6	202.0	3.5	0.5	20.2	50.3
Canada	1 635.6	1 166.1	182.9	124.4	506.6	240.6	17.6	7.4	336.3	180.8
Denmark	608.7	1 024.6	19.7	76.1	310.4	460.5	12.8	3.1	135.7	209.7
Finland	1 468.5	2 479.1	98.2	258.5	635.0	978.5	14.8	27.2	418.3	540.3
France ^c	5 049.5	3 476.8	163.1	138.1	3 199.2	1 942.8	127.9	102.5	1 055.4	608.3
Germany	3 826.8	2 982.1	484.4	372.1	1 582.9	966.3	454.6	171.8	661.0	741.5
Greece	0.0	89.0	0.0	0.4	0.0	3.0	0.0	3.7	0.0	6.2
Ireland	21.0	151.8	0.1	5.5	13.8	97.0	0.3	0.9	0.3	8.5
Italy	2 150.6	413.7	389.0	0.0	1 251.4	243.5	36.6	11.8	182.1	-0.2
Japan	6 782.5	10 121.9	562.3	807.0	1 139.3	1 220.0	313.2	337.8	4 094.3	6 198.4
Luxembourg	7.5	90.8	1.1	19.3	4.2	41.9	0.5	1.2	0.8	12.3
Netherlands	1 672.1	2 202.2	334.9	205.2	614.0	538.5	41.8	40.5	502.7	283.7
New Zealand	78.8	93.1	0.4	1.8	1.1	5.2	0.0	0.2	62.4	81.9
Norway	655.3	970.2	56.0	64.8	363.2	354.1	2.5	34.2	127.8	179.8
Portugal	90.8	193.0	0.0	0.9	85.9	121.0	0.0	0.2	0.0	60.6
Spain	448.9	774.8	164.7	352.2	150.3	150.3	3.4	12.2	86.9	105.8
Sweden	1 327.0	1 194.0	119.0	164.9	620.7	384.2	9.4	15.6	313.5	210.6
Switzerland	486.9	673.3	61.1	72.3	207.6	170.6	12.6	13.4	112.5	122.6
United Kingdom	1 468.5	2 479.1	98.2	258.5	635.0	978.5	14.8	27.2	418.3	540.3
United States	7 596.5	7 126.2	1 280.5	1 290.5	2 691.0	2 038.6	1 288.0	183.4	986.5	1 516.3
DAC countries, multilateral	12 846.1	13 932.6	1 054.8	1 417.7	6 203.4	5 273.3	304.9	593.3	4 449.3	4 160.7
Total DAC	48 651.5	50 886.6	5 043.4	5 460.7	20 252.2	15 589.8	2 700.4	1 589.1	14 323.6	16 029.0
Arab countries										
Bilateral^d	631.8	340.0	0.1	7.0	74.8	108.4	55.9	65.1	-3.2	-18.4
Multilateral	106.1	176.0	2.1	1.4	77.9	12.6	35.3	6.4	-13.0	12.4

Source: UN/DESA, calculations based on OECD, *Geographical Distribution of Financial Flows to Aid Recipients*.

^a Including Central Asian transition economies.

^b Excluding assistance provided by centrally planned and transition economies, owing to measurement difficulties. Donor total includes amounts to certain European countries and unallocated amounts and hence is larger than the sum of the amounts per region.

^c Excluding flows from France to the Overseas Departments, namely, Guadeloupe, French Guiana, Martinique and Réunion.

^d Approximately 35-40 per cent of Arab bilateral aid being geographically unallocated, depending on the year.

Table A.27.

RESOURCE COMMITMENTS OF MULTILATERAL DEVELOPMENT INSTITUTIONS, 1993-2001^a

Millions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000	2001
Financial institutions	39 709	40 656	43 516	44 701	45 760	57 928	42 770	37 740	42 290
African Development Bank	2 519	1 655	802	823	1 880	1 742	1 765	2 617	3 020
Asian Development Bank	5 426	3 864	5 759	5 878	9 648	6 208	5 158	5 912	5 370
Caribbean Development Bank	71	56	110	99	54	122	153	184	119
European Bank for Reconstruction and Development	2 103	2 232	2 616	2 774	2 625	2 658	2 784	2 901	3 276
Inter-American Development Bank	6 191	5 298	7 454	6 951	6 224	10 403	9 577	5 479	8 067
<i>of which:</i>									
Inter-American Investment Corporation	124	43	36	72	67	223	190	143	128
International Fund for Agricultural Development	383	364	414	447	430	443	434	409	434
World Bank Group	23 016	27 187	26 361	27 729	24 899	36 352	22 899	20 238	22 004
International Bank for Reconstruction and Development	15 098	16 427	15 950	15 325	15 098	24 687	13 789	10 699	11 709
International Development Association	5 345	7 282	5 973	6 490	5 345	7 325	5 691	5 861	6 859
International Finance Corporation	2 573	3 478	4 438	5 914	4 456	4 340	3 419	3 678	3 436
Operational agencies of the United Nations system	3 363	3 537	3 931	3 726	3 453	4 290	4 198	3 803	4 920
United Nations Development Programme ^b	1 031	1 036	1 014	1 231	1 529	1 764	1 632	1 458	1 526
United Nations Population Fund	206	278	340	285	322	326	245	171	236
United Nations Children's Fund	623	810	1 481	1 133	521	962	891	1 016	1 414
World Food Programme	1 503	1 413	1 096	1 077	1 081	1 238	1 430	1 158	1 744
Total commitments	43 072	44 193	47 447	48 427	49 213	62 218	46 968	41 543	47 210
Memo item:									
Commitments in units of 1990 purchasing power ^c	44 404	44 639	43 134	45 685	49 710	65 493	51 613	47 751	55 541

Source: Annual reports and information supplied by individual institutions.

^a Loans, grants, technical assistance and equity participation, as appropriate; all data are on a calendar-year basis.

^b Including United Nations Development Programme (UNDP)-administered funds.

^c Total commitments deflated by the United Nations index of manufactured export prices in dollars of developed economies: 1990=100.

Table A.28.
EXTERNAL DEBT AND DEBT INDICATORS FOR ECONOMIES IN TRANSITION, 1993-2000

Billions of dollars								
	1993	1994	1995	1996	1997	1998	1999	2000
All countries								
Total debt	126.9	135.6	156.6	163.1	172.1	202.9	211.8	215.9
Long-term	113.9	121.7	137.8	141.5	142.3	171.6	181.7	182.6
Concessional	14.6	13.3	15.2	15.6	13.4	15.0	19.0	17.8
Bilateral	14.3	13.0	14.5	14.6	12.0	13.1	16.1	14.6
Multilateral	0.2	0.3	0.6	1.0	1.4	1.9	2.9	3.2
Official, non-concessional	46.7	52.3	56.0	52.8	50.7	52.4	50.6	47.3
Bilateral	30.8	32.7	34.7	30.7	28.4	28.2	24.3	22.6
Multilateral	9.9	12.4	14.6	15.2	15.0	16.2	18.6	18.6
IMF	6.0	7.2	6.6	6.9	7.4	7.9	7.7	6.2
Private creditors	52.7	56.1	66.6	73.0	78.2	104.2	112.1	117.5
<i>of which:</i>								
Bonds ^a	11.8	28.2	32.0	30.3	28.0	31.7	33.7	32.2
Commercial banks ^a	29.3	12.8	15.2	19.8	21.3	21.6	18.7	18.0
Short-term	13.0	13.9	18.9	21.6	29.8	31.3	30.1	33.3
Russian Federation								
Total debt	112.4	122.3	121.7	126.7	127.7	177.7	174.4	160.3
Long-term	104.1	112.5	111.4	114.6	121.6	162.7	158.6	144.8
Concessional	0.9	1.1	1.2	1.1	1.0	1.0	0.3	0.3
Bilateral	0.9	1.1	1.2	1.1	1.0	1.0	0.3	0.3
Multilateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Official, non-concessional	56.2	66.4	66.1	74.7	75.9	87.0	86.1	82.2
Bilateral	52.4	60.6	54.5	59.4	57.4	61.1	63.9	63.5
Multilateral	1.3	1.5	2.0	2.8	5.3	6.6	6.9	7.0
IMF	2.5	4.2	9.6	12.5	13.2	19.3	15.2	11.6
Private creditors	47.1	45.0	44.1	38.7	44.7	74.7	72.2	62.2
<i>of which:</i>								
Bonds ^a	1.6	1.8	1.1	1.1	4.6	16.0	15.6	36.4
Commercial bank ^a	15.9	16.4	16.7	15.6	29.3	29.3	29.0	0.0
Short-term	8.3	9.9	10.4	12.1	6.1	15.0	15.7	15.5
Other Commonwealth of Independent States								
Total debt	9.5	14.7	19.9	21.7	27.0	32.8	33.2	32.0
Long-term	9.3	13.1	18.8	20.4	24.3	30.8	31.4	30.2
Concessional	0.8	1.0	1.6	2.8	2.9	3.8	7.6	6.9
Bilateral	0.8	0.9	1.2	2.1	1.8	2.4	5.8	4.9
Multilateral	0.0	0.1	0.4	0.7	1.0	1.4	1.8	2.0
Official, non-concessional	6.8	9.7	13.0	12.3	13.1	14.7	12.8	11.0
Bilateral	5.9	7.5	7.8	5.2	5.2	5.0	2.7	2.3
Multilateral	0.5	1.2	2.1	2.9	3.4	4.5	5.1	5.1
IMF	0.3	1.1	3.1	4.2	4.5	5.2	5.0	3.6
Private creditors	1.7	2.3	4.3	5.3	8.3	12.4	11.0	12.3
<i>of which:</i>								
Bonds ^a	0.0	0.0	1.2	1.3	1.7	3.3	3.1	3.5
Commercial bank ^a	0.3	0.3	0.4	0.5	1.4	1.5	1.5	1.4
Short-term	0.3	1.6	1.1	1.3	2.8	1.9	1.8	1.8

Table A.28 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000
Central and Eastern Europe								
Total debt	116.6	119.8	135.2	137.0	137.7	161.5	168.5	172.4
Long-term	103.9	107.6	117.5	118.8	113.6	135.1	143.1	144.2
Concessional	13.6	12.2	13.4	12.6	10.3	11.0	11.1	10.8
Bilateral	13.4	11.9	13.1	12.3	9.9	10.5	10.0	9.5
Multilateral	0.2	0.2	0.3	0.3	0.4	0.5	1.1	1.3
Official, non-concessional	39.4	41.8	42.0	39.5	36.6	36.5	36.3	34.7
Bilateral	24.9	25.2	26.9	25.5	23.1	23.1	21.5	20.1
Multilateral	9.1	11.0	12.1	11.8	11.0	11.0	12.4	12.3
IMF	5.4	5.7	3.1	2.2	2.5	2.4	2.4	2.2
Private creditors	50.9	53.6	62.1	66.7	66.7	87.6	95.7	98.7
of which:								
Bonds ^a	11.8	28.2	30.8	28.8	26.0	28.2	29.4	27.4
Commercial banks ^a	29.1	12.4	14.8	19.2	19.7	19.8	16.9	16.3
Short-term	12.7	12.3	17.7	18.3	24.1	26.4	25.4	28.2
Baltic States								
Total debt	0.7	1.1	1.5	4.4	7.4	8.6	10.1	11.5
Long-term	0.7	1.0	1.4	2.3	4.5	5.7	7.1	8.2
Concessional	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Bilateral	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Multilateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Official, non-concessional	0.5	0.7	1.0	1.1	1.1	1.2	1.5	1.3
Bilateral	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Multilateral	0.2	0.3	0.4	0.5	0.6	0.8	1.1	1.1
IMF	0.3	0.4	0.5	0.5	0.4	0.3	0.3	0.1
Private creditors								
of which:								
Bonds ^a	0.1	0.1	0.2	1.0	3.2	4.2	5.4	6.6
Commercial banks ^a	0.0	0.0	0.0	0.2	0.2	0.3	1.2	1.4
Short-term	0.0	0.0	0.1	2.1	2.9	2.9	3.0	3.3
Ratio of external debt to GNP								
Russian Federation	29.3	38.1	36.7	30.8	30.5	65.7	96.2	66.8
Other Commonwealth of Independent States	6.4	13.0	18.1	21.1	24.1	30.8	36.9	33.5
Central and Eastern Europe	49.9	45.0	43.2	40.2	41.6	44.2	47.8	48.3
Baltic States	4.7	7.0	9.4	26.1	39.5	41.8	46.8	50.3
Ratio of external debt to exports								
Russian Federation	170.9	159.4	129.0	120.7	122.5	201.8	204.6	138.4
Other Commonwealth of Independent States	89.8	50.5	51.7	49.0	58.1	80.4	83.0	62.3
Central and Eastern Europe	141.7	121.5	101.5	96.5	97.8	105.7	115.9	102.8
Baltic States	14.4	18.1	18.9	43.5	61.0	67.4	87.9	83.7
Ratio of debt service to exports								
Russian Federation	3.3	4.5	6.5	7.0	6.7	12.4	14.1	10.1
Other Commonwealth of Independent States	2.7	2.7	5.4	5.4	6.8	11.2	13.9	14.4
Central and Eastern Europe	12.3	15.5	14.5	16.5	15.1	16.3	21.0	19.2
Baltic States	0.7	2.1	1.2	3.3	7.1	8.5	13.5	13.8

Source: United Nations, based on IMF and World Bank.

^a Government or government-guaranteed debt only.

Table A.29.

EXTERNAL DEBT OF NET-DEBTOR DEVELOPING COUNTRIES, 1993-2001

Billions of dollars									
	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
All countries^b									
Total debt	1 510.0	1 671.3	1 844.3	1 922.1	1 956.6	2 087.8	2 085.8	2 027.6	2 071.3
Long-term	1 216.3	1 355.1	1 461.5	1 506.9	1 561.1	1 754.4	1 773.7	1 728.7	1 760.8
Concessional	364.0	393.4	404.8	393.9	363.7	368.7	386.8	370.7	367.2
Bilateral	271.4	288.0	290.8	276.1	244.3	239.2	252.1	235.3	231.6
Multilateral ^c	92.6	105.4	114.0	117.8	119.5	129.5	134.8	135.4	135.7
Official, non-concessional	307.8	339.0	371.2	340.9	333.1	386.4	376.0	364.9	397.5
Bilateral	132.5	152.1	168.2	152.0	136.2	147.9	139.2	137.5	152.1
Multilateral	149.3	161.0	166.4	156.4	154.8	180.2	189.7	189.2	191.7
IMF	25.9	25.9	36.5	32.5	42.0	58.4	47.1	38.2	53.7
Private creditors	544.5	622.8	685.5	772.0	864.3	999.3	1 010.8	993.1	955.5
of which:									
Bonds ^d	147.6	204.5	223.9	261.5	275.3	297.8	317.1	322.3	311.3
Commercial banks ^d	170.8	133.6	137.4	134.3	146.2	172.4	158.7	139.8	152.4
Short-term	293.8	316.2	382.8	415.3	395.5	333.4	312.1	298.9	310.5
Memo items:									
Principal arrears on long-term debt	65.8	72.4	77.6	70.9	63.5	72.7	69.8	49.9	23.4
Interest arrears on long-term debt	39.7	36.6	36.0	29.4	25.1	28.2	30.0	24.5	23.9
Latin America									
Total debt	546.6	585.1	648.7	670.3	701.9	776.3	796.2	774.4	787.1
Long-term	436.0	469.3	521.1	549.1	574.9	657.3	686.3	670.6	683.6
Concessional	59.5	62.3	64.2	61.2	59.9	33.7	35.1	31.8	32.4
Bilateral	52.3	54.5	55.8	52.2	50.2	23.5	24.0	20.7	21.0
Multilateral ^c	7.2	7.8	8.4	9.0	9.7	10.2	11.1	11.1	11.5
Official, non-concessional	123.8	128.1	153.0	132.9	115.9	146.6	147.7	137.8	152.5
Bilateral	51.7	53.4	62.1	47.5	36.6	51.2	46.9	47.2	42.6
Multilateral	58.2	61.3	64.7	62.0	61.2	73.9	81.0	82.5	86.6
IMF	13.8	13.3	26.2	23.3	18.1	21.5	19.8	8.2	23.2
Private creditors	252.7	279.0	304.0	355.0	399.0	476.9	503.5	501.0	498.7
of which:									
Bonds ^d	103.0	152.8	165.5	195.5	193.2	205.0	215.2	213.0	217.3
Commercial banks ^d	76.6	39.4	37.6	31.2	32.4	41.4	34.0	32.2	29.9
Short-term	110.6	115.8	127.6	121.3	127.1	119.0	109.9	103.8	103.5
Memo items:									
Principal arrears on long-term debt	20.5	20.3	16.3	7.5	6.4	5.7	5.9	4.2	4.2
Interest arrears on long-term debt	18.6	13.3	10.2	3.6	2.8	3.1	1.9	1.7	1.7
Africa									
Total debt	290.2	315.5	335.1	329.4	313.6	324.0	306.5	298.8	..
Long-term	250.2	275.5	290.2	282.1	267.8	275.9	259.0	259.6	..
Concessional	100.8	110.7	119.2	125.0	122.8	131.0	125.0	121.1	..
Bilateral	64.2	68.7	71.9	75.9	72.9	77.0	70.5	66.7	..
Multilateral ^c	36.6	41.9	47.3	49.2	49.9	54.1	54.5	54.4	..
Official, non-concessional	81.0	91.4	97.0	90.0	82.7	84.8	76.5	84.5	..

Table A.29 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
Bilateral	47.8	55.2	60.5	55.3	52.0	53.6	47.8	58.8	..
Multilateral	28.2	30.4	31.3	29.3	26.2	27.0	24.9	22.4	..
IMF	5.0	5.8	5.2	5.4	4.5	4.3	3.8	3.3	..
Private creditors	68.4	73.4	74.0	67.0	62.3	60.0	57.5	54.1	..
<i>of which:</i>									
Bonds ^d	2.9	4.5	5.3	5.9	9.7	9.8	10.6	10.6	..
Commercial banks ^d	21.1	21.5	22.5	24.2	20.3	18.7	16.3	15.4	..
Short-term	39.9	40.0	44.9	47.3	45.8	48.2	47.5	39.2	..
<i>Memo items:</i>									
Principal arrears on long-term debt	31.9	35.4	41.6	41.0	39.0	43.7	39.0	27.2	..
Interest arrears on long-term debt	17.0	18.6	20.6	20.2	18.3	20.4	19.7	14.9	..
Sub-Saharan Africa									
Total debt	153.4	162.1	171.8	169.7	163.5	170.3	159.2	161.8	158.2
Long-term	129.0	139.6	147.0	144.1	139.7	146.5	136.1	150.8	146.2
Concessional	69.6	77.7	81.9	84.4	84.4	91.2	86.2	67.4	70.7
Bilateral	36.6	38.3	39.7	40.2	39.9	43.0	37.9	24.6	21.4
Multilateral ^c	33.0	39.4	42.2	44.2	44.5	48.2	48.4	42.8	49.3
Official, non-concessional	35.3	37.0	39.3	36.5	32.9	33.8	29.6	47.1	39.6
Bilateral	21.6	24.6	25.7	24.6	22.5	23.3	20.5	35.4	34.5
Multilateral	10.9	11.1	11.1	10.0	8.8	8.7	7.7	5.0	2.7
IMF	2.7	1.3	2.5	1.9	1.6	1.8	1.4	6.7	2.4
Private creditors	24.1	24.8	25.8	23.3	22.4	21.5	20.2	36.4	35.8
<i>of which:</i>									
Bonds ^d	0.2	0.2	0.3	0.2	2.7	2.6	2.5	9.2	9.1
Commercial banks ^d	8.2	8.5	9.3	11.6	8.3	7.8	7.2	7.4	7.7
Short-term	24.4	22.5	24.8	25.5	23.8	23.8	23.0	10.9	12.0
<i>Memo items:</i>									
Principal arrears on long-term debt	26.8	28.3	32.0	30.2	27.2	29.9	24.2	11.3	..
Interest arrears on long-term debt	13.9	14.1	15.3	14.6	12.7	13.9	13.3	2.3	..
Asia									
Total debt	673.3	770.7	860.5	922.4	941.1	987.5	983.2	954.4	..
Long-term	530.1	610.3	650.2	675.7	718.5	821.3	828.4	798.5	..
Concessional	203.6	220.4	221.5	207.7	180.6	203.4	225.7	216.8	..
Bilateral	154.9	164.7	163.2	148.1	121.2	138.7	157.5	147.9	..
Multilateral ^c	48.7	55.7	58.3	59.6	59.4	64.7	68.2	68.8	..
Official, non-concessional	103.0	119.6	121.1	118.0	134.9	155.5	152.8	143.7	..
Bilateral	33.1	43.6	45.6	49.1	47.6	43.1	44.5	31.6	..
Multilateral	62.9	69.3	70.4	65.1	67.4	79.3	83.8	84.3	..
IMF	7.0	6.7	5.1	3.8	19.9	33.1	24.6	27.8	..
Private creditors	223.4	270.3	307.6	350.0	403.0	462.3	449.9	438.0	..
<i>of which:</i>									
Bonds ^d	41.7	47.2	53.0	60.0	72.4	83.0	91.3	98.7	..
Commercial banks ^d	73.1	72.7	77.3	78.9	93.5	112.3	108.4	92.2	..
Short-term	143.3	160.4	210.3	246.7	222.6	166.2	154.7	155.9	..

Table A.29 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
<i>Memo items:</i>									
Principal arrears on long-term debt	13.4	16.7	19.7	22.4	18.1	23.3	24.9	18.5	..
Interest arrears on long-term debt	4.1	4.7	5.2	5.6	4.0	4.7	8.3	8.0	..
Least developed countries									
Total debt	134.3	144.4	148.7	145.6	140.4	149.6	144.2	139.9	..
Long-term	117.7	126.6	130.7	128.6	123.6	131.5	126.2	122.1	..
Concessional	81.7	87.7	90.1	91.6	90.7	98.3	95.7	93.3	..
Bilateral	42.2	42.9	41.9	41.0	40.0	43.2	39.5	37.4	..
Multilateral ^c	39.4	44.8	48.2	50.6	50.7	55.1	56.2	55.9	..
Official, non-concessional	21.5	22.5	23.6	21.4	19.4	20.3	18.6	17.2	..
Bilateral	15.4	16.3	17.0	16.2	14.7	15.3	13.4	12.8	..
Multilateral	3.5	3.6	3.6	3.4	3.0	3.0	2.8	2.5	..
IMF	2.5	2.6	3.1	1.8	1.6	2.0	2.4	1.9	..
Private creditors	14.6	16.5	17.0	15.6	13.5	12.9	12.0	11.7	..
of which:									
Bonds ^d	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
Commercial banks ^d	3.1	3.6	4.0	6.7	6.4	5.5	5.0	5.1	..
Short-term	16.5	17.8	18.0	17.0	16.9	18.1	18.0	17.7	..
<i>Memo items:</i>									
Principal arrears on long-term debt	26.3	29.8	33.4	31.6	29.3	32.0	26.6	26.8	..
Interest arrears on long-term debt	12.1	13.9	14.8	13.9	13.0	14.2	13.5	13.6	..

Source: UN/DESA, based on data of IMF, OECD and World Bank.

^a Estimate.

^b Debt of 122 economies, drawn previously from the Debtor Reporting System of the World Bank (107) countries. For non-reporting countries, data are drawn from the Creditor Reporting System of OECD (15 economies), excluding non-guaranteed bank debt of offshore financial centres, much of which is not the debt of the local economies.

^c Including concessional facilities of IMF.

^d Government or government-guaranteed debt only.

Table A.30.

DEBT INDICATORS AND DEBT-SERVICE PAYMENTS FOR NET-DEBTOR DEVELOPING COUNTRIES, 1993-2001

	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
	Debt indicators (percentage)								
Ratio of external debt to GNP									
All countries	40.9	39.9	38.6	36.4	37.3	42.3	42.4	38.1	37.2
<i>of which:</i>									
Latin America	40.7	38.0	39.9	38.0	36.0	39.9	46.4	40.9	43.3
Africa	74.0	78.7	74.8	68.9	63.7	67.2	61.6	60.6	..
Asia	34.4	34.3	31.8	30.4	33.6	39.4	36.1	32.4	..
<i>Memo items:</i>									
Sub-Saharan Africa	122.1	146.4	135.7	121.6	117.7	123.1	108.3	113.0	109.7
Least developed countries	118.7	138.2	125.6	111.7	101.4	107.0	105.0	99.7	..
Ratio of external debt to exports									
All countries	182.5	173.3	157.1	148.3	139.2	154.5	145.8	118.4	116.6
<i>of which:</i>									
Latin America	249.3	230.0	212.8	200.4	188.9	208.1	204.6	167.2	167.0
Africa	238.4	254.9	229.5	206.2	192.8	220.2	198.2	163.9	..
Asia	138.5	131.5	119.0	115.0	108.0	118.8	99.4	89.5	..
<i>Memo items:</i>									
Sub-Saharan Africa	390.5	401.2	355.6	319.1	328.7	370.3	303.1	272.5	234.1
Least developed countries	556.2	549.0	460.6	415.3	383.0	426.3	413.6	312.5	..
Ratio of debt service to exports									
All countries	19.8	18.0	18.0	19.0	19.5	19.6	23.7	18.9	18.2
<i>of which:</i>									
Latin America	27.5	25.1	26.5	31.7	35.6	32.5	41.6	35.7	33.3
Africa	22.9	19.6	18.3	16.6	16.5	17.2	16.5	13.1	..
Asia	15.6	14.5	14.3	14.1	13.2	14.2	15.3	12.6	..
<i>Memo items:</i>									
Sub-Saharan Africa	15.3	17.8	20.4	16.5	15.9	18.0	17.3	10.5	12.1
Least developed countries	12.3	12.0	19.5	12.4	11.1	11.9	12.8	9.8	..

Table A.30 (continued)

	1993	1994	1995	1996	1997	1998	1999	2000	2001 ^a
	Debt-service payments (billions of dollars)								
All countries									
Total debt service	164.2	173.5	211.0	246.0	274.8	265.0	338.8	325.1	322.8
Interest payments <i>of which:</i>	62.7	69.2	88.5	92.9	96.5	100.6	104.4	108.7	107.4
Non-concessional	56.6	63.0	81.9	86.3	90.6	94.7	98.1	102.7	98.5
Latin America									
Total debt service	60.7	64.2	81.0	106.5	132.8	121.6	162.3	167.3	156.8
Interest payments <i>of which:</i>	23.9	27.9	37.1	39.6	41.9	44.5	50.6	55.5	51.1
Non-concessional	23.0	26.9	36.0	38.5	41.1	43.6	49.7	54.6	50.2
Africa									
Total debt service	27.9	24.2	26.6	26.6	26.9	25.3	25.5	23.8	..
Interest payments <i>of which:</i>	9.8	9.5	10.5	11.0	9.5	9.6	9.2	8.1	..
Non-concessional	8.4	8.2	9.0	9.3	8.0	7.9	7.6	6.8	..
Asia									
Total debt service	75.7	85.1	103.4	112.9	115.2	118.1	150.9	134.0	..
Interest payments <i>of which:</i>	28.9	31.7	40.9	42.3	45.1	46.6	44.6	45.1	..
Non-concessional	25.2	27.9	36.9	38.5	41.5	43.3	40.8	41.3	..
Memo items:									
Sub-Saharan Africa									
Total debt service	5.7	6.9	9.5	8.4	7.9	8.3	8.2	6.3	8.1
Interest payments <i>of which:</i>	2.4	2.7	3.1	3.2	2.8	3.0	2.9	2.5	3.3
Non-concessional	1.9	2.1	2.5	2.5	2.2	2.2	2.1	2.3	3.0
Least developed countries									
Total debt service	2.9	3.2	6.3	4.3	4.1	4.2	4.5	4.4	..
Interest payments <i>of which:</i>	1.2	1.2	1.7	1.4	1.2	1.2	1.3	1.2	..
Non-concessional	0.7	0.6	1.1	0.8	0.6	0.6	0.6	0.6	..

Source: United Nations, based on data of IMF, OECD and World Bank.

^a Preliminary estimate.

