

HUMAN DEVELOPMENT REPORT 1992



Published
for the United Nations
Development Programme
(UNDP)

New York Oxford
Oxford University Press
1992

Oxford University Press
Oxford New York Toronto
Delhi Bombay Calcutta Madras Karachi
Kuala Lumpur Singapore Hong Kong Tokyo
Nairobi Dar es Salaam Cape Town
Melbourne Auckland

and associated companies in
Berlin Ibadan

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ISBN 0-19-507773-3 (paper)
ISBN 0-19-507772-5

9 8 7 6 5 4 3 2 1
Printed in the United States of America on acid-free, recycled paper.

Design: Gerald Quinn, Quinn Information Design, Cabin John, Maryland
Editing, desktop composition and production management: Bruce Ross-Larson, Kim Bieler, Mary Mahy and Katrina Van Duyn, American Writing Corporation, Washington, D.C.



Foreword

The startling events of the past two years have led to the end of a world divided between East and West and to a new age of political and economic freedom.

Never before has there been broader consensus on what is needed for development. Economic development can be sustained only by unleashing the creative energies of all people through competitive and efficient markets. And political development requires the democratic participation of all people in shaping their own destiny.

Despite the overwhelming consensus on people-centred strategies, we still live in a world of unequal opportunities. *Human Development Report 1992* takes a look at poor nations and poor people in a global perspective.

The two previous Reports showed how national budgets could be redirected from military spending and prestige projects into priority areas of human development, such as basic health and universal primary education. This year's Report concentrates on the international dimensions of human development. It looks at how immigration policies, trade barriers and international debt contribute to the continuing disparity between rich and poor nations.

One of the great lessons of recent decades is that competitive markets are the best guarantee for human development. They open up opportunities for creative enterprise, and they increase the access of people to a whole range of economic choices.

Today, national markets are being liberalized all over the world—from Poland to Pakistan, and from Russia to Mexico. Stifling economic controls are being rapidly dismantled. Public enterprises are being

privatized. Consumer demand is replacing centralized planning.

It is ironic that while national markets are opening, global markets remain restricted. Where can developing nations sell their products unless global markets are also freed of protectionist restraints?

Tariff and non-tariff trade barriers imposed by industrial countries cost developing countries about \$40 billion a year in lost export revenues. Immigration laws block the flow of the unemployed or underemployed to industrial countries where job opportunities could significantly increase the current \$25 billion a year in worker remittances.

The message that comes out loud and clear from *Human Development Report 1992* is that the international community must strengthen its support to global human development. It must do this not only through increasing aid, but through improving developing countries' access to global markets. This would dramatically increase the capital flows from North to South—and make the resources available to developing countries for urgently needed investment in their people. For as the Report states, to eliminate chronic dependency on primary commodities and aid, developing countries must invest heavily in the human capital necessary to move into the 21st century on an equal footing with the industrial countries.

I would like to express my appreciation for the excellent work that the Report team has accomplished under the guidance of Mahbub ul Haq, former Minister of Planning and Finance of Pakistan, who now serves as my Special Adviser. The views set forth in this Report have emerged from the

team's professional, frank and candid analysis of the issues. They do not necessarily reflect the views of UNDP, its Governing Council or other member governments of UNDP. The usefulness of a report such as this continues to depend on its professional

independence and intellectual integrity.

I am confident that the 1992 Report will once again make a major contribution to the international development debate and to focusing world attention on people and their development needs.



New York
March 2, 1992

William H. Draper III

**Team for the preparation of
*Human Development Report 1992***

Special Adviser
Mahbub ul Haq

UNDP Team

Director: Inge Kaul
Members: Leo Goldstone
Bernard Hausner, Saraswathi Menon,
Moez Doraïd, Kees Kingma, with
Beth Ebel, Luis Gomez-Echeverri,
Gillian Dell, Jeni Klugman, Laura Mourino,
Karen Plafker and Peter Stalker (editor).

Panel of consultants

Dragoslav Avramovic,
Meghnad Desai, Keith Griffin,
Azizur Rahman Khan, Paul Streeten,
and Herbert Wulf, with valuable
contributions from Akilagpa Sawyerr,
Arjun Sengupta and John Williamson.

Acknowledgements

The preparation of the Report benefited greatly from the valuable contributions by numerous organizations and individuals.

Several international agencies shared their experience and research with the team. The Report draws on the statistical databases and material provided by the UN Statistical Office, UN Population Division, UN Centre on Transnational Corporations, UN Centre for Human Rights, UNOV, UNICEF, UNCTAD, UNFPA, UNU, WHO, ITC, ILO, FAO, UNESCO, The World Bank, IMF, WMO, OECD, SIPRI, UNIDO, UNECE, WFP, UNCSDHA, EUROSTAT, IPU, ICUS, World Resources Institute and World Priorities Inc. Special contributions were received from UNCTAD and the International Organization for Migration.

Invaluable comments and data in areas where none were otherwise available were also provided by several UNDP field offices, UNDP's Regional Bureaux, the Bureau for Programme Policy and Evaluation, the United Nations Development Fund for Women and the Office for Project Services.

Many colleagues in UNDP contributed comments and observations on earlier drafts of the Report. In particular, the authors wish to thank Wally Abbott, Stephen Adei, Bayani Aguirre, Aldo Ajello, Ali Attiga, J. Russell Boner, Stephen Browne, Sharon Capeling-Alakija, Soren Dyssegard, Gustav Edgren, Daan Everts, Peter Gall, Luis Maria Gomez, Trevor Gordon-Somers, Michael Gucovsky, Nadia Hijab, Arthur Holcombe, Narinder Kakar, Basem Khader, Uner Kirdar, Anton Kruiderink, Elizabeth Lwanga-Okwenge, Paul Matthews, Jehan Raheem, Ingolf Schuetz-Mueller, Krishan G. Singh, Janne

Teller, Sarah Timpson, Emma Torres, David Whaley and Fernando Zumbado. Many other useful suggestions were received from UNDP colleagues—too numerous to acknowledge individually but in all cases most gratefully received.

Secretarial and administrative support for the Report's preparation was provided by Renuka Corea, Linda Pigon-Rebello, Ida Simons, Flora Aller, Gabriella Charles and Karen Svadlenak. The Report team was assisted in background research by Anette Andersson, Manfred Fischer, Isabelle Igert, Lisa Lundal, Maya Matthews and Carine van Oosteren. Assistance for the Report's production was provided by Frank Burdette, Toni Burnham, Eileen Hanlon, Antje Kharchi, Alison Strong and Lauralee Wilson.

The authors of the Report would also like to acknowledge with great appreciation the intellectual advice and encouragement from Irma Adelman, Russel Barsh, Jagdish Bhagwati, Havelock Brewster, Ricardo Ffrench-Davis, Khalil Hamdani, Michael Hopkins, Richard Jolly, Lawrence Klein, Robert Lucas, Jan Martenson, Carlos Massad, Jacky Mathonnat, Goran Ohlin, David Pearce, Graham Pyatt, Gustav Ranis, Karl Sauvant, Alexander Shakow, Frances Stewart, Wouter Tims, Danilo Türk and the members of the Expert Group on Human Freedom and Development.

The authors of the Report owe a deep debt to William H. Draper III, UNDP Administrator. His commitment to and belief in the primacy of people and their contribution to creativity, productivity, innovation and development have been a source of great encouragement and inspiration throughout.

Abbreviations

DAC	Development Assistance Committee
EC	European Community
ECA	Economic Commission for Africa
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ESAF	Enhanced Structural Adjustment Facility
ESCAP	Economic and Social Commission for Asia and the Pacific
EUROSTAT	Statistical Office of the European Communities
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GEF	Global Environment Facility
HDI	Human development index
IAF	Intermediate Assistance Facility
IBRD	International Bank for Reconstruction and Development (World Bank)
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
ILO	International Labour Organisation
IMF	International Monetary Fund
LIBOR	London interbank offered rate
OAS	Organization of American States
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
PFI	Political freedom index
SAF	Structural Adjustment Facility
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOV	United Nations Office at Vienna
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization
WIDER	World Institute for Development Economics Research

Contents

OVERVIEW 1

CHAPTER ONE

The concept and measurement of human development	12
Sustainable human development	13
The human development index	19
Human development in action	24

CHAPTER TWO

Political freedom and human development	26
Freedom and civil society	26
Political freedom and economic growth	27
The measurement of political freedom	27

CHAPTER THREE

The widening gap in global opportunities	34
Income disparities	34
Economic growth disparities	35
Disparities in market opportunities	38
Human capital disparities	39
Official development assistance	41
International debt	45

CHAPTER FOUR

Global markets, poor nations, poor people	48
Financial markets	48
Labour markets	54
Markets in goods and services	58
Losses from unequal access	66
Regional economic groups	67
National policies for global competitive advantage	68
Country studies	71

CHAPTER FIVE

A new vision for global human development	74
The existing framework of global institutions	74
Global institutions for the 21st century	78

A transitional strategy	79
Towards a new global compact	87

Technical notes	91
Bibliographic note	105
References	107

HUMAN DEVELOPMENT INDICATORS 119

BOXES

1.1	Issues raised by the 1990 and 1991 Human Development Reports	13
1.2	Balance sheet of human development—developing countries	14
1.3	Balance sheet of human development—industrial countries	15
1.4	Institutional capacity for sustainable development	16
2.1	The tide of freedom	28
2.2	An illustrative checklist of indicators of political freedom	31
3.1	Investing in Africa's people	40
3.2	The Trinidad debt reduction proposals	47
3.3	Independent expert group proposals	47
4.1	Whoever hath shall be given more	53
4.2	The brain drain from poor countries to rich	57
4.3	Why people migrate	58
4.4	Workers to work—or work to workers	59
4.5	Environmental protection and international trade	63
4.6	Productivity benefits from education	69
5.1	A Development Security Council	82
5.2	Restructuring the Global Environment Facility	83
5.3	International taxation for sustainable development	84
5.4	Reforming the United Nations	88
5.5	Honesty International	89

TABLES

1.1	HDI ranking for industrial countries	19
1.2	HDI ranking for developing countries	20
1.3	Gender-sensitive HDI	21
1.4	Income-distribution-adjusted HDI	22
2.1	Political freedom index aggregates	32
3.1	Global income disparity, 1960-89	36
3.2	Global economy, 1989	36
3.3	Disparity between rich and poor countries and between rich and poor people, 1988	36
3.4	Widening economic gaps between rich and poor	36
3.5	GNP per capita growth rates	36
3.6	North-South disparity in human development, 1960-90	37
3.7	Widening economic gaps between regions	37
3.8	GNP per capita annual growth rates	37
3.9	ODA by region, 1989/90	42
3.10	Top 20 recipients, 1990	42

3.11	ODA to the poorest	42
3.12	ODA shares by income group	42
3.13	ODA to big military spenders, 1989/90	42
3.14	Human priorities in bilateral aid	43
3.15	Human priorities in multilateral aid	43
3.16	Applying the UN ODA target progressively	44
4.1	Long-term real interest rates in six industrial countries, 1890-1989	49
4.2	Real interest rates on foreign debt paid by selected major debtors, 1980-85	49
4.3	Net financial transfers on long-term lending to developing countries	50
4.4	IMF net transfers to developing countries	51
4.5	World Bank: higher lending, lower transfers, 1985-91	51
4.6	Inflows of foreign direct investment to developing regions	52
4.7	Rate of return on non-residential capital stock in major industrial economies, 1975-90	53
4.8	International economic migrants from the developing countries	54
4.9	Immigration of skilled workers	55
4.10	Workers' remittances, 1989	56
4.11	Top 10 developing countries' manufactured exports	69
5.1	Trends in global military spending	85
5.2	Peace dividend: actual and potential	87
5.3	Military-social spending imbalance in the Third World	87
5.4	Soldier-teacher ratios in the Third World	87

FIGURES

1.1	Adjusting the HDI for male-female disparities, 1990	21
1.2	Adjusting the HDI for income distribution, 1990	22
1.3	Tracking the HDI over time	23
3.1	Income disparity between the richest and poorest 20% of the world's population	34
3.2	Global economic disparities	35
3.3	Between countries, between people	36
3.4	People and growth	38
3.5	North-South gaps in human development	39
3.6	Distribution of ODA	41
3.7	ODA and human expenditure	43
3.8	Debt-related net transfers	45
4.1	Disparity in real interest rates between developing and industrial countries	49
4.2	Net transfers to developing countries	50
4.3	Net transfers to developing countries from Bretton Woods institutions	51
4.4	International migrants from developing countries	54
4.5	Shifting demographic balance	55
4.6	Migration of skilled workers from developing countries	56
4.7	Cost of global markets to developing countries	67
5.1	Global military spending, 1960-90	85
5.2	Peace dividend, 1990-2000	86



Overview

The world has a unique opportunity in the current decade to use global markets for the benefit of all nations and all people.

Human Development Report 1992 looks at the workings of these global markets—at how they meet, or fail to meet, the needs of the world's poorest people.

The global issues in this Report supplement the analysis of domestic policy issues in the first two Reports, which stressed that the real causes of poverty and human deprivation lie deep in the national policy actions of the developing countries. Improvements in external environment can help greatly, but they can never substitute for domestic reforms.

This Report attempts to place global markets in proper perspective. Competitive markets are the best guarantee for efficient production. But these markets must be open to all the people, they require a skilfully crafted regulatory framework, and they must be supplemented by judicious social policy action. "It is not a question of state or market: each has a large and irreplaceable role", as World Bank's *World Development Report 1991* aptly summed up.

If global markets were truly open, they would allow capital, labour and goods to flow freely round the world—and help equalize economic opportunities for all. But global markets are neither free nor efficient. At a time when national markets are opening, global markets remain greatly restricted. The developing countries, with some notable exceptions, are finding it difficult to exploit fully the potential of these markets. This reflects the weakness in their policies and the restrictions on global markets.

This Report analyses global markets from a human perspective. Markets may be im-

pressive economically or technologically. But they are of little value if they do not serve human development. Markets are the means. Human development is the end.

The Report presents a disturbing new analysis of the global distribution of income and opportunities—demonstrating that income disparities have in recent years widened dramatically.

In 1960, the richest 20% of the world's population had incomes 30 times greater than the poorest 20%. By 1990, the richest 20% were getting 60 times more. And this comparison is based on the distribution between rich and poor *countries*. Adding the maldistribution within countries, the richest 20% of the world's *people* get at least 150 times more than the poorest 20%.

How can such disparities persist and even widen? Why do world markets seem not to have benefited the poorest? The Report identifies two main reasons.

First, where world trade is completely free and open—as in financial markets—it generally works to the benefit of the strongest. Developing countries enter the market as unequal partners—and leave with unequal rewards.

Second, in precisely those areas where developing countries may have a competitive edge—as in labour-intensive manufactures and the export of unskilled labour—the market rules are often changed to prevent free and open competition.

The Report concludes that if developing countries are to trade on a more equal basis, they will need massive investments in people—because knowledge and the mastery of new technology are a country's best competitive advantage today. The Report also argues for major changes to enable

Markets are the means. Human development is the end.

The issue is not only how much economic growth, but what kind of growth

global markets to work more efficiently and equitably.

The concept of human development

Previous *Human Development Reports* have defined human development as the process of enlarging the range of people's choices—increasing their opportunities for education, health care, income and employment, and covering the full range of human choices from a sound physical environment to economic and political freedoms.

While many of the policy messages of human development are widely understood, some misunderstandings still exist. There is a real danger that the concept of human development may become more a fashion than a practice, more a slogan than a blueprint for action.

Some analysts have incorrectly described human development as antigrowth, arguing that it focuses on the distribution rather than the generation of income, that it is a social rather than a developmental concern. In reality, nothing could be further from the truth. Human development is concerned both with developing human capabilities *and* with using them productively. The former requires investments in people, the latter that people contribute to GNP growth and employment. Both sides of the equation are essential.

Another misconception is that human development is primarily sectoral—concerned with investments in education, health and other social services. This is incorrect. Development *of* people is certainly vital, but it is only one part of the picture. Human development also means development *for* people, including the creation of economic opportunities for all. And it means development *by* people, requiring participatory approaches. Human development encompasses all three aspects, not just one.

Yet another misunderstanding is that human development strategies are valid only for the poorest societies, with the primary goal of satisfying basic needs. It is true that human needs and goals are at the centre of such strategies. But these goals can range from the most basic ones of human survival to the most advanced human agenda of

modern science and technology. People's choices take centre stage, but the choices differ at different stages of development.

Human development is thus a broad and comprehensive concept. It covers all human choices in all societies at all stages of development. It broadens the development dialogue from a discussion of mere *means* (GNP growth) to a discussion of the ultimate *ends*. It is as concerned with the generation of economic growth as with its distribution, as concerned with basic needs as with the entire spectrum of human aspirations, as concerned with the human dilemmas of the North as with the human deprivation in the South. The concept of human development does not start with any predetermined model. It draws its inspiration from the long-term goals of a society. It weaves development around people, not people around development.

This year's Report furthers the exploration of human development by considering the interaction between people and their natural environment. If the objective of development is to improve people's choices, it must do so not only for the current generation but also for future generations. In other words, development must be sustainable.

Global poverty is one of the greatest threats to the sustainability of the physical environment and to the sustainability of human life. Most of the poor live in the most ecologically vulnerable areas—80% of the poor in Latin America, 60% in Asia and 50% in Africa. They overuse their marginal lands for fuel wood and for subsistence and cash-crop production, further endangering their physical environment, their health and the lives of their children. In developing countries, it is not the quality of life that is at risk—it is life itself.

For these societies, there simply is no choice between economic growth and environmental protection. Growth is not an option—it is an imperative. The issue is not only *how much* economic growth, but *what kind* of growth. The growth models of developing and industrial countries must become models of sustainable human development.

For industrial societies, the options are larger. They can afford to slow down their energy-intensive material growth and nev-

ertheless improve their well-being. They must adopt new technologies and comprehensive policies to reduce the pressures they put on the carrying capacity of the earth.

Environmental concerns also differ at different stages of development. The industrial countries are preoccupied with the destruction of the ozone layer and global warming—resulting from overconsumption of natural resources. The concerns of the developing countries are more immediate: water and land. Polluted water is a threat to life, and eroded land is a threat to livelihood.

The Report discusses many concrete policies to make development sustainable—ranging from national capacity building to payments for ecological space to automatic sources of finance to new institutions for sustainable development. It also offers proposals on how to integrate environmental concerns in the measurement of human development.

The human development index

Human Development Report 1990 introduced a new human development index (HDI), which combines life expectancy, educational attainment and income indicators to give a composite measure of human development. This Report updates the index with the latest available information. All the components of this year's index are based on 1990 data.

The updating of HDI has altered the rankings for many countries. In the ranking of industrial countries, Canada has displaced Japan at the top though Romania still lingers at the bottom. For the developing countries, Barbados remains at the top, while Guinea has replaced Sierra Leone at the bottom.

The HDI is an average for each country. It does not reveal disparities among different social, economic or regional groups. But for a selected group of countries for which data are available, separate HDIs have been prepared to account for gender, income, and regional differences. In addition, HDIs have been prepared for a series of earlier years, so that changes in human development can be tracked over time.

Human Development Report 1991 pro-

posed a new human freedom index (HFI). Subsequent debate revealed that much more conceptual and methodological work is required for a quantification of freedom. So, this year a new methodology is being suggested for the construction of a political freedom index (PFI) to assess the status of human rights according to generally accepted concepts and values.

Indices such as the HDI and the PFI cannot hope to reflect the breadth and complexity of the questions they cover. But they can help stimulate and clarify debate on subjects whose difficult and frequently controversial nature often permits them to escape full national and international attention. The debate on the nature and measurement of human development will continue in future Reports.

Each Report focuses on one important theme. Earlier Reports looked at human development at the national level. This year, the Report reviews human development in a global context. It comes to five major conclusions.

1. Economic growth does not automatically improve people's lives, either within nations or internationally.

Income disparities within countries are considerable. The worst national disparity is in Brazil: 26 times between the richest 20% of the people and the poorest 20% according to their per capita income. But the international disparity is far greater: today, it is at least 150 times—having doubled over the past 30 years.

The link between economic growth and human development breaks down at the international level for many of the same reasons as it does at the national level.

The poor have limited access to credit, capital, technology and other production inputs in their countries. Not regarded as creditworthy, they often turn to money lenders and to the informal sector for their needs. The situation is similar, if not worse, at the international level. The poorest 20% of the world's population receives only 0.2% of global commercial bank lending, 1.3% of global investment, 1% of global trade and 1.4% of global income.

The richest 20% of the world's people are at least 150 times richer than the poorest 20%

Disparities in technology and information systems have widened

Many poor countries are already being marginalized in the world trading system—particularly Sub-Saharan Africa and the least developed countries. The share of Sub-Saharan Africa in global trade has been reduced to a quarter of its 1960 level; the share of the least developed countries has been halved during the same period. The poor—unless helped through vigorous policy action—tend to drop out of the market-place, whether within nations or at the international level.

Global disparities in indicators of basic human survival (primary education, life expectancy, infant and child mortality) have narrowed considerably during the past three decades. But disparities in technology and information systems have tended to widen. The countries of the North have, on a per capita basis, nine times the number of scientists and technical personnel in the South, nearly five times the tertiary enrolment ratio and 24 times more investment in technological research. They also have a far superior communications infrastructure, with 18 times as many telephone connections per capita, six times as many radios and eight times as many newspapers. Access to technology is particularly well-guarded. And in global competition, this edge in technology and information proves decisive.

Much of the policy and institutional framework that creates a better link between economic growth and human development at the national level is simply missing at the international level.

- Within nations, people can move in search of employment and income-earning opportunities. Across nations, immigration laws deny workers the opportunity to equalize the rate of return on labour.
- Within nations, institutions are set up to increase the access of the poor to production opportunities and financial credit—for example, the Grameen Bank in Bangladesh. There are no international Grameen Banks.
- Within nations, central banks are responsible for creating and distributing liquidity to various sectors of the economy, to various income and population groups and to different geographical regions. At the global level, the IMF has never been allowed to function as a central bank.

- Within nations, progressive income tax systems and expenditure policies are often adopted to transfer income and opportunities to the poor. There are no international mechanisms for such transfers.

2. Rich and poor countries compete in the global market-place as unequal partners. If developing countries are to compete on a more equal footing, they will require massive investments in human capital and technological development.

Developing countries have very weak bargaining power in international markets. Most have only limited domestic markets and few goods and services to sell—depending on the export of primary commodities, which often make up 90% of the exports of countries in Africa and 65% of those in Latin America. The prices of these commodities fell dramatically in the 1980s, reinforcing the long-term trend of deteriorating commodity markets. This was partly because world demand was falling but also because many countries were suddenly called on to repay their debts. They had to step up production and exports to generate sufficient foreign exchange—and then found themselves competing furiously with each other in a shrinking market.

For developing countries, the relevant real interest rate on their foreign debt is the nominal interest rate adjusted by the rate of change in their dollar export prices. As a result primarily of the fall in their export prices, developing countries effectively paid an average real interest rate of 17% during the 1980s compared with 4% paid by the industrial nations.

The attempted liquidation of their debts could not keep up with the fall in the prices of their exports that it caused. This phenomenon—first identified during the depression of the 1930s—has a paradoxical and disturbing outcome: *the more debtors pay, the more they owe*.

The World Bank and the International Monetary Fund were intended to even out such swings in international lending and to strengthen the access of developing countries to global financial markets. They did increase their net credits to the developing

countries in the early 1980s. But because they had neither the necessary resources, nor the official mandate, to intervene in global markets in a meaningful way, they could not sustain such policies. So, far from dampening the swings, they amplified them. Between 1983 and 1987, when developing countries faced a sudden exodus of commercial bank lending, net IMF transfers turned from plus \$7.6 billion to minus \$7.9 billion. Net World Bank transfers also turned negative—to minus \$500 million in 1991.

The market weakness of developing countries is also evident in their inability to attract adequate amounts of direct foreign investment. Investors look for the highest return on their capital, and in recent years this has consistently been found in industrial countries. As a result, 83% of direct foreign investment goes to the industrial countries. And the developing countries that do receive foreign investment tend to be the already better off—68% of the annual flow to developing countries went to just nine countries in Latin America and East and South-East Asia.

This may seem strange, since capital might be thought to yield a higher return in capital-scarce countries that have abundant labour. What seems to count just as much, however, is the quality and technological capability of workers. Countries that have more educated and more highly skilled workforces—as well as investment climates that are politically and economically more stable—tend to offer better returns. Even nationals of developing countries invest their funds in industrial countries, adding to the seemingly perverse flow of funds from poor countries to rich.

This weakness of developing countries is neither inherent nor inevitable. They can improve their prospects—through sound economic policies, management and *major* investments in human capital. Some developing countries have made impressive gains—in life expectancy, in school enrolment, in adult literacy, in nutritional levels and in gender equality. But if they are to improve their competitive edge significantly and strengthen their position in global markets, they will have to meet a dual chal-

lange—broadening the basic level of human development and concentrating on more advanced areas.

The priority for meeting such essential human needs as basic education and primary health care must remain unchallenged, as the first two *Human Development Reports* argued. No inverted pyramid of human capital formation can ever be stable. But the developing countries must go beyond basic concerns of human survival and invest heavily in all levels of human capital formation—particularly in technical and managerial skills. Unless developing countries acquire greater control over the expanding “knowledge industry”, they will languish forever in the backwaters of low-value-added production.

The world is unlikely ever to have an equal distribution of physical capital. But improving the distribution of knowledge and skills is a much more manageable proposition—and it can help equalize the distribution of development opportunities both nationally and globally.

Several countries, industrial and developing, have shown just what can be achieved by clear strategies of human capital formation and market penetration. The industrial “tigers” of East and South-East Asia—including the Republic of Korea, Thailand and Malaysia—are leapfrogging several decades of development.

Determined national action can thus propel individual countries to much higher levels of human development and economic growth. But if the developing countries as a whole are to make progress, there will also have to be international reforms.

3. Global markets do not operate freely. This, together with the unequal partnership, costs the developing countries \$500 billion a year—10 times what they receive in foreign assistance.

The restrictions are most evident for goods and for labour. Tariff and non-tariff barriers keep out many manufactures from developing countries, and immigration restrictions prevent workers from migrating in search of higher returns for their labour.

Trade barriers in industrial countries

Improving the distribution of knowledge and skills is a manageable proposition

Poverty needs no passport to travel across international frontiers

protect national markets from imports from a whole range of countries—rich and poor. Non-tariff measures, for example, are imposed mostly on products in which developing countries are more competitive—on labour-intensive exports such as textiles, clothing and footwear. And tariff levels, for a wide range of goods, increase with the level of processing. This is true for spices, jute and vegetable oils as well as for tropical fruits, vegetables and beverages. Such increases discourage developing countries from processing their primary commodities—from making chocolate out of cocoa or carpet-backing out of jute.

According to a World Bank study, trade restrictions reduce developing countries' GNPs by 3%—an annual loss of \$75 billion. Another estimate suggests that, for textiles and clothing alone, phasing out the Multi-Fibre Arrangement could increase the exports of developing countries by about \$24 billion a year.

These barriers have actually been increasing. Twenty of 24 industrial countries now are more protectionist than they were 10 years ago. Almost 28% of all OECD imports from developing countries are affected by non-tariff barriers. It is true that developing countries use protectionist policies to protect infant and other industries. But the real irony is that—when the level of average protection in developing countries is beginning to come down, partly as a result of structural adjustment programmes—the protectionist trends in the industrial nations are gaining ground.

The General Agreement on Tariffs and Trade (GATT) was created so that such barriers could steadily be removed—to the benefit of world trade as a whole. But its influence has been very limited. Many areas—including agriculture, tropical products, textiles, services, intellectual property rights and investment flows—do not conform to its principles. In fact, only 7% of world trade is in full conformity with GATT principles.

Goods from developing countries cannot, therefore, move freely across national borders. Restrictions are even tighter on the migration of labour.

An extra 38 million people join the labour

force of developing countries each year—adding to the more than 700 million people unemployed or underemployed. If job opportunities are not created for them, many more will be tempted to join the growing stream of international migrants, legally or illegally. About 75 million people from developing countries are on the move each year—as economic migrants, transient workers, refugees or displaced persons.

In response, the industrial countries are becoming much more selective about the immigrants they accept. They have set higher and higher levels of qualification—giving preferences to skilled workers, or to those who bring capital with them, or to political refugees.

These policies are costly for developing countries. They lose highly skilled people—scientists and professionals, in whose education they have invested many billions of dollars. But in addition, they lose remittances that unskilled migrant workers might have sent home. Remittances are an important source of income for many developing countries. They come not just from industrial countries, but also from migrants who have moved to other—often faster-growing or oil-producing—developing countries. In 1989 alone, total remittances from industrial countries and the Gulf amounted to \$25 billion.

It is clearly unrealistic to expect that industrial countries will greatly lower their immigration barriers. Instead, sufficient economic opportunities will have to be created in the developing world to reduce the pressures for migration.

Global market restrictions and unequal partnership cost the developing countries about \$500 billion—around 20% of their GNP and more than six times what they spend on human development priorities, such as basic education, primary health care, safe water and the elimination of malnutrition. If this \$500 billion were available to developing countries—and used well—it could have a major impact on the reduction of poverty. It should never be forgotten that poverty needs no passport to travel across international frontiers—in the form of migration, environmental degradation, drugs, disease and political instability.

Radical reforms are needed for markets to work in the interests of poor countries and poor people. But markets alone cannot protect people against absolute poverty. Also required are strong—and efficient—social safety nets, both globally and nationally.

4. The world community needs policies in place to provide a social safety net for poor nations and poor people.

The free workings of markets often tend to increase the disparities between rich and poor. National governments try to offset such tendencies by redistributing income through systems of progressive income tax. They also supplement this with social safety nets to prevent people from falling into absolute destitution.

The United States, for example, “recycles” around 15% of its national income through the public budget—to social services, unemployment benefits and welfare payments. In Sweden, the figure is around 30%, and even many developing countries have social policies that recycle between 5% and 15% of GDP.

No such systems operate to redistribute income effectively at the global level. Some beginnings are now being made at the regional level, within the European Community. But the closest the world comes to a global social safety net—providing enabling support to poorer population groups—is the current system of official development assistance (ODA), which is fatally flawed in many respects:

- *Quantity*—ODA currently amounts to only 0.35% of the combined GNP of the OECD countries, compared with the international target of 0.7%. This is clearly inadequate. Donor countries consider it necessary to recycle about 25% of their incomes to meet the needs of their people, including 100 million of those who fall below poverty-line incomes of around \$5,000. But to help meet the needs of more than one billion of the absolute poor in developing countries, they allocate just 0.35%.

- *Equity*—ODA contributions do not increase progressively with the per capita incomes of the donors: some of the richest nations give a much smaller proportion of

their GNP than the less wealthy countries give. In fact, some 80% of the current shortfall of \$51 billion from the overall 0.7% target is the responsibility of just two wealthy nations—the United States and Japan.

- *Allocation*—Aid is often unrelated to the level of poverty. South Asia receives \$5 per person while aid-receiving countries in the Middle East (with more than three times South Asia’s per capita income) receive \$55 per person. India has 34% of the world’s absolute poor, yet receives only 3.5% of total ODA. Indeed, the 10 countries that together have more than 70% of the world’s poorest people receive only a quarter of global aid. The countries that get the most aid are often those using their resources unwisely: high military spenders get roughly twice as much aid per capita as moderate spenders, and over 25% more than low military spenders. Nor is aid allocated to what should be human priority concerns. Basic education, primary health care, safe drinking water and nutrition programmes get only 10% of multilateral ODA, and 6.5% of bilateral ODA. Since the prospects for a major increase in the total volume of ODA are rather dim, every opportunity must be seized to improve the quality of foreign assistance.

If ODA is genuinely to serve as a social safety net for the world’s poor, it will have to be based on a new framework—where commitments to the aid effort are treated as firm obligations, where annual flows move predictably, where the burden is distributed progressively, and where aid allocations are made rationally and equitably in accord with agreed global goals. This aid should preferably be channelled through multilateral organizations, which can operate without the political pressures that determine much bilateral aid. And the distribution of ODA should be based on a new policy dialogue stressing that aid should be directed to human priority concerns and encouraging recipients to reduce their military spending and respect human rights.

Such a fundamental restructuring of ODA can take place only if it is based on international agreements that permit both rich and poor nations to protect their legiti-

It is essential to combine global efficiency with global equity

Failures of the past should be a source of instruction, not of political paralysis

mate interests. What is needed is a new global compact.

6. Industrial and developing countries have the opportunity to design a new global compact—and to ensure sustainable human development for all in a peaceful world.

The dustbin of history is full of grand global designs that were never implemented—a sobering reflection before making yet another attempt. But the failures of the past should be a source of instruction, not of political paralysis. Past proposals often came to nothing for several reasons. Many were unilateral—based on concessions by the North to the South, rather than on mutual interest. Often they were overly ambitious—demanding from industrial countries substantial and politically unpopular increases in foreign assistance, rather than offering well-considered reforms in global markets from which everyone could gain. Many were narrowly focused—on either an economic or political issue. And some proposals were just made at inappropriate moments—when the time for change was not ripe.

With the cold war over, military spending on the decline, economic and political freedom expanding, and a growing public awareness of environmental issues, the world now has a unique opportunity to make a substantial break with the past. The time has come for a new *global compact on human development*—an agreement to put people first in national policies and in international development cooperation.

But a realistic global compact must be very clearly defined—in the objectives it plans to fulfil, in the resources it needs, in the strategy for its implementation and in the institutional framework required to support it. And it would have to involve give and take on all sides.

Such a compact would also have to be prepared through a process of worldwide consultations. A world summit on human development should be convened to enlist the support of the world's political leaders for the objectives of the compact and their commitment to the resource requirements it will entail.

Objectives

While the overall objective of the new global compact would be to improve levels of human development worldwide, developing and industrial countries may want to make this objective more concrete.

DEVELOPING COUNTRIES might want to see the compact help them achieve at least the following:

- *Essential human goals*—to be attained by the year 2000. These goals should include universal basic education for men and women, primary health care and safe water for all, the elimination of serious malnutrition, and at least 80% access to family planning.
- *Employment*—to create sufficient job opportunities to absorb the new additions to the labour force and reduce absolute poverty by 50%.
- *GDP growth rate*—to be accelerated significantly to implement the foregoing objectives.

INDUSTRIAL COUNTRIES might want the compact also to cover some of the shared global objectives that are of immediate priority concern to them:

- *Drug trafficking and pollution*—to be tackled by close cooperation among all countries in the world.
- *Immigration pressures*—to be relieved through creating more job opportunities within poor nations.
- *Nuclear threats*—to be eliminated as international tensions are defused and countries willingly accept reductions of nuclear weapons, including non-proliferation policies.

Certainly, developing and industrial countries would *jointly* agree that the foregoing goals cannot be successfully pursued without firm policy commitment to the following:

- *Global peace and disarmament*—besides strengthening global and regional peace arrangements, military spending to be reduced progressively in both industrial and developing countries.
- *Development security*—to prevent the accumulation of unmanageable debt burdens, whether environmental, financial or social.

Resource needs

The global human development compact will have costs. And these will not only be financial. First and foremost, the compact calls for a firm policy commitment to the set objectives. Only if policy-makers are committed to the *ends* will they agree on the *means*.

But to reach agreement on the financial resource requirements of the compact, it is important that its objectives are, as far as possible, fully costed and that there is a clear identification of the funding sources to be tapped. These could include:

- *The peace dividend*—All countries, industrial and developing, should commit themselves to reducing military expenditures during the 1990s by at least 3% a year. This reduction would yield by the year 2000 a total peace dividend of around \$1.5 trillion—\$1.2 trillion in the industrial countries and \$279 billion in the developing countries.
- *A reformed system of official development assistance*—The world needs a new ODA system that is progressive, predictable and equitable. Since it will take time to develop such a comprehensive reform, the major focus should be on improving the quality of current ODA. At least two-thirds of ODA should be channelled to the poorest nations (compared with the present one-quarter) and at least 20% should go to human priority expenditure (compared with the present 7%).
- *A global debt bargain*—A new bargain must be struck with the severely indebted nations to halt the current debt-related net transfer of \$50 billion a year from the developing to the industrial countries. This will involve a major write-down of debts by official donors and commercial banks as well as by multilateral institutions.
- *Open global markets*—Global markets should be liberalized both in goods and services, to accelerate global growth and to ensure much better distribution of this growth. In particular, the existing restrictions on the export of textiles, clothing and agricultural, tropical and resource-based products should be eliminated. This should enable developing countries to increase their

exports by \$40 billion a year and thus gain new employment and income earning opportunities for their people.

Strategy

To ensure that the resource mobilization measures are linked to the attainment of the agreed-on objectives of the compact, it will be necessary to base the design of the compact and its implementation on carefully crafted strategies. These are needed not just internationally but within regions and countries. Although the strategies will naturally differ from one country and one region to another, there are likely to be common elements.

DEVELOPING COUNTRIES should adopt improved policies of national governance to make them fully responsive to the needs of their people. This might include more open government, based on respect for human rights and on wide participation, both in political life and in development planning. Public administration should run with greater transparency and accountability. And public policy should provide a framework combining private initiative, energetic entrepreneurship and the efficient functioning of national and international markets with well-defined policies and targets for human development.

INDUSTRIAL COUNTRIES will have to ensure that their peace dividend is carefully managed. The resources released will be needed for structural adjustment programmes if industrial countries are to liberalize their markets in goods, capital, technology and labour—as well as to finance higher levels of human development at home and abroad.

ALL COUNTRIES will need to come together in joint action programmes to combat some of the most serious global problems—including poverty, hunger, illiteracy, drug trafficking and abuse, nuclear proliferation, international terrorism, illegal migration, the depletion of non-renewable resources and the spread of pollution. These must be based on a recognition that the world cannot be made safe without the full collaboration of all—rich and poor, North and South. Only through cooperation can

*A peace dividend
of around
\$1.5 trillion
can be realized
by the year 2000*

Global reforms are a complement to—not a substitute for—determined national action

the world achieve sustainable human development.

Needed today are a clear vision of human goals over the next decade and a new institutional framework for their implementation. Human destiny is a choice, not a chance.

Institutional framework

The world needs a new vision of global cooperation for the next century. Global institutions of the 21st century might include a global central bank, a system of progressive income tax, an international trade organization and a strengthened UN system. In the meantime, reforms of the existing institutions should be examined as a transitional strategy.

THE UNITED NATIONS should be greatly strengthened—politically, managerially and financially. All nations, large and small, should accept the collective umbrella and discipline of the UN and pay a contribution assessed by income level and size, and more in line with existing development needs. A permanent, multilateral peacekeeping force should be created under the umbrella of the UN. These reforms would enable the UN to respond quickly and effectively, both to political conflicts and to development and humanitarian needs.

The United Nations should also play an increasingly important role in economic and social matters. This could be achieved through the creation of a 22-member Development Security Council, with 11 permanent and 11 rotating members. The Council would arrive at a political consensus on development policy—to be implemented by the appropriate agencies. It would consider all major global issues—including poverty eradication, human development, food security, trade negotiations, commodity prices, debt, development assistance, drug trafficking, refugees and the management of the global commons.

THE WORLD BANK should re-establish its role as a sympathetic intermediary between developing countries and the global capital markets. It might develop new lending instruments to recycle funds better from industrial to developing countries. Possibili-

ties include creating new bonds through an international investment trust, and opening a new intermediate lending window to meet the needs of countries that no longer qualify for concessional funds from IDA (the Bank's soft-loan window) but are not yet ready to meet the stiffer terms of the IBRD (the Bank's commercial window).

THE INTERNATIONAL MONETARY FUND should be strengthened to enable it to impose adjustment programmes not just on developing countries but also on industrial nations. The IMF should, above all, move much more towards assuming the role of a global central bank—providing and managing global liquidity.

THE GLOBAL ENVIRONMENT FACILITY, which UNDP, UNEP and the World Bank now manage jointly, should also be restructured so that it can play a more significant part in global environmental protection and support for ecologically sustainable development. This would involve broadening the Facility's management structure to give a greater voice to the developing nations, focusing more on the domestic environmental policies of developing countries and enlarging the Facility's financial base. The UN Conference on Environment and Development and its follow-up activities will offer a unique opportunity to achieve concrete progress in these areas.

THE GENERAL AGREEMENT ON TARIFFS AND TRADE should have its mandate enlarged to cover most international trade. As suggested by the ongoing Uruguay Round of multilateral trade negotiations, this would mean applying GATT principles to agriculture, tropical products, textiles and trade-related aspects of services, intellectual property rights and investment flows. The GATT Secretariat would also be more effective if it had a small executive board—one that carried sufficient regulatory clout.

• • •

The global reforms in the years ahead should aim at improving the well-being of all the world's more than five billion people. *Human Development Report 1992* analyses the functioning of global markets from this human perspective. And although the reforms emphasized in this Report are global, they are intended as a complement to—not a

substitute for—determined national action.

The basic message of this year's Report is that the world has a unique opportunity to use global markets to the benefit of all. Removing many of the restrictions on world trade will help global markets to deliver

more fully the benefits they have always promised. And by making a substantial investment in human capacity building, economic management and technology, developing countries can engage in world trade as equal partners and earn equal benefits.



The concept and measurement of human development

People contribute to growth, and growth contributes to human well-being

Human development has moved to the centre of the global development debate. It is being incorporated in the development strategies of countries all over the world—from Bangladesh to Ghana to Pakistan to Colombia. It is an important element in discussions on international aid. And it is now the core of the UN's International Development Strategy for the 1990s.

Universal acceptance, however, brings its own dangers. The concept can become more popular than understood, more a fashion than a practice, more a slogan than a guide for action. The *Human Development Report* will, therefore, each year re-examine the basic concept and its measurement. It will also explore new directions. This year, for instance, the Report examines the links between human development and the environment—and between human development and global markets. In addition, it suggests further innovations in the human development index and offers suggestions for translating human development ideas into practical action.

The first Report, in 1990, defined human development as “a process of enlarging people’s choices”. Income is certainly one of these choices, but it is by no means the only one. The objective of development is that people can enjoy long, healthy and creative lives—a simple truth, but one often forgotten in the rush to accumulate more possessions and greater wealth (box 1.1).

Some who welcome the Report’s focus on people seem, nevertheless, to have misunderstood some of the underlying ideas. They have suggested, for example, that human development is concerned with the *distribution* of wealth, not with its *creation*. Nothing could be further from the truth.

The mistake probably arises because the

concept of human development does emphasize investment in people—in basic health and nutrition, for example. But this is a form of investment, not just a means of distributing income. Healthy and educated people can, through productive employment, contribute more to economic growth.

Previous concepts of development have often given exclusive attention to economic growth—on the assumption that growth will ultimately benefit everyone. Human development offers a much broader and more inclusive perspective. It demonstrates that economic growth is vital: no society has in the long run been able to sustain the welfare of its people without continuous injections of economic growth. But growth on its own is not sufficient—it has to be translated into improvements in people’s lives. Economic growth is not the *end* of human development. It is one important *means*.

Thus, human development and economic growth are closely connected. People contribute to growth, and growth contributes to human well-being.

The emphasis that human development places on human capabilities has also led some people to believe that human development is limited to social sectors, such as health or education. These investments in people are vital, but they are only one part of the picture. Human development is not limited to any specific sector. It does not focus on social issues at the expense of economic issues. It stresses the need to develop human capabilities. But it is equally concerned with how those capabilities are *used*—by people who can participate freely in social, political and economic decision-making and who can work productively and creatively for development.

The people of developing countries have significantly improved their capabilities in recent years (boxes 1.2 and 1.3). In life expectancy and basic education, they have been closing the gap with industrial countries. But in other areas, the gaps are widening—in higher education, technology, informatics and labour productivity. So, to promote economic growth in the future, they will also have to acquire the more advanced skills needed at the new technological frontiers. East Asia's industrial "tigers" have demonstrated just how this can be done. The Republic of Korea increased labour productivity by 11% a year between 1963 and 1979. And Thailand has surpassed even this performance by increasing productivity by 63% between 1980 and 1985. Human development contributed much to these gains in productivity and economic development.

A further fallacy about the concept of human development is that it applies only to *basic needs*—and only to poor countries. Not so. The human development concept applies to countries at all levels of development. People everywhere have needs and aspirations—though these naturally vary from one country to another. The majority of the people in the poorest countries are preoccupied with staying alive. People in newly industrializing countries are concerned about acquiring more advanced skills and keeping abreast of technical change. People in rich countries may be more worried about social issues, such as homelessness and drug addiction.

Each country will have its own human agenda, but the basic principle should be the same—to put people at the centre of development and to focus on their needs and their potential. Human development spans the full range of human needs and ambition.

Human development concerns all activities—from production processes, to institutional changes, to policy dialogues. It is development focused on people and their well-being. It is as concerned with the generation of economic growth as with its distribution, as concerned with basic needs as with the spectrum of human aspirations, as concerned with the human distress of the

North as with the human deprivation in the South. Human development, as a concept, is broad and comprehensive. But it is guided by a simple idea—people always come first.

Sustainable human development

Population and levels of economic activity have increased more rapidly in the last four decades than at any time in human history. Since 1950, the world's population has grown from 2.5 billion to 5.3 billion. Much of that growth has taken place in developing countries, with 77% of the world's people.

Although fertility levels and population growth rates are declining, the large base of young people already born means that the

BOX 1.1

Issues raised by the 1990 and 1991 Human Development Reports

The first *Human Development Report*, in 1990, defined human development as the process of enabling people to have wider choices. Income is one of those choices, but it is not the sum total of human life. Health, education, a good physical environment and freedom of action and expression are just as important.

Human development cannot be promoted, therefore, by a single-minded pursuit of economic growth alone. The quantity of growth is important: without sufficient resources, little can be achieved. But the quantity of growth is only one contribution to human development. The distribution of growth is also important—whether people participate fully in the process of growth.

The 1990 Report also designed a new measure for socio-economic progress: the human development index (HDI). The HDI integrated life expectancy, adult literacy and income in an innovative way to produce a yardstick more comprehensive than GNP alone for measuring country progress.

The 1991 Report developed the human development concept further. It concentrated on the role of national governments—asking how they could generate the resources to promote human development. The Report concluded that an enormous amount could be saved (more than \$50 billion a year) by restructuring national budgets—away from

wasteful expenditure on the military and on loss-making public enterprises, for example, and towards more relevant priorities such as basic education and primary health care.

The analysis suggested the use of four ratios indicating the proportion of national income committed to priority human expenditure. These ratios highlighted some disturbing anomalies. Many developing countries spend more than 25% of their GNP through the budget, yet direct less than a tenth of this expenditure at human priority development. The analysis showed that even the poorest countries have enormous potential for improving the well-being of millions of their people by targeting their budgetary expenditures better.

As well as looking at national budgets in developing countries, the 1991 Report considered the potential for restructuring international aid allocations. For bilateral aid donors as a whole, it discovered that less than 7% of their total aid was going to human priority areas in developing countries. It concluded that even modest restructuring could achieve a great deal: reallocating just a third of today's aid could produce a fourfold increase in the amount going to human priority concerns.

The Report's conclusion was clear and unambiguous: "The lack of political commitment, not of financial resources, is often the real cause of human neglect."

Balance sheet of human development—developing countries

PROGRESS	DEPRIVATION
	LIFE EXPECTANCY
<ul style="list-style-type: none"> Average life expectancy is now 63 years—17 years more than in 1960. In 26 developing countries, it is above 70 years. 	<ul style="list-style-type: none"> 14 million children die every year before they reach the age of five.
	HEALTH
<ul style="list-style-type: none"> Two-thirds of the people have ready access to health services. Access to safe water has increased in the past 20 years by more than two-thirds. Public expenditure on health as a proportion of GNP increased by nearly 50% in the past 30 years. 	<ul style="list-style-type: none"> Nearly 1.5 billion people lack access to health services. 1.3 billion people still lack access to safe water. 2.3 billion people lack access to sanitation. In Sub-Saharan Africa, one adult in 40 is HIV-infected.
	FOOD AND NUTRITION
<ul style="list-style-type: none"> Daily calorie supply is now about 110% of the overall requirement (compared with 90% some 25 years ago). 	<ul style="list-style-type: none"> Over 100 million people were affected by famine in 1990. More than a quarter of the world's people do not get enough food, and nearly one billion go hungry.
	EDUCATION
<ul style="list-style-type: none"> The adult literacy rate has increased by more than one-third since 1970. Nearly three-quarters of children are enrolled in school. 	<ul style="list-style-type: none"> Over 300 million children are out of primary and secondary school. Nearly one billion adults are illiterate, nearly 600 million of them women.
	INCOME
<ul style="list-style-type: none"> More than 2% of GDP is spent on social security benefits. Employee earnings grew some 3% annually in the 1980s, twice the rate in the 1970s and greater than that in industrial countries. 	<ul style="list-style-type: none"> 1.2 billion people still barely survive—in absolute poverty. About half the people in Sub-Saharan Africa are below the poverty line.
	CHILDREN
<ul style="list-style-type: none"> The mortality rate of young children has been halved in the past 30 years. The immunization rate for one-year-old children has increased from one-quarter to more than three-quarters during the past 10 years. 	<ul style="list-style-type: none"> Nearly one million children in Sub-Saharan Africa are infected with HIV. Infant mortality figures in the poorest nations are 115 per 1,000 live births. 180 million young children are still malnourished.
	WOMEN
<ul style="list-style-type: none"> The male-female gaps in primary education have decreased by half in the past 20 to 30 years, and in literacy by one-third in the past 20 years. 	<ul style="list-style-type: none"> Females receive on average only half the higher education of males. Female representation in parliament is only 14% that of males.

Balance sheet of human development—industrial countries

PROGRESS

LIFE EXPECTANCY AND HEALTH

- Average life expectancy is 75 years.
- There is one doctor for every 460 people.
- Two-thirds of the people are eligible for public health insurance and nearly three-quarters of the health bills are paid by public insurance.

DEPRIVATION

- One in three adults smokes.
- Nearly five people in every 1,000 are seriously injured in road accidents.
- The cost of in-patient care has increased by two-thirds since 1980.
- Some 300,000 cases of AIDS have been reported to date.

EDUCATION

- The proportion of the population going on to university has increased from less than one-quarter in 1965 to more than one-third today.
- There are more than 80 scientists and technicians for every 1,000 people.

INCOME AND EMPLOYMENT

- Average income has increased three and a half times in the past 30 years.
- Social security benefits average nearly 11% of GDP, and 1.3% of GDP is spent on labour market programmes.
- More than one-quarter of the labour force is unionized.

- In the OECD countries alone, an estimated 30 million people are unemployed, and one-third of them have been out of work for over two years. The rate of unemployment among youth is 13% and rising.
- The wealthiest 20% of the people receive on average seven times the income of the poorest 20%.

WOMEN

- At the secondary level, female school enrolment is higher than male. At the tertiary level, it is about equal—though about one-third less for science.
- Women's participation in the labour force was 44% of men's in 1960. Now it is 78%.

- Women's wages are still on average only two-thirds those of men, and their unemployment rate is consistently higher.
- Each year, one woman in 2,000 is reported raped.

SOCIAL FABRIC

- Nearly one person in two has a TV, one in three reads a newspaper and eight in 10 visit a museum at least once a year.

- One in every 500 people is in jail.
- The average homicide rate is four per 100,000.
- The annual divorce rate for people over 25 is nearly 5%.

ENVIRONMENT

- Since 1965, production has become six times less energy-intensive.
- Some 60% of people are served by water-treatment facilities.
- Industrial and other countries have agreed to phase out major CFCs (chlorofluorocarbons) by the year 2000.

- The greenhouse index is four times that of the developing world.
- 42 kilograms of air pollutants are emitted annually per 100 people.
- Nearly 10 metric tons of hazardous and special waste are generated annually per square kilometre.

world's population will continue to grow for some time, perhaps doubling before it stabilizes. The sheer numbers of people means that continuing growth in economic activity is inevitable.

Throughout the world, people aspire to participate in the benefits that derive from production and trade among themselves and with other societies. It is inconceivable, however, that the world can support billions of people in the wasteful style to which the

better-off minority has become accustomed. The 23% of the world's people living in industrial countries of the North earn 85% of the world's income. The strains of this level of economic activity are felt in the loss of forests and species, the pollution of rivers, lakes and oceans, the accumulation of greenhouse gases and the depletion of life-preserving ozone.

Industrial countries are beginning to recognize these problems and the need to address them. In some quarters, the proposed solution is to institute measures to prevent the developing countries from participating in the economic activities that put such pressures on the environment. Such a system would, of course, be totally incorrect. There nevertheless is a welcome recognition of the fact that industrial countries have made major mistakes in developing energy-intensive patterns of production and consumption. The human race cannot continue to devour the world's resources and dump its wastes in the ways now practised by the affluent minority.

Affluent life styles and practices are not the only source of environmental deterioration. Equal and sometimes even greater strains are put on the world's ecological systems by the poverty in which three-quarters of the world's people live. Poor people and poor countries depend on the soil for food, the rivers for water and the forests for fuel. Even though they need these resources desperately, the poor have little choice—without assets or income—but to overuse and destroy, simply to survive. In doing so, they threaten their well-being and that of their children.

The current course is not inevitable. It can be reversed, and the health and well-being of all the world's people can be assured, if problems are acknowledged, responsibility for them is accepted, and measures to address them—including some very difficult ones—are undertaken (box 1.4). The United Nations Conference on Environment and Development (UNCED), to be held in Brazil in June 1992, offers an opportunity to address many of these issues and negotiate the kinds of changes and sacrifices needed to reverse the negative trends that are now so painfully apparent.

BOX 1.4

Institutional capacity for sustainable development

Few developing countries have the capacity to formulate, plan, implement and manage environmental programmes—and to incorporate these programmes into their overall human development efforts. This inadequacy is often perceived as one of the main obstacles to implementing sustainable human development policies and programmes.

Strengthening national capacity naturally means training people—qualified decision-makers, managers and line personnel are essential at all levels. But it also means creating self-supporting capacities in formulating and managing environmental policy, in generating and assimilating appropriate technologies and in developing community awareness and support for the issues, problems and opportunities.

Capacity building for development calls for a major and sustained domestic commitment in each country and for international support. Such international support—from bilateral or multilateral sources, as well as cooperation among developing countries—will be needed for a substantial period. Furthermore, external support will have to go far beyond technical assistance to include major resource transfers in the form of investment and loan financing. Technical assistance can, of course, be a catalyst setting the stage for resource transfers and helping to formulate and implement external financial assistance.

It is difficult to estimate the cost of meeting the capacity-building needs. What is evident, however, is that a transition to more sustainable models of development requires a massive effort by all countries. To estimate the requirements for such an effort, more detailed needs assessments must be undertaken. On the

basis of such assessments, a more systematic capacity-building programme can be designed.

This capacity-building programme could be funded as a separate window of the Global Environment Facility (GEF) or any other global fund to be agreed on at UNCED. Of the total amount available, 10-15% should be exclusively assigned for building and strengthening indigenous capacity. The programme could comprise three subprogrammes:

- *Environmental management planning*—to help developing countries prepare their own parts of "Agenda 21", the global programme for sustainable development. The main purpose of this subprogramme would be to establish capacity in developing countries to plan and manage the environment within the context of their overall planning.
- *A capacity-building window*—to provide resources to developing countries for specific capacity-building programmes in support of Agenda 21. These programmes would be aimed particularly at institution building, policy and legislation—and would help developing countries establish the proper administrative and regulatory infrastructure to implement sustainable human development policies and programmes.
- *Sustainable development networks*—to enhance cooperation among developing countries through the exchange of information and policy experience on sustainable development.

In a recent survey by UNDP, more than 100 countries confirmed that success of the UNCED depends on the ability of developing countries to plan and manage their own environment and sustainable human development agenda.

Poverty, environment and human development

If development is to widen the range of people's choices, it must do so not only for the current generation but for future ones as well. It must be sustainable. One of the greatest threats to sustainable human and economic development comes from the downward spiral of poverty and environmental degradation that threatens current and future generations.

Some 1.4 billion of the world's 5.3 billion people live in poverty. Other estimates suggest that including those living "along the subsistence margin" with only minimal necessities increases the number of poor to nearly two billion.

The poor are disproportionately threatened by the environmental hazards and health risks posed by pollution, inadequate housing, poor sanitation, polluted water and a lack of other basic services. Many of these already deprived people also live in the most ecologically vulnerable areas. According to one estimate, 80% of the poor in Latin America, 60% of the poor in Asia and 50% of the poor in Africa live on marginal lands characterized by low productivity and high susceptibility to environmental degradation—including arid lands, soils with low fertility, steep slopes and urban slums and squatter settlements. The environmental degradation that results when people use these marginal lands for fuel wood and for subsistence and cash production makes their poverty worse. It also threatens their health and well-being and that of their children. And as cash-crop production displaces subsistence activity, the poor are further marginalized and pushed onto environmentally fragile lands.

Sustainable development and economic growth

The call for sustainable development is not simply a call for environmental protection. Instead, sustainable development implies a new concept of economic growth—one that provides fairness and opportunity for all the world's people, not just the privileged few, without further destroying the world's finite

natural resources and without compromising the world's carrying capacity.

The World Commission on Environment and Development defined sustainable development as development that fulfils the needs of the present without limiting the potential for meeting the needs of future generations. Put forward in 1987, this definition has gained widespread currency and support, though those who use it may not always have similar perceptions about what it means.

Sustainable development is a process in which economic, fiscal, trade, energy, agricultural and industrial policies are all designed to bring about development that is economically, socially and ecologically sustainable. That is, current consumption cannot be financed by incurring economic debts that others must repay in the future. Investment must be made in the health and education of today's population so as not to create a social debt for future generations. And natural resources must be used in ways that do not create ecological debts by overexploiting the carrying and productive capacity of the earth.

In general, the minimum requirements for achieving sustainable development include:

- The elimination of poverty.
- A reduction in population growth.
- More equitable distribution of resources.
- Healthier, more educated and better trained people.
- Decentralized, more participatory government.
- More equitable, liberal trading systems within and among countries, including increased production for local consumption.
- Better understanding of the diversity of ecosystems, locally adapted solutions to environmental problems and better monitoring of the environmental impact of development activities.

Should economic growth be curbed to conserve the environment? Yes may seem the obvious answer. But such a facile reply avoids the most serious issues in developing countries with more than one billion people in absolute poverty and another billion on the margin of poverty. The poor cannot accept that their past and their present should

Current consumption cannot be financed by incurring debts that future generations must repay

Poverty is as great an enemy of the environment as misspent affluence

be projected into an indefinite future. Nor can they accept that the industrial countries are entitled forever to an 85% share of the world's income and a perpetuation of their energy-intensive patterns of consumption. This generation, in addition to leaving a legacy of "environmental debt" to future generations through pollution and exhaustion of resources, is in danger of leaving a financial debt, as a result of past borrowing. This generation is also in danger of leaving a social debt, if today's young people lack the standards of health, education and skill to cope with tomorrow's world.

Today's environmental awareness is highlighting many new areas of potential conflict—between industrial and developing countries, between environmental protection and economic growth, between this generation and the next. It would be naive to suggest that they can all be resolved. These debates will continue long into the next century and beyond. But the concept of human development can offer a few guiding principles.

The first is that "sustainable human development" should give priority to human beings. Environmental protection is vital. But (like economic growth) it is a means of promoting human development. The primary objective of our efforts must be to protect human life and human options. This implies that the longer-term viability of the world's natural resource systems—including their biodiversity—has to be ensured. *All life depends on them.*

The second guiding principle is that for developing countries there can be no choice between economic growth and environmental protection. Growth is not an option. It is an imperative. The issue is not *how much* economic growth but *what kind* of growth. No growth can be as detrimental to the environment as rapid growth.

It is not the rate of economic growth that allows us to gauge the effect on the environment. It is the composition of GDP—the product mix as well as the types of production processes—that alone can tell us whether the overall impact on the environment is positive or negative. Income should ideally be measured in net terms—after deducting the depreciation of physical

capital, human capital and the stock of natural resources. Environmental problems arise when the depreciation of natural resources is ignored merely because it carries no price tag.

Developing countries need to accelerate their rates of economic growth. But they must adopt strategies that, as far as possible, respect the physical environment. This means using technologies different from those used in the past by industrial countries—less energy-intensive and more environmentally sound.

Industrial countries also want to continue to develop. But much of their development will have to be in improving the quality of life if the natural carrying capacity of the planet is not to be strained further.

The third guiding principle is that each country has to set its own environmental priorities, which often will be very different in industrial and developing countries.

Industrial countries see air pollution as a health hazard, but they are also more generally concerned about a degradation of the quality of life—an imbalance between human beings and the rest of the natural world. And their concerns are often projected long into the future, with attention to such problems as global warming and the destruction of the ozone layer. Many of these problems can be associated with the industrial countries' overconsumption of natural resources.

Developing countries are often concerned less about the quality of life than about life itself. And their concerns are much more immediate: polluted water is a threat to life, eroded land a threat to livelihood.

Poor people often lack the financial strength to conserve, replace and replenish their natural surroundings. Crop-rotation cycles have become shorter and shorter, and more and more marginal land is being farmed. In 1984, an estimated 135 million people lived in areas affected by desertification (compare that with 57 million people in 1977).

Thus, at the lower end of the income scale, poverty is as great an enemy of the environment as misspent affluence by rich societies.

The human development index

To ensure that development planning is directed to people's needs requires improved social statistics and new development measures. *Human Development Report 1990* therefore introduced the human development index (HDI), which combines indicators of national income, life expectancy and educational attainment to give a composite measure of human progress.

This year, the HDI has been updated with the latest available data. Earlier HDIs included information five to 10 years old. The HDI in this Report is based entirely on 1990 data.

The revision has altered the rankings for many countries (tables 1.1 and 1.2). In the ranking of industrial countries, Canada has displaced Japan at the top, though Romania still lingers at the bottom. For the developing countries, Barbados remains at the top, while Guinea replaces Sierra Leone at the bottom.

It should be recalled that the HDI does not measure absolute levels of human development. It ranks countries in relation to each other, according to how far they have come from the lowest levels of achievement and how far they will have to travel towards the present highest level of achievement on each of the three indicators.

Suggested changes in the index

The introduction of the HDI has led to a lively and useful debate on socio-economic measures of development. Many of these issues are discussed in detail in technical note 1. But some of the salient issues are covered here.

- *Ends and means*—It is sometimes suggested that the HDI mixes means and ends—the assumption being that income is a means of achieving human development while standards of health and educational achievement are ends. But income, as used in the HDI, can also be considered as a proxy measure for some of the ends. Income is treated as a surrogate for the satisfactions derived from a bundle of basic goods and services. This is why the HDI does not use nominal GNP but adjusts it to reflect real

purchasing power. In addition, the weight applied to income in the calculation of the HDI tapers off sharply beyond the threshold income regarded as sufficient for human survival. The value of including income is that it allows the HDI to combine both social and economic indicators. Conventional social indices often ignore economic progress—just as economic indices ignore social progress.

- *Choice of social indicators*—The social indicators in the HDI are life expectancy, adult literacy and mean years of schooling. It is sometimes argued that one might also use infant or child mortality, or levels of nutrition or employment. But these indicators overlap with those already used. Progress in infant and child mortality and in nutrition would already be reflected in life expectancy. And employment rates would be reflected in real income.

Ideally, what is needed is a mathematical relationship that expresses how various inputs—such as nutrition or primary schooling—produce a certain level of human development. Lacking this kind of “production function”, the best solution is to stick to a simple index where each component reflects a broad social reality.

- *The common denominator*—Longevity, educational attainment and income are all expressed in different units. Since there does not appear to be a common denominator, some people are puzzled as to how it is possible to combine them. There is, however, a common denominator in the HDI.

For each of its components, the HDI looks at the data to find the current minimum value—for, say, life expectancy (42.0 years in Sierra Leone)—and the maximum desirable value (78.6 years in Japan). It then takes the *distance travelled* by each country from the minimum towards the maximum (expressed as a percentage) as the basis for the combination with other indicators. The breakthrough in the HDI methodology was to choose distance as the common denominator. This choice also gives the index a dynamic quality—a measure of movement towards a desired objective.

- *A composite index*—It has also been suggested that it would be better if the Report produced a series of different so-

TABLE 1.1
HDI ranking for
industrial countries

	HDI rank	HDI value
Canada	1	0.982
Japan	2	0.981
Norway	3	0.978
Switzerland	4	0.977
Sweden	5	0.976
USA	6	0.976
Australia	7	0.971
France	8	0.969
Netherlands	9	0.968
United Kingdom	10	0.962
Iceland	11	0.958
Germany	12	0.955
Denmark	13	0.953
Finland	14	0.953
Austria	15	0.950
Belgium	16	0.950
New Zealand	17	0.947
Israel	18	0.939
Luxembourg	19	0.929
Italy	21	0.922
Ireland	22	0.921
Spain	23	0.916
Greece	26	0.901
Czechoslovakia	27	0.897
Hungary	28	0.893
Poland	32	0.874
USSR	33	0.873
Bulgaria	35	0.865
Yugoslavia	37	0.857
Malta	38	0.854
Portugal	39	0.850
Albania	49	0.791
Romania	60	0.733

cial indicators, which might pinpoint specific problems more sharply than does a composite HDI. Such indicators can, and should, be produced for each social field. But a composite index has its own virtue, in that it provides a convenient summary of diverse data. For instance, Oman has a per capita income two and a half times that of Costa Rica, but its literacy rate is one-third of Costa Rica's, its average life expectancy is nine years less and its child mortality rate is two and a quarter times higher. All this can be reduced to the in-

formation that Oman has an HDI of 0.589, while Costa Rica's HDI is 0.842—43% higher.

- *New dimensions*—It has been suggested that, beyond economic and social indicators, the HDI should incorporate other indicators of progress, such as human freedom or cultural achievement. The freedom issue is covered at length in chapter 2. Cultural factors have also been considered, but these are diverse, country-specific and difficult to quantify. It was thought better not to load the HDI at the outset with burdens

TABLE 1.2
HDI ranking for developing countries

	HDI rank	HDI value		HDI rank	HDI value		HDI rank	HDI value
Barbados	20	0.927	Sri Lanka	76	0.651	Cameroon	118	0.313
Hong Kong	24	0.913	Ecuador	77	0.641	Ghana	119	0.310
Cyprus	25	0.912	Paraguay	78	0.637	Pakistan	120	0.305
Uruguay	29	0.880	China	79	0.612	India	121	0.297
Trinidad and Tobago	30	0.876	Philippines	80	0.600	Namibia	122	0.295
Bahamas	31	0.875	Peru	81	0.600	Côte d'Ivoire	123	0.289
Korea, Rep. of	34	0.871	Oman	82	0.598	Haiti	124	0.276
Chile	36	0.863	Dominican Rep.	83	0.595	Comoros	125	0.269
Singapore	40	0.848	Samoa	84	0.591	Tanzania, U. Rep. of	126	0.268
Brunei Darussalam	41	0.848	Iraq	85	0.589	Zaire	127	0.262
Costa Rica	42	0.842	Jordan	86	0.586	Nigeria	128	0.241
Argentina	43	0.833	Tunisia	87	0.582	Lao People's Dem. Rep.	129	0.240
Venezuela	44	0.824	Mongolia	88	0.574	Yemen	130	0.232
Kuwait	45	0.815	Lebanon	89	0.561	Liberia	131	0.227
Mexico	46	0.804	Iran, Islamic Rep. of	90	0.547	Togo	132	0.218
Qatar	47	0.802	Gabon	91	0.545	Uganda	133	0.192
Mauritius	48	0.793	Guyana	92	0.539	Rwanda	134	0.186
Bahrain	50	0.790	Vanuatu	93	0.536	Bangladesh	135	0.185
Malaysia	51	0.789	Botswana	94	0.534	Cambodia	136	0.178
Dominica	52	0.783	Algeria	95	0.533	Senegal	137	0.178
Antigua and Barbuda	53	0.781	El Salvador	96	0.498	Ethiopia	138	0.173
Grenada	54	0.758	Nicaragua	97	0.496	Angola	139	0.169
Colombia	55	0.758	Indonesia	98	0.491	Nepal	140	0.168
Suriname	56	0.749	Maldives	99	0.490	Malawi	141	0.166
United Arab Emirates	57	0.740	Guatemala	100	0.485	Burundi	142	0.165
Seychelles	58	0.740	Honduras	101	0.473	Equatorial Guinea	143	0.163
Brazil	59	0.739	Viet Nam	102	0.464	Central African Rep.	144	0.159
Cuba	61	0.732	Swaziland	103	0.458	Sudan	145	0.157
Panama	62	0.731	Cape Verde	104	0.437	Mozambique	146	0.153
Jamaica	63	0.722	Solomon Islands	105	0.434	Bhutan	147	0.146
Fiji	64	0.713	Morocco	106	0.429	Mauritania	148	0.141
Saint Lucia	65	0.712	Lesotho	107	0.423	Benin	149	0.111
Saint Vincent	66	0.693	Zimbabwe	108	0.397	Chad	150	0.088
Saudi Arabia	67	0.687	Bolivia	109	0.394	Somalia	151	0.088
Saint Kitts and Nevis	68	0.686	Egypt	110	0.385	Guinea-Bissau	152	0.088
Thailand	69	0.685	Myanmar	111	0.385	Djibouti	153	0.084
South Africa	70	0.674	Sao Tome and Principe	112	0.374	Gambia	154	0.083
Turkey	71	0.671	Congo	113	0.372	Mali	155	0.081
Syrian Arab Rep.	72	0.665	Kenya	114	0.366	Niger	156	0.078
Belize	73	0.665	Madagascar	115	0.325	Burkina Faso	157	0.074
Libyan Arab Jamahiriya	74	0.659	Papua New Guinea	116	0.321	Afghanistan	158	0.065
Korea, Dem. Rep. of	75	0.654	Zambia	117	0.315	Sierra Leone	159	0.062
						Guinea	160	0.052

it might not be able to carry. But efforts in this direction should be encouraged.

- **Data deficiencies**—There have been criticisms that the statistical basis of the HDI is weak, since for many countries the social data are deficient, outdated or completely missing. The HDI calculation in last year's Report, for example, was based on 1980 data for mean years of schooling, 1985 data for adult literacy, 1985-88 data for real GDP per capita and 1990 data for average life expectancy.

No index can be better than the data it uses. But this is an argument for improving the data, not abandoning the index. This year's index does, in fact, use 1990 data for all its components. UNDP, along with other UN system agencies, is helping many developing countries strengthen their data collection systems. Indeed, the publication of the *Human Development Report* is beginning to put pressure on all countries to improve their data systems and analysis, especially their social statistics. This will give them the necessary information basis for designing, planning, implementing and evaluating development programmes in ways that are more systematic and more oriented towards people.

The preparation of an adequate human development index must be an evolutionary process. And refinements will be made each year as useful suggestions are received and better data become available.

One of the refinements is to develop methods of disaggregating the HDI according to population groups (for example, gender or income groups) and regions. Presenting average figures for each country disguises many important disparities—between urban and rural areas, between rich and poor, between male and female, as well as between different ethnic groups and different regions. The HDI should try to reflect how people really live.

The methodological and statistical work involved in such a disaggregation of the HDI will need many years of work. But some advances have already been made.

A gender-sensitive HDI

It is not possible to produce a gender-sensitive HDI for all countries, since the data are

not available. But there are, for 33 countries, separate male and female estimates for life expectancy, adult literacy, mean years of schooling, employment levels and wage rates. This has made possible the calculation of both separate male and female HDIs and an overall gender-sensitive HDI (table 1.3, figure 1.1 and technical note table 1.1). This gender-sensitive HDI, introduced in the 1991 Report, has been updated this year. In subsequent Reports, as more data become available, this exercise will be extended to cover many more countries.

These indices show that, for industrial countries, gender disparities have been narrowed in such areas as education and health. But they remain wide in levels of employment and pay—so women still earn a relatively low share of national income. In Ja-

TABLE 1.3
Gender-sensitive HDI

	Gender-sensitive HDI	Female HDI as % of male HDI
Sweden	0.938	96.16
Norway	0.914	93.48
Finland	0.900	94.47
France	0.899	92.72
Denmark	0.879	92.20
Australia	0.879	90.48
New Zealand	0.851	89.95
Canada	0.842	85.73
USA	0.842	86.26
Netherlands	0.835	86.26
Belgium	0.822	86.57
Austria	0.822	86.47
United Kingdom	0.819	85.09
Czechoslovakia	0.810	90.25
Germany	0.796	83.32
Switzerland	0.790	80.92
Italy	0.772	83.82
Japan	0.761	77.56
Portugal	0.708	83.36
Luxembourg	0.695	74.88
Ireland	0.689	74.89
Greece	0.686	76.10
Cyprus	0.659	72.32
Hong Kong	0.649	71.10
Singapore	0.601	70.87
Costa Rica	0.595	70.61
Korea, Rep. of	0.571	65.53
Paraguay	0.566	88.82
Sri Lanka	0.518	79.59
Philippines	0.472	78.67
Swaziland	0.315	68.74
Myanmar	0.285	74.07
Kenya	0.215	58.60

FIGURE 1.1
Adjusting the HDI
for male-female disparities,
1990

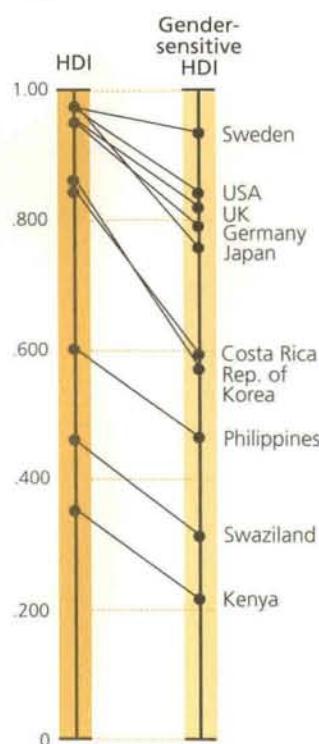


FIGURE 1.2
**Adjusting the HDI
for income distribution,
1990**

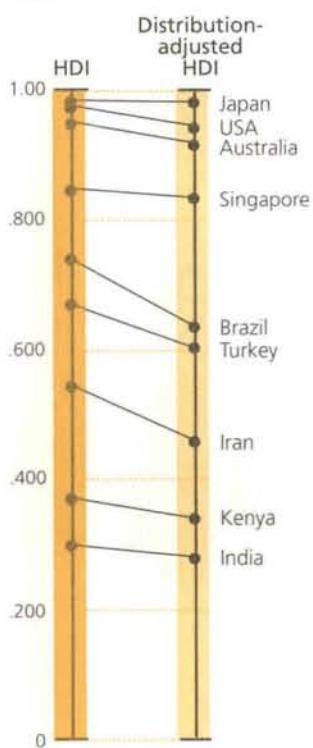


TABLE 1.4
Income-distribution-adjusted HDI

	Income-distribution-adjusted HDI value	Percentage difference between HDI and income-distribution-adjusted HDI value
Japan	0.979	-0.26
Netherlands	0.964	-0.34
Sweden	0.957	-1.97
Switzerland	0.957	-2.09
Norway	0.956	-2.37
Canada	0.947	-3.68
Belgium	0.944	-0.67
USA	0.943	-3.44
United Kingdom	0.943	-2.03
France	0.936	-3.53
Australia	0.933	-4.04
Finland	0.931	-2.32
Denmark	0.923	-3.23
Israel	0.913	-2.93
New Zealand	0.909	-4.11
Ireland	0.904	-1.88
Spain	0.894	-2.49
Italy	0.890	-3.51
Korea, Rep. of	0.884	1.44
Hungary	0.878	-1.68
Hong Kong	0.871	-4.82
Singapore	0.835	-1.57
Yugoslavia	0.833	-2.90
Costa Rica	0.820	-2.75
Chile	0.817	-5.59
Portugal	0.799	-6.30
Argentina	0.792	-5.20
Venezuela	0.771	-6.91
Mauritius	0.744	-6.59
Mexico	0.736	-9.22
Malaysia	0.731	-7.93
Colombia	0.722	-5.07
Panama	0.648	-12.91
Thailand	0.644	-6.43
Brazil	0.635	-16.38
Jamaica	0.631	-14.37
Sri Lanka	0.623	-4.50
Syrian Arab Rep.	0.617	-7.83
Turkey	0.608	-10.34
Philippines	0.572	-4.94
Tunisia	0.566	-2.81
Iran, Islamic Rep. of	0.510	-7.37
Indonesia	0.495	0.75
El Salvador	0.483	-3.18
Honduras	0.420	-12.84
Egypt	0.373	-3.01
Kenya	0.341	-7.28
Pakistan	0.297	-2.56
Zambia	0.292	-7.75
India	0.278	-6.66
Côte d'Ivoire	0.249	-16.07
Bangladesh	0.168	-9.95
Nepal	0.136	-23.20

pan, females earn only a third of the average male per capita income. In Canada, the United Kingdom and the United States, they get half. And even in countries as egalitarian as Norway, Finland and Denmark, women earn only two-thirds of the income men earn.

Many countries fall in their rank in the HDI when gender-sensitivity is introduced. Canada, for example, no longer occupies the top spot, but slips to number eight. Its female HDI is only 86% of its male HDI, because women have significantly lower employment and wage rates than men. Similarly, Japan slips from the number two position to number 18. Sweden, by contrast, moves from number five to number one, as it has greater equality between men and women.

In developing countries, female-male disparities continue to be very wide. In Myanmar, the female HDI is about three-quarters of the male HDI, in Costa Rica a little over two-thirds, and in Kenya only about one-half.

An income-distribution-adjusted HDI

Income disparities are wide in many countries, particularly in the developing world. Brazil has one of the most unequal distributions of income—the top 20% of the population receives 26 times the income of the bottom 20%. When the income component of its HDI is reduced by a factor to reflect this maldistribution, its overall HDI falls by 16%. The same correction also causes a major drop in the HDI of many other countries, including Côte d'Ivoire, Honduras, Jamaica, Nepal, Panama and Turkey. Table 1.4 gives the income-distribution-adjusted HDI for the 53 countries for which data are available. Among the industrial countries, the largest adjustments downwards are (in descending order) for Portugal, New Zealand, Australia, Canada, France, Italy and the United States (figure 1.2).

Both the gender-sensitive and the income-distribution-adjusted HDIs show that many people today do not share fully in the progress of development. But how wide the socio-economic disparities really are on a global scale becomes evident only in

chapter 3, which looks at income disparities in a border-transgressing way—comparing the situation of the poorest fifth of the world's population to that of the richest fifth.

Provincial and regional HDIs

Several countries have already calculated HDIs for some of their different provinces or administrative subdivisions, revealing considerable contrasts. The HDIs for different geographical regions in the same country may be at entirely different levels of human development—enhancing understanding of grievances often expressed by less-favoured areas.

- *Turkey*—A calculation based on 1985 data shows that the province with the highest HDI is Izmir, on the Aegean Sea. The lowest figure (44% of Izmir's HDI) is that of Hakkari in the southeast. Of the country's 67 provinces, 18 fall in the category of high human development, 42 in medium, and seven in low. The main cause of these differences is a disparity in literacy rates.
- *India*—A calculation for 17 states indicates medium human development for two states (Punjab and Kerala) and low human development for the rest. And while India as a whole is number 121 in the HDI ranking, Uttar Pradesh (the most populous state with about 112 million people) would be number 147.
- *Thailand*—Only the region around Bangkok has high levels of human development. The lowest levels are in the extreme northeast and northwest. Variations here are principally due to income (three times higher in the central region than in the northeast). There is little variation in life expectancy or educational attainment. A measurement over time has also been attempted in Thailand, showing a pronounced improvement for the lowest-ranked provinces, particularly for Mae Hong Son, ranked last.
- *Morocco*—The variations here are not as wide as in, say, India. But the HDI for Tensift, the lowest-ranking region, was only 68% of Oriental, the highest.
- *Jordan*—This is a small country, and the differences between regions tend to be nar-

rower. The HDI for the lowest-ranked region, Ma'an, was 78% that of the highest, Amman. All regions have relatively high literacy rates, varying from 67.5% to 82.5%, and variations in life expectancy are also narrow, from 65 to 71 years. The greatest disparities are in per capita income—which in Amman is 2.5 times that of the southern regions.

These region-specific or province-specific HDIs can make a valuable contribution to the understanding of human development issues—particularly for the larger countries which almost seem to have several (very different) smaller countries co-existing within them. Future Reports will extend this analysis as more information becomes available.

Rural-urban disparities

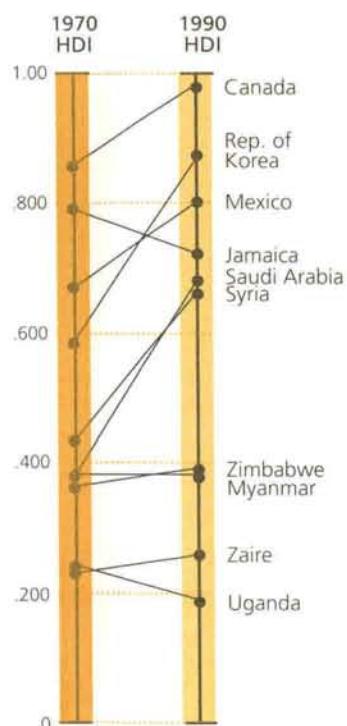
Two-thirds of the people in developing countries live in rural areas. But since the urban areas have the greatest concentration of economic and political power, the rural areas usually receive a lower quality of social services. In Côte d'Ivoire, access to health services in rural areas is only 18% that of urban areas. In Afghanistan, it is 21%, and in Mozambique 30%—two countries ridden by political strife. For access to safe drinking water, the figure for El Salvador is 13%, for Ethiopia 16%, and for Bolivia 19%.

Separate HDIs for rural and urban areas would highlight these disparities, but very few of the necessary data are available. Where the calculation is possible, it shows dramatic differences. In Morocco, the rural HDI is only 66% of the urban HDI—a greater disparity than that between different provinces. In Jordan, the HDI for urban dwellers places them in the high-medium human development league. But the HDI for those in the rural areas was at the low-medium level.

Changes in the HDI over time

The HDI ranks countries relative to each other for a particular period. The maximum and minimum values that define the distance to be travelled for each variable are specific to one year. But one can also track

FIGURE 1.3
Tracking the HDI over time



Each country must design its own human development strategy

changes in the HDI by choosing the maximum and minimum values, not for a particular year, but for a certain period.

This has been done for 110 countries for 1970-90 (figure 1.3 and technical note table 1.3). The largest increases in HDI were for Saudi Arabia, the Republic of Korea, Mauritius, Malaysia, Tunisia, Syria, Botswana, Turkey, Indonesia, Gabon and Algeria. These increases were achieved, however, in different ways. Saudi Arabia and Indonesia benefited from the increase in oil prices since the early 1970s, providing financial resources for major investments in health and education services. The Republic of Korea and Malaysia increased their investments in people—to increase productivity and accelerate economic growth. This growth then permitted greater expenditure on human development. Botswana and Gabon benefited from the sale of minerals and skilfully invested this in human development.

The table also shows that while it is relatively easy to make rapid strides from low levels of human development, the going gets much tougher at higher levels.

An environmentally sensitive HDI

The world's resources depreciate steadily each year. Natural resources are depleted, physical resources wear out, and the skills of human beings need to be replaced from one generation to the next. If the present generation in any country does not cover this with sufficient savings and investments, the base for future production is being eroded. And even if investments are sufficient, bottlenecks may develop if critical natural resources or human skills are missing.

Traditional economic indicators such as GNP and GDP are inadequate measures of sustainability. They measure production but provide little information about people or the state of their living environment. If a deteriorating environment causes disease, resulting in increased health expenditures and thus increased GNP, the increased GNP would be interpreted as a higher level of development—even though people and their environment are worse off. Similarly, cur-

rent income measures do not factor in the inevitable future costs of current depletion of resources. What is needed is a system that reflects resource depletion and other forms of environmental degradation.

Several attempts have been made to recalculate national income statistics taking the depreciation of natural capital into account. One of the pioneering studies, in Costa Rica, shows that between 1970 and 1990 the accumulated depreciation of its forests, soils and livestock amounted to more than \$4 billion (in 1984 dollars). This depreciation amounted to about 6% of Costa Rica's total GDP in that period. Similarly in Indonesia, the accumulated depreciation of forests, soils, and fisheries between 1971 and 1984 amounted to \$38 billion (in 1973 dollars), about 9% of its GDP in that period.

These are, of course, only partial calculations. They do not take into account the depreciation of all resources—human, natural and financial. An HDI that truly reflected the concept of sustainability would have to account for all such losses. Indeed, the "greening" of the GNP will be an important contribution towards developing an environmentally sensitive HDI. Further research is under way to see how this might be done.

Human development in action

The concept of human development offers analysis and ideas that could promote much more positive, realistic and sustainable development in the years ahead. But none of the Reports will be of value if the ideas are not translated into practical action. How can this best be done? At least three steps are essential.

1. Country human development strategies

The real challenge is at the national level. Each country, developing or industrial, must set its own goals and design its own strategy.

Developing countries face the most daunting tasks. They need to formulate their long-term human development goals, cost them fully and integrate them into realistic growth and investment strategies. They also

need to make the radical changes, in both institutions and policy frameworks, that will permit them to achieve these goals—noting less than a new framework of national planning.

This is no mere technocratic exercise. Changes on this scale require the mobilization of national political will, since a genuine human development strategy is likely to provoke fundamental changes in society.

International organizations can offer some help. UNDP, along with UNICEF and other UN system agencies, is already working with 20 countries that have requested assistance in formulating comprehensive human development strategies.

Industrial countries have different priorities, but they too need to clarify their objectives and develop new strategies. They have to tackle the increasing levels of unemployment, poverty and homelessness, along with other serious problems, such as pollution, drug addiction and urban violence. They face a real danger that their social fabric will unravel even as incomes for many people continue to rise. Industrial countries also need to strike a new balance between market efficiency and social compassion.

2. New techniques for project appraisal

Development projects may be technically and economically sound yet cause considerable social, political and environmental damage—increasing disparities between urban and rural areas, for example, or between ethnic groups, or between men and women. Many of today's forms of project appraisal would not reflect such problems since they concentrate more on technical, financial and economic feasibility.

Human development demands that projects be appraised primarily for their impact on people. UNDP has a major research programme under way on more "people-centred" forms of policy appraisal

and assessment. The first results will be presented in next year's *Human Development Report*.

3. New strategies for aid

A human development strategy will have a profound impact on the future of official development assistance—its scale, its distribution and its content. Future policy dialogues between donors and recipients are bound to reflect such concerns in several different areas.

Today, only a very small part of ODA (23%) is earmarked for the poorest nations, and an even smaller part (6.5%) is for human priority concerns. A major restructuring of ODA will be needed if it is to address concerns of both poverty and human development.

But there are also areas where donors have concerns about the policies of recipient countries—concerns they will raise before making aid allocations. Military expenditure will be one of the most significant. Donors will want to see recipients scaling down their expenditure and redirecting resources to human needs.

But donors themselves will have to reassess their policies if they are to retain credibility. Aid often goes to political and military allies, and twice as much aid per capita is being given to high military spenders as to low spenders. Donors will also have to reduce their own military spending and stop encouraging arms exports. Issues of ODA allocation and military spending are treated in greater detail in chapter 3.

Many donors are now also including human rights issues in their aid calculations—a reflection of an increasing concern for human rights all around the world. But this is an area where informal dialogue may be more effective than formal conditionalities. Democracy is a native plant—it may wilt under foreign pressure.

**Democracy is a native plant—
it may wilt under foreign pressure**



Political freedom and human development

*The world today
is a much
freer place*

The purpose of human development is to increase people's range of choices. If they are not free to make those choices, the entire process becomes a mockery. So, freedom is more than an idealistic goal—it is a vital component of human development.

People who are politically free can take part in planning and decision-making. And they can ensure that society is organized through consensus and consultation rather than dictated by an autocratic elite.

Democratic rule can never be perfect. It needs constant injections of energy and effort. And it demands patient renewal—a continuous search for the best balance between conflicting social interest groups and priorities. But such processes can ensure that—as far as possible—a country's development is truly “people-centred”.

Freedom and civil society

Societies all over the world have struggled for centuries to build consensus through systems of deliberation and negotiation. In Afghanistan it might be called *jirga*, in India *panchayat*, in Islamic societies *shoora*, among the Luo in East Africa *pinyowacho*, and among native Americans *mawi tiplutmamk*. Almost every country has forms of community decision-making based on dialogue and consensus at the local level.

At the national level, however, political systems are based more on majority rule. The rise of the nation-state, and increasing levels of economic and social integration, have resulted in forms of government based more on the sum-total of individual votes. Almost half the world's countries today have elected forms of government, and another 26 countries are moving in this direction by

allowing multiple voices to be heard, through political parties and other interest groups. This process still has some way to go. But compared with even a few years ago, the world today is a much freer place.

Democracy and freedom rely, however, on much more than the ballot box. The expansion of democracy has been accompanied by a greater acknowledgement of human rights. Colombia's new constitution centres on the dignity of the human being. Government offices or commissions for human rights have been set up during the past two years in many countries—Algeria, Colombia, Cyprus, Gabon, Gambia, Mali, Mauritania, Mexico, Morocco, Paraguay, Romania, Rwanda and Tunisia. Malaysia has revitalized its human rights centre. And in several other countries, non-governmental organizations (NGOs) act as human rights advocates and monitors—Cambodia, Cape Verde, Indonesia, Thailand, Turkey, Uganda and Zambia, to mention but a few.

Governments in every country are surrounded by a host of groups and institutions that help build and sustain the democratic process. NGOs flourish at every level: farmers organizations, trade unions, chambers of commerce, community groups. And myriad advocacy groups argue the case for women, for children, for the disabled, for human rights, for the environment—for almost any cause of common concern.

Such groups can survive even the severest forms of political repression. Trade unions in Eastern Europe, women's organizations in Latin America, students in Asia—all have helped keep freedom alive and played their part in the struggle for democracy. They have shown that freedom is something not just to be given or taken—it has to be lived.

Political freedom and economic growth

Political freedom is an essential element of human development. But does it contribute to economic growth? This is a long-running debate.

Some scholars have argued that freedom is a necessary condition to liberate the creative energies of the people and to pursue a path of rapid economic development. They have pointed to some historical evidence, including the experience of the United States.

Some other scholars have argued that economic development would be more rapid if freedoms were curtailed: a strong state can maintain the stability and predictability needed to smooth the path for modernization.

It is true that an autocratic government can sometimes engineer fundamental reforms and promote social concerns. The governments of Eastern Europe and the former Soviet Union figured well on statistics of education and health, as did the Republic of Korea under General Park and Chile under General Pinochet.

But it is difficult to establish a durable connection between authoritarian rule and economic or social development. For every example of an authoritarian state that has succeeded in accelerating its economic development, there are many other examples where authoritarian rule merely led to economic stagnation or complete economic chaos.

The link between freedom and development is seldom in dispute. What is often disputed is the causality—the direction of the arrow, whether more freedom leads to more development or more development leads to more freedom. This might reflect the diversity of historical experience and the many policy options available. But it is clear that more analysis is needed in this area.

Evidently, economic and social progress can be out of step with freedom for a shorter or a longer period. If growth is seen, however, not as an end in itself but as a part of human development, democracy cannot be set aside. Growth-oriented strategies can sometimes afford to be blind to democracy.

People-oriented development strategies cannot. They must be based on popular participation—in economic, social and political life.

What is clear, at least, is that the economically better-off countries today (as measured by GDP or the HDI) also have a large measure of freedom. And even where economic development and freedom have marched out of step for some periods (as in Eastern Europe and East Asia), they are now coming closer together.

Yet, when drawing lessons from the past, it must be borne in mind that many historical precedents are no longer valid. It used to be argued that the poor would vote for economic development first and greater political freedom second. If this were ever true, it seems to be much less so today—there seems to be a genuine desire across the world for both economic progress *and* political freedom. At the national level, people are becoming more educated and conscious of their rights: they are no longer accepting to be passive observers under repressive regimes. And at the global level, human rights monitors and the rapidly expanding media networks provide a steady flow of information on human rights violations. Human cruelty can no longer be hidden in dark and distant corners of the planet.

This changing international culture and public awareness also affects international development cooperation. Many donor countries are considering withholding aid if recipient countries do not respect the human rights of their citizens.

People now see freedom as an essential element in human development, not as an optional extra. And the past decade has, in effect, been a decade of democracy in many parts of the world (box 2.1). Any report on human development must thus include a professional analysis of human freedom.

***Political freedom
is an essential
element of
human
development***

The measurement of political freedom

Many people argue that even if freedom should be debated, it should not be measured. The concept, they point out, is so large and complex that any system of measurement will diminish it. Freedom is too

valuable to be reduced to a number. It should, they say, be discussed qualitatively, not quantitatively.

Certainly, no measure of freedom can do it full justice. But freedom is scarcely unique in this respect. The same is true of measures of income—and of human development. Indeed, many scales are now readily accepted for phenomena previously thought to be unmeasurable. Even heat was once

thought unmeasurable—until Celsius demonstrated otherwise. Rankings are even applied to literature and to scientific discovery, with rewards allocated according to these judgements.

Human knowledge will progress little unless attempts are made to analyse and measure qualitative phenomena in a scientific, empirical manner. And while many of the quantitative measures that are developed may be no more than rough approximations, they can be an important stimulus to thought and debate.

BOX 2.1

The tide of freedom

Transitions from autocratic to democratically elected political systems have come in waves over the past decade.

The first wave swept through Latin America. It began in Peru in 1980 with the completion of a transition to an elected government after 12 years of military rule. In the following years, South America's military regimes fell one by one: Argentina in 1983, Brazil and Uruguay in 1985, Chile in 1988 and Paraguay in 1989. There have been more than 180 coups in 157 years in Bolivia, but democratic, civilian rule was restored in 1982.

Haiti is undergoing the region's most painful transition. Violence and coups have plagued the country since the Duvalier regime was ousted in a 1986 military coup. The latest setback occurred in December when Jean-Bertrand Aristide, Haiti's first democratically elected president, was overthrown and forced into exile.

The fall of the Berlin Wall in 1989 heralded a wave of transitions in the Eastern European countries and what was the Soviet Union. Radical political changes begun in Poland in 1988 were consolidated. Other countries followed: Bulgaria, Czechoslovakia, German Democratic Republic, Hungary and Romania either began or completed transitions to democratic rule in 1990. In 1991, Albania held its first multiparty elections in 68 years. That same year, the republics of the former Soviet Union experienced rapid political change towards democracy.

There was little political change in post-independence Africa until the late 1980s, but since then the transformations have been dramatic. Elections were held in Namibia in 1989 and the new government guided the country into independence in 1990. In 1991, multiparty

elections were held in Benin, Cape Verde, São Tome and Príncipe, and Zambia. The military government in Nigeria has committed itself to transfer rule to civilians through elections in 1992.

Many other African countries also moved towards ending single-party systems: Angola, Burkina Faso, Congo, Côte d'Ivoire, Ghana, Kenya, Niger and Tanzania. And opposition forces in such other countries as Cameroon, Madagascar and Zaire are pressing for political change.

Political change has transformed many countries in Asia over the past several years as well. In 1985, Filipinos poured into the streets to overthrow the Marcos government and, shortly thereafter, held a democratic presidential election. In 1990, Mongolians ratified a new constitution that established a multiparty system.

During 1991, Nepal held its first democratic elections in 30 years. Hong Kong took its first steps towards democracy with direct elections to its legislature, and Samoa held its first elections with universal adult suffrage. Pakistan and Bangladesh switched from martial law regimes to elected parliamentary systems. Warring factions in Cambodia signed a peace accord, and an international effort is under way to help smooth the transition to a multiparty system.

In the Middle East, election fever gripped Jordan at the end of the decade, and in 1991 a national charter legalized a multiparty system. Algeria's democratic transition is still incomplete. Multiparty elections are scheduled for November 1992 in Yemen.

Close to a third of humankind still lives in countries that place restrictions on political freedom and participation. But the world today is a much freer place than it was three decades ago.

A system of classification of freedoms

There clearly are many kinds of freedom—freedom to vote, for example, or freedom from hunger. So, any form of measurement must start with a system of classification and selection.

INDIVIDUAL AND COLLECTIVE RIGHTS. One widely used distinction is that between individual and collective rights. This distinction is often made to refer to two aspects. First, societies differ in many respects—depending, for example, on their sociocultural traditions, their norms and value systems, and their political and economic history. This is a point worth remembering when examining the link between freedom and human development. Societies clearly differ in their notions of freedom and in how they perceive and establish the link between freedom and development.

One important difference concerns the emphasis societies may place on the freedom of the individual and that of collectives—as the family, the tribe, the community, or the country. In today's world, marked by growing interdependence among countries and international migration, the question has also arisen as to how governments guarantee the rights of persons who are not residents of the country. The issue of the rights of migrant workers is of special importance in this context.

Second, some rights are enjoyed by every person individually, others only collectively. Every person needs to be free from arbitrary arrest, while the absence of censorship is a freedom everyone can enjoy simultaneously. Others apply to specific

groups of people, such as freedom from gender, ethnic or racial discrimination.

All individual freedoms need to be interpreted so that freedom for some does not curtail the freedom of others or impair collective national interests.

And these freedoms must not merely be legally available as human rights, they must also be respected in practice. So, any system of measurement must assess both the legal framework in a country and the experience of individuals and communities.

ECONOMIC AND SOCIAL RIGHTS. Many people argue, however—particularly in developing countries—that a freedom index should not be confined to political freedoms. They emphasize the importance of economic and social rights—to food or to education. They refer back to the Universal Declaration of Human Rights (adopted in 1948) which, in effect, emphasizes both political rights and economic and social rights. The latter have also been emphasized in such instruments as the International Covenant on Economic, Social and Cultural Rights adopted in 1966 and the Declaration on the Right to Development adopted in 1986.

For many people, economic and social rights are just as important as political freedom, or more so. The right to vote, they contend, is of less value to someone who is starving or illiterate. Indeed, political democracy will always be fragile until basic economic rights are guaranteed. Economic and social rights should, they argue, be included in any freedom index.

It is certainly true that any comprehensive definition of human freedom must include economic, social and political rights. But should they be measured jointly? The human development index (HDI) is an attempt to measure economic and social rights and the extent to which they are realized. A new political freedom index (PFI) could look specifically at political rights. The issue is whether they should remain separate or be integrated in one overall index.

There are two main reasons for keeping them separate.

First, the HDI and the PFI operate on very different timescales. The HDI is likely to be quite stable over time, since economic and social achievements—such as those

tracked by health and education indicators—move relatively slowly. Political freedoms, by contrast, can fluctuate very rapidly, from one palace coup to the next or from an authoritarian to a multiparty system. Witness the swiftness of recent change in Haiti, Zambia and Algeria. Since HDI achievements will not in the short term be greatly affected by political change, insulating the HDI from the political shocks of the PFI would offer a truer picture.

The two indices differ in a second crucial respect. The HDI depends partly on a country's economic opportunities, while the PFI does not. Countries do not have to censor the press or torture prisoners just because they are poor. But a poor country that made substantial progress in freedom could not hope to see this reflected in a dramatic improvement in its ranking in a combined index like the HDI.

For these reasons, it is better not to merge the two indices. Instead, they should be used as the basis for an interesting range of comparisons and analyses—to examine the overall state of democratic human development in one country or in a range of countries.

POLITICAL FREEDOM. Many international agreements have been adopted on civil and political rights. These include the United Nations Universal Declaration of Human Rights; the International Covenant on Civil and Political Rights; the International Covenant on Economic, Social and Cultural Rights; and the Regional Charters on Human Rights adopted by Africa, Europe and the American States and the draft proposals for the Arab States and the Asian States.

Analysing all these instruments shows that, in some respects, there are regional differences. But in most respects, the rights enshrined in these documents show considerable congruence. They can be grouped into five broad clusters, reflecting values common to all cultures, all religions and all stages of development.

1. Personal security.
2. Rule of law.
3. Freedom of expression.
4. Political participation.
5. Equality of opportunity.

No measure of freedom can do it full justice

Current sources of data require careful handling

These five clusters can also be related to the main institutions of society that protect—or abuse—human rights. The legislature represents political participation; the executive branch has a critical role in equality of opportunity; the judiciary is responsible for rule of law and the physical integrity of the individual; and the ‘fourth estate’, civil society and the press, are important barometers of freedom of expression, including freedom of association and movement.

Approaches to the construction of a political freedom index

Identifying some of the key components of political freedom is only the first step towards its measurement.

INDICATORS OF POLITICAL FREEDOM. To make the key components, or main clusters, of political freedom accessible to empirical observation, it is necessary to select for each one of them a set of indicators that would allow observers to determine whether the rights in question are being respected or violated in practice—and, if so, to what extent. These indicators should meet the following criteria:

- Relevance for human development.
- Universal applicability.
- Freedom from any cultural bias.

The type of indicators that could be used for this purpose are shown in box 2.2. Such a checklist should ideally focus on a few significant items and be easily quantifiable so that available data can be related to it.

SOURCES OF DATA. To obtain concrete information on each indicator of human freedom is not easy at present. There are several sources of information—from the UN Centre for Human Rights and the UN Commission on Human Rights to NGO reports and bilateral government sources. But there are problems inherent in using these sources. First, they are not complete: they need to be supplemented by other regional and national sources, particularly from the developing world. Second, they are not unbiased. Considerable expert judgement is needed to determine which sources are relevant for each country and what information is corroborated by all sources. Third,

the sources of information generally focus on the negative aspects—specific violations of human rights. These need to be put in their proper perspective by reviewing the positive achievements of a country and by placing its human rights record in a dynamic, historical and cultural context. Fourth, it is necessary to look at the documented record of human rights violations and the responses of individual governments to such allegations. Such information is available from the reports of the UN Commission on Human Rights and its subsidiary bodies, but the country coverage is limited.

Considerable work is needed to ensure more comprehensive, objective and up-to-date sources of information. In the meantime, however, work on the methodological basis for an index must go on because it cannot wait for the emergence of perfect data. This is the process through which most indices have passed, including national income accounts. But the current state of raw data requires that it be handled with great care.

QUANTIFICATION OF INFORMATION. Most available information is in a descriptive or narrative form. To translate it into a comparable numbering system requires many judgements. Such an exercise is best undertaken by several expert teams working independently and then comparing and harmonizing their results. For the numbering system, it is useful to adopt a broad range (say, 0 to 10) so that variations in performance can be quantified with greater precision as more data become available and more experience is gained.

WEIGHTING SYSTEM. There are a number of possibilities for weighting individual scores to arrive at an aggregate index. One can, for example, assign the same weight to each cluster, or give different weights. Then the method of averaging has to be decided—choosing the minimum, say, or the product, or a simple average. The minimum is the most punishing—it pinpoints the weakest spot in a country’s human rights performance, judging it only as good as its worst measure. The product can also be quite harsh, since a low score on one factor could reduce the total score by a factor of up to 10.

An illustrative checklist of indicators of political freedom

Personal security

- *Arbitrary arrest and detention*—Are there arrests without a warrant or probable cause; detentions without prompt hearing before a court or other independent body; unreasonably long detentions before trial or conviction; arrests and detentions of people for their political beliefs? Is there any incommunicado detention?
- *Torture or cruel treatment or punishment*—Are there acts of torture (mental or physical)? Is there cruel, unusual or degrading treatment or punishment? Are there inhumane prison conditions? Does police brutality exist?
- *Arbitrary killing*—Are there any executions without due process of law by the police, security forces or state officials? Are there any killings by non-governmental forces with government acquiescence or compliance? Are there killings, either of civilians or of captured or wounded combatants, in violation of the laws of war?
- *Disappearances*—Are persons abducted and held in unacknowledged detention by order of, or with the complicity of State or opposition forces, without their family or friends having any knowledge of where they are and how they are faring? Do family members have effective judicial or administrative mechanisms for determining the whereabouts and status of abducted persons?

Rule of law

- *Fair and public hearings*—Are there fair and public hearings in the determination of all criminal charges? Is every person charged with an offence tried without undue delay, and with adequate time and facilities for the preparation of his or her defence?
- *Competent, independent and impartial tribunal*—Is the judiciary free of outside pressure or influence? Is there corruption in the judiciary? Is the procedure for selecting judges an open one in which opinions outside the executive can be heard? Do judges have security of tenure?
- *Legal counsel*—Does everyone have the right to capable and independent defence counsel in the determination of any criminal

charge against him or her? Does everyone have the right to have legal assistance assigned to him or her in any case where the interests of justice so require, and without payment by the defendant if he or she lacks the necessary means? Is there a right to consult with counsel immediately on arrest, before interrogation begins?

- *Review of conviction*—Does everyone convicted of a crime have the right to have his or her conviction and sentence reviewed by an independent judicial tribunal?
- *Failure to prosecute*—Do state prosecutors also prosecute government officials, or members of pro-government forces, who violate the rights and freedoms of other persons?

Freedom of expression

- *Restrictions in law and practice*—Is freedom of expression a constitutionally or legally protected right? Are there legal restrictions on freedom of opinion and expression other than what is necessary to protect the rights of others? Is there prosecution of journalists or others for infringement of such laws? Are the punishments prescribed severe in proportion to the offence?
- *Media censorship*—Is there direct censorship of any of the media? Is there indirect censorship by such means as withdrawal of government advertising revenue, licensing laws, or restrictions on the supply of materials? Are there threats to, or harassment of, publishers, editors or journalists? Is there destruction of media outlets by State or non-State forces? Has the government shut down any newspapers on the grounds of their legitimately expressed views?
- *Media ownership*—Is the media (particularly TV and radio) wholly or partly owned by the government? If so, do the media tend to reflect or favour government policy? Is independent ownership of the media permitted?
- *Freedom of speech*—Is there any censorship of mail, phone-tapping or government surveillance? Are there any restrictions on freedom of speech? Are there government controls on book publishing or the arts, other than to safeguard public morality or in

the legitimate interests of national security or public order?

Political participation

- *Political participation*—Is there freedom of association and assembly? Are multiple parties allowed in law and in practice? Is there violence against, or harassment of, political opponents?
- *Free and fair elections*—Is there a universal adult franchise? Are there procedural irregularities by government, such as the exclusion or intimidation of voters, the rigging of votes, or violence against candidates or opponents of government? Do the voting procedures permit political parties and independent observers to monitor balloting and vote counting?
- *Continuity of the democratic system*—Are free elections a recent introduction or a long-standing tradition? What are the prospects of a democratic system continuing? Do elections occur at reasonably regular intervals?
- *Community and local decision-making*—Are political decision-making powers decentralized? How much public participation is allowed in local bodies and at the community level?

Equality of opportunity

- *Legal guarantees*—Are there constitutional or statutory guarantees of equality, regardless of gender, race, colour, descent, tribe, religion or national or ethnic origin?
- *Violence against, or harassment of, particular groups*—Does the State always prosecute those responsible for violence or harassment (State or non-State) against particular groups?
- *Political participation*—Are any groups excluded from, or hindered from, participation in voting or government? Does the State support or condone this, or does it make serious efforts to combat it?
- *Economic participation*—Are there inequalities in pay and employment as a result of discrimination? Are there discriminatory restrictions on economic participation? Does the State support or condone discrimination, or does it make serious efforts to ensure equal treatment?

Political freedom and human development seem to move in tandem

A simple average is the most forgiving, since shortfalls in one cluster can be compensated for by high scores in another.

Some tentative conclusions

On the basis of the foregoing methodology, a tentative attempt was made by different experts to construct a political freedom index. They took into account the many imperfections in database and the provisional nature of the methodology. The overall conclusions that flow from this analysis should be treated with great caution until more work is done in this area (table 2.1).

- *The distribution of freedom*—Data were collected for 104 countries representing 92% of the world's population. Of these, about a third had high freedom (a 75% score or above), another third had reasonable freedom (50-75%), and the remaining third modest to low freedom (50% or less). But given the current political trends in the world, it is clear that an increasing number of countries will be moving to higher scores.
- *The link with human development*—Political freedom and human development do seem to move in tandem. Countries with a high HDI have an average PFI of 84%, while countries with a low HDI have an average PFI of 48%.

- *The link with levels of income*—There also appears to be a link between a country's per capita income and the extent of its democratic freedoms. For high-income countries, the average PFI is 84%, for middle-income countries 61%, and for low-income countries 43%. But the table also shows that, as income levels fall, freedom does not decline correspondingly. Even poor nations can enjoy a high level of political freedom.
- *Progress to date*—Political participation (through elected legislatures) and equality of opportunity are the areas in which the world has progressed the most. Physical integrity of the individual, on the other hand, is an area where human rights abuses still occur most frequently.

Further research

The construction of a composite political freedom index (PFI) raises many issues of methodology and statistical sources. Any such index has to be tested on the criteria of relevance, objectivity and transparency. Obviously, a good deal of research is required before a political freedom index is constructed that is universally acceptable.

The preparation of a professionally sound political freedom index must be a continuing process. The methodology of-

TABLE 2.1
Political freedom index aggregates

Aggregate	Personal security	Rule of law	Freedom of expression	Political participation	Equality of opportunity	PFI
<i>Human development levels</i>						
High HDI	8.5	8.4	8.4	8.9	7.8	84.1
Medium HDI	4.8	4.8	4.7	5.0	5.5	49.6
Low HDI	4.5	4.6	4.9	4.3	5.8	48.2
<i>Per capita income levels</i>						
High income	8.7	8.6	8.3	8.7	7.6	83.7
Middle income	5.8	5.8	6.0	6.3	6.4	60.8
Low income	4.0	4.2	4.3	3.4	5.5	42.8
<i>Political freedom levels</i>						
High political freedom	9.0	9.1	9.1	9.5	8.2	89.7
Reasonable political freedom	5.6	6.1	6.6	6.5	6.3	62.0
Modest political freedom	3.8	3.3	3.0	2.6	5.2	35.8
Low political freedom	1.9	1.6	1.3	1.3	3.8	19.9
<i>Global profile</i>						
World	6.0	6.0	6.1	6.1	6.4	61.0
Industrial countries	9.2	9.2	9.1	9.5	8.1	90.1
Developing countries	4.9	4.9	5.1	4.9	5.8	51.3

ferred here is no more than a modest start. Further research on the PFI ought now to be undertaken—in a university or other research centre—to improve its conceptual, methodological and statistical basis. Such research would need to:

1. Investigate further the interrelationship of freedom and development. There is an extensive but inconclusive literature on this subject. Different studies emphasize different rights and often lead to different conclusions. It is necessary to understand more fully how development relates to human rights, and vice versa.
2. Investigate the interrelationship between individual and collective rights as well as that between political rights and economic and social rights. The literature is extensive, but there does not appear to be much quantitative information in this area. Survey data may be useful for examining whether people perceive a connection between individual and collective rights.
3. Determine the most reliable sources of information for human rights performances for all countries. Besides data obtained from internationally renowned organizations, additional information should be obtained from regional and local sources as well. The response of governments to various allega-

tions of human rights violations should be fully ascertained and evaluated.

4. Refine the methodology for construction of a political freedom index. Further investigation is required to determine whether other dimensions should be included within each cluster and to find out which indicators are appropriate within each dimension, to test the weighting system for reliability, to examine more systematically alternative methods of aggregation and synthesis, and to explore whether the PFI will lend itself to measuring progress in political freedom over time and whether it can serve as a link with other indices of development, such as the HDI.

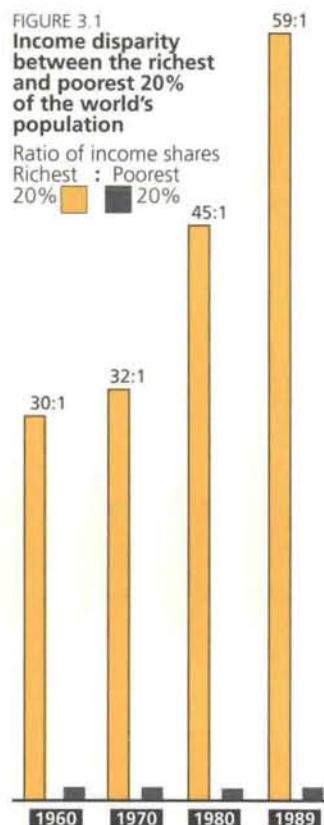
Like the HDI, the PFI is a reflection of people's lives. The sum-total is human freedom. People know when they are tortured, when they are without a political voice, when they are unable to express views and preferences, when they are discriminated against and when they fear that, if detained, they may be without defence. They know what and how much they have lost.

The main purpose of the PFI, therefore, should be to find a measure that expresses freedom from the perspective of the people and to offer a professional basis for a constructive policy dialogue.

*The preparation of
a professionally
sound political
freedom index
must be a
continuing process*



The widening gap in global opportunities



Growth in national income does not automatically increase the well-being of poor people. Income and assets are often very unevenly distributed. And the poor have little access to credit and to market opportunities.

Governments do have many means of redistribution that they may apply: progressive income tax, economic planning mechanisms and social safety nets that can prevent people from falling into destitution. Moreover, people are generally free to move from one part of the country to another if they see an opportunity to improve their well-being.

Globally, the disparities between rich and poor nations can be even greater. But since the kinds of institutions and mechanisms that can redistribute income *in countries* are generally absent, it is hardly surprising that the gap in global opportunities has widened in the past three decades.

Income disparities

The income gap between the richest and the poorest in developing countries is often startlingly wide. In Brazil, the top 20% of the population receives 26 times the income of the bottom 20%. This may be an extreme case of national inequality, but at a global level the contrast is even starker—and getting worse year by year.

This deterioration is clear from changes in the distribution of the world's GNP in the past 30 years (table 3.1). Between 1960 and 1989, the countries with the richest 20% of world population increased their share of global GNP from 70.2% to 82.7%. The countries with the poorest 20% of world population saw their share fall from 2.3% to 1.4%. The consequences for income in-

equalities have been dramatic. In 1960, the top 20% received 30 times more than the bottom 20%, but by 1989 they were receiving 60 times more (figure 3.1 and tables 3.1 and 3.2). The Gini coefficient, a statistical measure of inequality, rose to an intolerable level that far exceeds anything seen in individual countries (from 0.69 to 0.87, on a scale where zero is perfect equality and 1.00 is total inequality).

Even these figures conceal the true scale of injustice since they are based on comparisons of the average per capita incomes of rich and poor *countries*. In reality, of course, there are wide disparities within each country between rich and poor *people*.

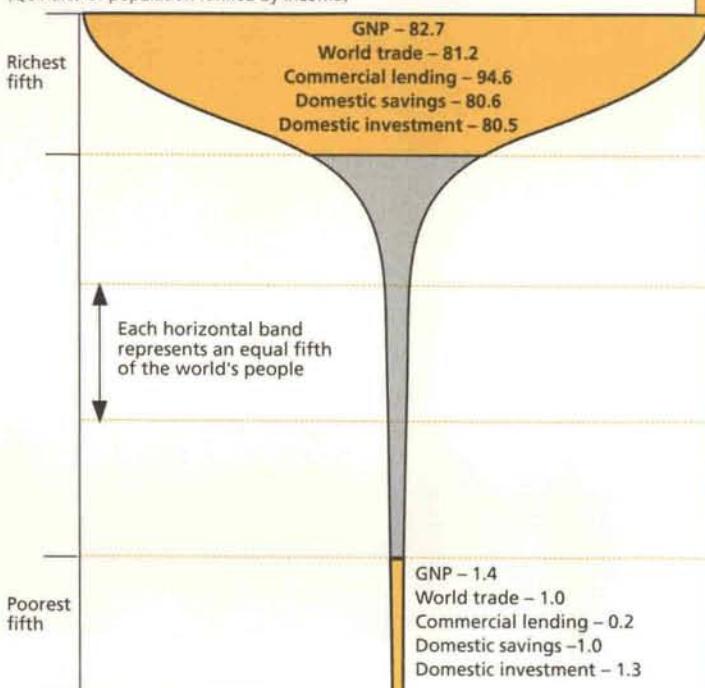
Global inequality would be expressed much more accurately if such national income disparities were taken into account. Relatively few countries publish information on income distribution, so it is not possible to make a worldwide assessment. But a rough estimate can be made for a group of 41 countries for which data are available: a calculation for this group produces a country-based inequality ratio of 65 to 1—though once internal income distribution is taken into account, the ratio between the richest and the poorest people more than doubles to 140 to 1 (figure 3.3, table 3.3 and technical note 2).

If data were available for all 160 countries, the global disparity ratio would undoubtedly be higher still—because in the group of 41 countries, the industrial countries (where income disparities tend to be smaller) are overrepresented. The inequality ratio for the whole world is probably more than twice that indicated in table 3.3 and may be well over 150 to 1.

The income disparity between rich and

FIGURE 3.2
Global economic disparities

Distribution of economic activity, 1989—percentage of world total
(Quintiles of population ranked by income)



poor nations might be better measured using real purchasing power rather than nominal GNP. Even this would still suggest a real income disparity greater than 50 to 1.

Moreover, it is *absolute* rather than *relative* income differences that are even more significant as far as individual people and their attitudes are concerned. The absolute difference in per capita income between the top 20% and the bottom 20% of world population, expressed in 1989 US dollars, increased between 1960 and 1989 from \$1,864 to \$15,149.

These disparities are reflected in real consumption levels. The North, with about one fourth of the world's population, consumes 70% of the world's energy, 75% of its metals, 85% of its wood and 60% of its food.

However it is measured, the current disparity between the world's richest and poorest people is extremely large.

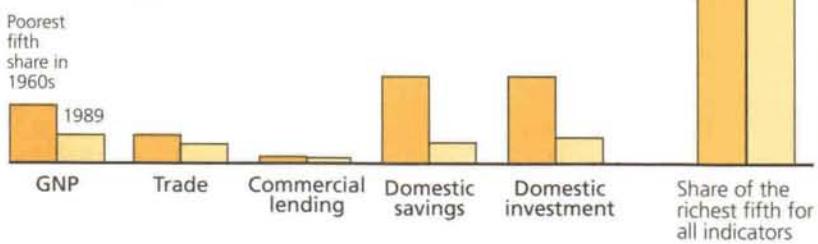
Economic growth disparities

The income gap between rich and poor countries is not only considerable—it is widening. Between 1960 and 1989, the countries with the richest 20% of world population grew 2.7 times faster than the bottom 20% (tables 3.4 and 3.5).

There are also striking contrasts between individual countries and between different regions (tables 3.7 and 3.8). For 1965–80, the world's overall growth rate was 2.4% a year, and the figure for the OECD countries as a whole was close to this at 2.9%. But among the developing regions, the differences were considerable. Those with high per capita growth rates for this period included China (4.1%), East and South-East Asia (3.9%), Latin America and the Carib-

Ratio of shares in the global economy, 1960s and 1989

Ratio of the poorest fifth to the richest fifth



DISPARITY BETWEEN RICH AND POOR

FIGURE 3.3
Between countries,
between people

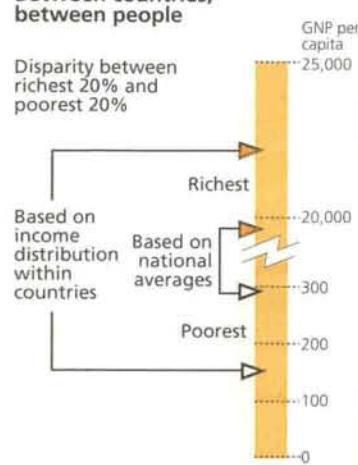


TABLE 3.1
Global income disparity, 1960-89
Percentage of global income

	Poorest 20% (%)	Richest 20% (%)	Richest to poorest	Gini coefficient
1960	2.3	70.2	30 to 1	0.69
1970	2.3	73.9	32 to 1	0.71
1980	1.7	76.3	45 to 1	0.79
1989	1.4	82.7	59 to 1	0.87

TABLE 3.2
Global economy, 1989
Percentage of total

	Income	Trade	Domestic investment	Domestic savings
Poorest 20%	1.40	0.95	1.25	0.98
Second 20%	1.85	1.35	2.62	2.53
Third 20%	2.30	2.53	2.92	2.59
Fourth 20%	11.75	13.94	12.65	13.39
Richest 20%	82.70	81.23	80.56	80.51

TABLE 3.3
Disparity between rich and poor countries and between rich and poor people, 1988

	Countries ^a		People ^b	
	Per capita income (US\$ billions)	Percentage of total income	Per capita income (US\$ billions)	Percentage of total income
Poorest 20%	301	1.0	Poorest 20%	163
Richest 20%	19,542	67.6	Richest 20%	22,808
Richest to poorest	65 to 1		Richest to poorest	140 to 1

a. Based on average national per capita income.

b. Based on income distribution within countries.

TABLE 3.4
Widening economic gaps between rich and poor
Percentage of global economic activity

	Global GNP ^a	Trade ^b	Commercial bank lending ^b	Domestic investment ^c	Domestic savings ^c	Foreign private investment ^d
<i>1960/70</i>						
Richest 20%	70.2	80.8	72.3	70.4	70.4	73.3
Poorest 20%	2.3	1.3	0.3	3.5	3.5	3.4
Ratio, richest to poorest	30 to 1	62 to 1	326 to 1	20 to 1	20 to 1	21 to 1
<i>1989</i>						
Richest 20%	82.7	81.2	94.6	80.6	80.5	58.4
Poorest 20%	1.4	1.0	0.2	1.3	1.0	2.7
Ratio, richest to poorest	59 to 1	86 to 1	485 to 1	64 to 1	82 to 1	21 to 1
Value (US\$ billions)	20,000	6,000	5,000	4,500	4,500	200

a. 1960; b. 1970; c. 1965; d. Developing countries only.

TABLE 3.5
GNP per capita growth rates
(population share)

Annual growth rate in per capita GNP	Percentage of developing countries' population sharing such growth	
	1965-80	1980-89
Over 5%	10.6	33.2
Between 1% and 5%	76.1	37.2
Below 1%	13.3	29.6
Total	100.0	100.0

DISPARITY BETWEEN REGIONS

TABLE 3.6
North-South disparity in human development, 1960-90

	North		South		Absolute disparity	
	1960	1990	1960	1990	1960	1990
<i>Narrowing disparity in human survival</i>						
Life expectancy (years)	69.0	74.5	46.2	62.8	22.8	11.7
Adult literacy (%) ^a	95	97	46	64	49	33
Nutrition (daily calorie supply as % of requirement) ^b	124	134	90	109	34	25
Infant mortality (per 1,000 live births)	37	13	150	74	123	61
Child mortality (per 1,000 live births)	46	18	233	112	187	94
Access to safe water (% of population) ^c	100	100	40	68	60	32
<i>Widening disparity in human progress</i>						
Mean years of schooling (years) ^d	9.1	10.0	3.5	3.7	5.6	6.3
Tertiary education enrolment ratio (%) ^b	18	37	3	8	15	29
Scientists and technicians (per 1,000 people) ^e	51	81	6	9	45	72
Expenditure on R&D (US\$ billions) ^d	196	434	13	18	183	416
Telephones (per 1,000 people)	130	466	9	26	121	440
Radios (per 1,000 people) ^b	449	1,008	32	173	417	835

a. 1970, not 1960; b. 1965; c. 1975; d. 1980; e. 1980-85.

TABLE 3.7
Widening economic gaps between regions

Percentage of global

	Global population		Global GNP		Global trade		Global commercial bank lending		Foreign private investment		ODA ^a	
	1960	1989	1960	1989	1970	1989	1970	1989	1970	1989	1960	1989
Sub-Saharan Africa	7.1	9.5	1.9	1.2	3.8	1.0	0.3	0.3	24.8	15.0	8.3	37.8
South Asia	19.8	22.7	3.1	2.8	1.3	0.9	0.1	0.1	1.5	3.1	35.9	17.8
East and South-East Asia (excl. China)	8.8	9.9	1.7	2.9	4.1	8.1	5.7	12.8	11.7	33.3	15.3	13.7
China	21.8	21.6	3.0	2.0	0.8	1.9	0.4	0.2	11.8	7.0	0.0	6.5
Arab States	3.9	5.0	1.5	2.5	3.3	4.1	1.5	2.4	9.8	13.2	32.8	12.6
Latin America and the Caribbean	7.1	8.4	4.7	4.4	5.6	3.3	0.8	6.4	40.4	28.4	7.7	11.6
Developing countries	68.5	77.1	15.9	15.8	18.9	19.3	8.8	22.2	100.0	100.0	100.0	100.0
Least developed	6.8	8.4	1.0	0.5	0.8	0.4	0.2	0.1	1.7	2.2	7.0	33.7
Industrial countries	31.5	22.9	84.1	84.2	81.1	80.7	91.2	77.8				

a. Developing countries only.

TABLE 3.8
GNP per capita annual growth rates

	1965-80	1980-89	1965-89
South Asia	1.4	2.9	1.8
East and South-East Asia (excluding China)	3.9	3.3	3.7
China	4.1	8.2	5.7
Sub-Saharan Africa	1.5	-1.7	0.3
Arab States	3.0	0.5	2.1
Latin America and the Caribbean	3.8	-0.4	1.9
Industrial countries	2.5	2.2	2.4
OECD	2.9	2.4	2.6
Developing countries	2.9	3.4	3.1
Least developed countries	0.6	-0.7	0.1
All countries	2.4	3.2	2.9

bean (3.8%) and the Arab States (3.0%). Compared with these, the growth rates for South Asia and Sub-Saharan Africa were very sluggish.

During the 1980s, however, the situation changed dramatically. East and South-East Asia and China continued to make rapid strides, and the situation in South Asia also improved considerably. But elsewhere there was less progress. Between 1980 and 1989, economic growth in Latin America and the Caribbean averaged *minus* 0.4% a year. And Sub-Saharan Africa experienced an average annual growth rate of *minus* 1.7% over the same period, falling even farther behind.

The position for the least developed countries, containing 8% of the developing world's population, was bad as well. Their share of global GNP shrank between 1960 and 1989 from a tiny 1% to an even more miserable 0.5%.

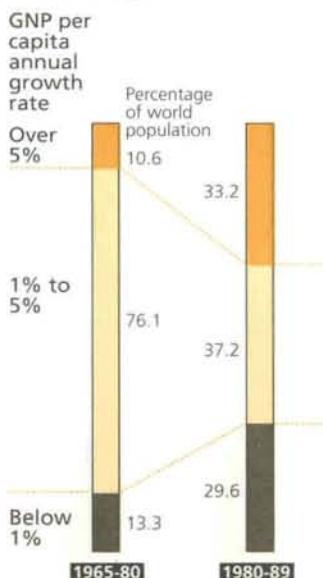
The 1980s have often been described as the "lost decade" for development. This might seem strange since average global growth was higher during 1980-89 than in 1965-80 (3.2% compared with 2.4%). The real problem in the 1980s was that global growth was poorly distributed.

In 1965-80, overall growth may have been lower but more people saw their position improve (figure 3.4). Taking annual per capita growth of between 1% and 5% to be "reasonable", the proportion of the world's population living in countries with less than that was 13% in 1965-80, but it increased to nearly 30% in 1980-89.

The 1980s also saw a greater polarization between rich and poor. Compared with 1965-80, three times as many people in the 1980s lived in countries with high per capita growth (above 5%). This polarization would become even more evident if the deterioration in national income distribution were also taken into account—gaps between rich and poor widened considerably in some of the fast-growing economies.

Examining only average growth rates is, therefore, very unsatisfactory, and the focus of future attention should be on the actual rates for specific populations and income groups.

FIGURE 3.4
People and growth



Disparities in market opportunities

The gaps in income and employment opportunities, between rich and poor nations and between rich and poor people, are thus very large—and widening at an alarming pace. But at the global level, there are also great disparities in the access to markets—those for goods and services and those for capital.

- *Trade*—Many developing regions have seen their share of global trade fall since 1970. These include Sub-Saharan Africa (3.8% to 1%), Latin America and the Caribbean (5.6% to 3.3%) and the least developed countries (0.8% to 0.4%). For the bottom 20% of world population, the share is now only 1%. Other regions did much better during this period: East and South-East Asia (including China) more than doubled their share from 4.9% to 10%.

- *Commercial bank lending*—The bottom 20% of the world's population receives only 0.2% of global commercial bank lending. Like poor people within nations, poor nations in the international community are simply not creditworthy.

- *Foreign direct investment*—Despite the supposedly abundant labour supply and investment opportunities, no more than 0.2% of transnational investment is directed to the bottom 20% of the world's population.

The disparities are wide for people in most of the developing world, but some regions and countries are further behind than most.

SUB-SAHARAN AFRICA AND SOUTH ASIA increased their share of global population between 1960 and 1989 from 27% to 32%. But their share of global GNP declined by 20% and their share of global trade was more than halved—underlining a rapid process of marginalization for 1.7 billion people (box 3.1).

THE LEAST DEVELOPED COUNTRIES, as a group, slipped even further behind. They already had miserable shares of global GNP (1% in 1960), global trade (0.8% in 1970) and global commercial bank lending (0.2% in 1970)—much lower than their 8% share of world population. But even these levels have been halved over the last two to three decades.

Whatever the indicator, the evidence points to large and widening disparities. At both the national and international levels, the basic question now is: How can this trend be reversed?

Human capital disparities

Economic output normally increases as capital investment increases and as more workers join the labour force. But increases in productivity also play an important part. In the industrial countries, productivity is thought to have accounted for about 50% of the growth in economic output. The situation is very different, however, in the developing world, where productivity increases have been much smaller—responsible for no more than about 9% of output growth.

Productivity increases have been attributed to several factors: technical innovation, for example, or a healthier and more skilled and educated workforce, or a more vigorous entrepreneurial spirit. All these are usually the reward for investing in education and health, building up the country's "human capital".

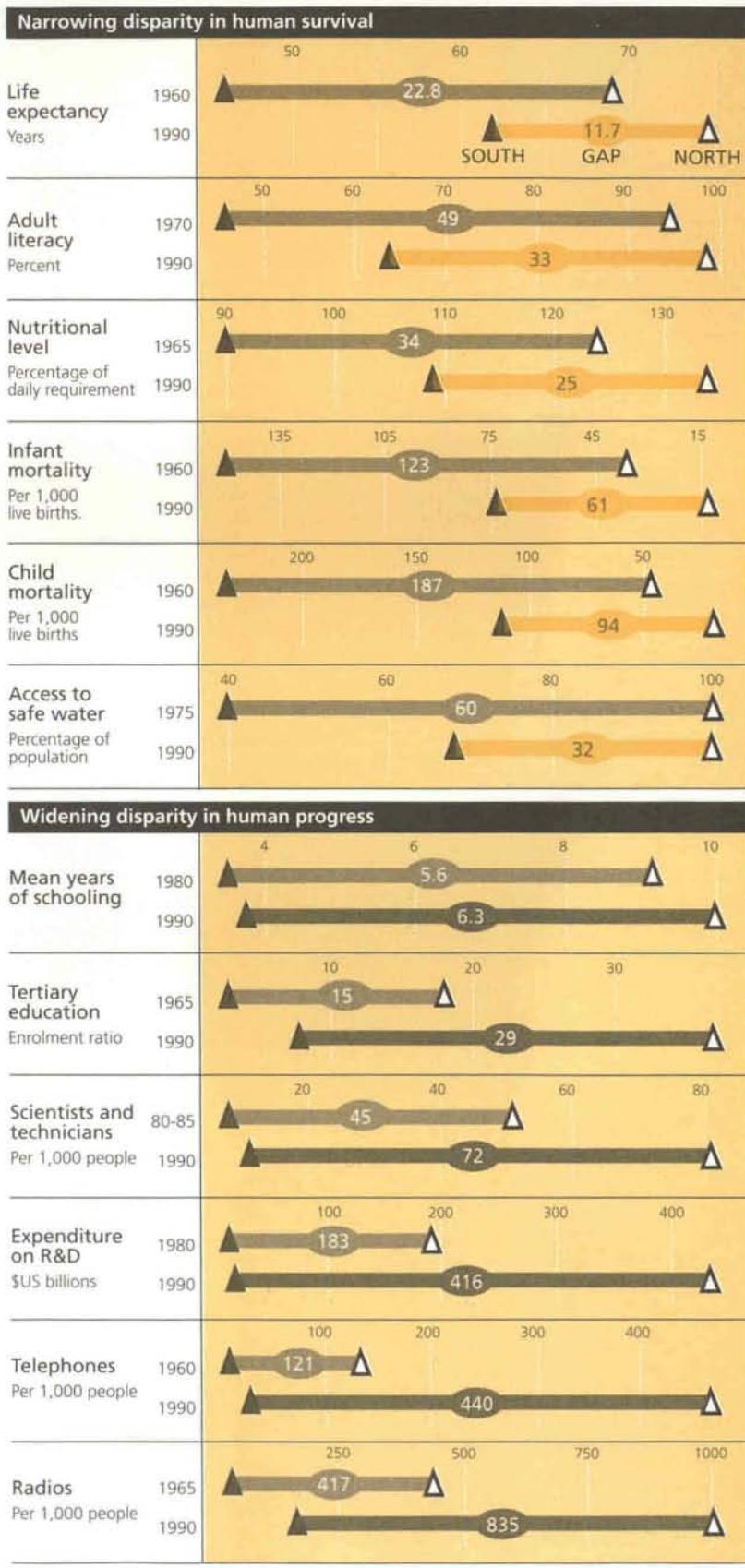
Developing countries have made some progress in improving their stock of human capital (table 3.6 and figure 3.5). They now have much healthier and more educated populations:

- *Average life expectancy* increased between 1960 and 1990 from 67% of the level in the North to 84%.
- *Daily per capita calorie supply* increased between 1964-66 and 1984-86 from 72% of the level in the North to 80%.
- *Infant and child mortality rates* were more than halved between 1960 and 1990 (an achievement that took more than a century in the industrial countries).
- *Adult literacy* increased from 46% to 64% between 1960 and 1990, narrowing the literacy gap between North and South from 52% to 34%.
- *The enrolment ratio for primary and secondary school children* increased from 55% to 72%.

As the 1990 *Human Development Report* showed, the North-South gaps in basic human survival have narrowed considerably over the past three decades. People in the

FIGURE 3.5
North-South gaps in human development

Change in absolute disparity



Investing in Africa's people

Africa is being left behind by the rest of the world. Years of economic decline have taken their toll as Africa's participation in global economic activity has steadily fallen.

- *Share of global GNP*—between 1960 and 1989, this dropped from 1.9% to 1.2% (Africa has 9.5% of world population).
- *Share of global trade*—between 1970 and 1989, this fell from 3.8% to 1%.
- *Share of developing world private investment*—between 1970 and 1989, this went from 25% to 15%.

One of Africa's main economic weaknesses is its dependence on primary commodities. Between 1986 and 1990, the decline in commodity prices cost the continent more than \$50 billion in export earnings. And the long-term outlook is no better.

Africa's external debt (excluding South Africa) has tripled since 1980 and is now as large as its total GNP. Debt service in 1990 was equivalent to 19% of total exports of goods and services. And it is proving difficult to get these debts either written off or written down.

Africa's economic decline is now leading to reversals in its modest and still fragile progress in human development. The literacy rate is still only 62%, and less than half the population has access to safe water or health services. Per capita GNP growth was negative (-1.7% a year) between 1980 and 1989, and wages of modern sector workers dropped 30% on average between 1980 and 1986. Education, primary health care and the provision of safe water are being undermined. Primary school enrolment had jumped between 1965 and 1980 from 41% to 79%, but by 1988 it had fallen back to 67%.

One thing Africa is not short of, however, is external advice. In fact, Africa has perhaps received more advice per capita than any other continent. The

South are living longer, and more than half the population has acquired at least a rudimentary education. But the real challenge lies ahead. The engine of economic progress is technological innovation and increases in human productivity—and this is precisely where the developing countries are being

left behind by the rapid strides of the industrial world. Some of the current gaps between North and South in technical education, informatics and technological research are particularly disturbing:

- *The tertiary enrolment ratio* is only 8% in the South, compared with 37% in the North. In the least developed countries, it is 2%.
- *Scientific and technical personnel* number only nine per 1,000 people, compared with 81 in the North.
- *Communications*—the informatics and communications revolution seems to have bypassed most developing countries. Per capita, they have only one-eighteenth as many telephone connections, one-eighth as many newspapers and one-sixth as many radios.
- *Computerization*—only a twentieth of the world's computers are in the South.
- *Research and development (R&D)*—despite having 80% of the world's population, developing countries are responsible for only 4% of global R&D expenditure.

The technological gaps between North and South have widened in the past three decades. Such gaps are self-reinforcing. The concentration of knowledge in the industrial countries means that further advances tend also to occur there. This gives them a productivity advantage and consequently much higher returns on capital and labour. The higher profit rates in industrial countries enable them to attract yet more capital (even from developing countries), and this facilitates more investment in technology.

These gaps are widening because basic scientific and technological information is increasingly being privatized. The kind of information that used to appear in the public domain is now likely to be patented or copyrighted—and available only to those who can pay the price. Even to keep up to date with freely available information now demands higher levels of technology to access computer networks.

This cycle of concentration is reflected in world trade. OECD nations find that they can now meet an increasing share of consumer demand with skill-intensive production within their own countries and that they need to import less from the developing world. The developing countries' share of

world trade fell from 24.8% in 1980 to 19.3% in 1989.

The challenge for developing countries in the next decade is a dual one. Where basic human needs are not yet met—for basic education, primary health care or food—progress must be accelerated. The route to higher levels of human development is to not ignore the basics. An inverted pyramid of human development is hardly a foundation for sustainable progress.

Other countries will have to sustain their progress, but they must also invest in higher levels of human development. Their challenge is striking the right, most efficient and most effective balance between closing within-country disparities and keeping up with global progress and development.

Developing countries must, therefore, go beyond basic concerns of human survival and invest heavily in *all* levels of human capital formation—particularly in technical and managerial skills. Unless they acquire greater control over the expanding “knowledge industry”, they will languish in the backwaters of low-value-added production.

Official development assistance

A country can offset the tendency for increasing national income disparity with a progressive tax on income. But there is no such global system. The same is true of social policy and safety nets. Many industrial countries (and developing ones) try to stop people falling into absolute destitution. Around 25% of national incomes are channelled through the public budget to social services, unemployment benefits and welfare payments. But again, there are no such global safety nets and few mechanisms for translating sentiments of international solidarity into effective international action.

It might be thought that official development assistance (ODA) could fulfil this role. But the experience so far has been disappointing (figure 3.6). ODA has critical weaknesses—in quantity, equity, predictability and distribution.

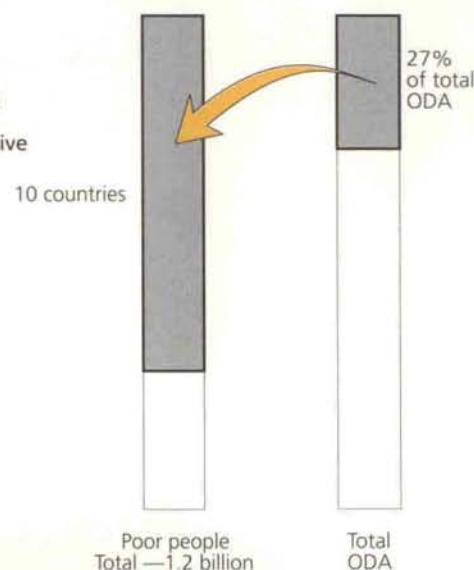
QUANTITY. The industrial countries currently give ODA equivalent to around 0.35% of their combined GNP—\$54 billion a year, with \$52 billion coming from OECD coun-

FIGURE 3.6
Distribution of ODA

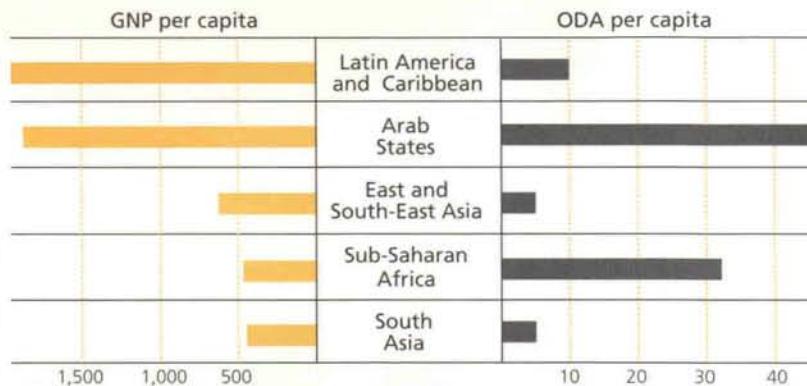
to the poorest people ...

Over 72% of the developing countries' poor people live in 10 countries that receive 27% of all ODA.

(1990)



to developing regions ...



to countries with high military priorities ...

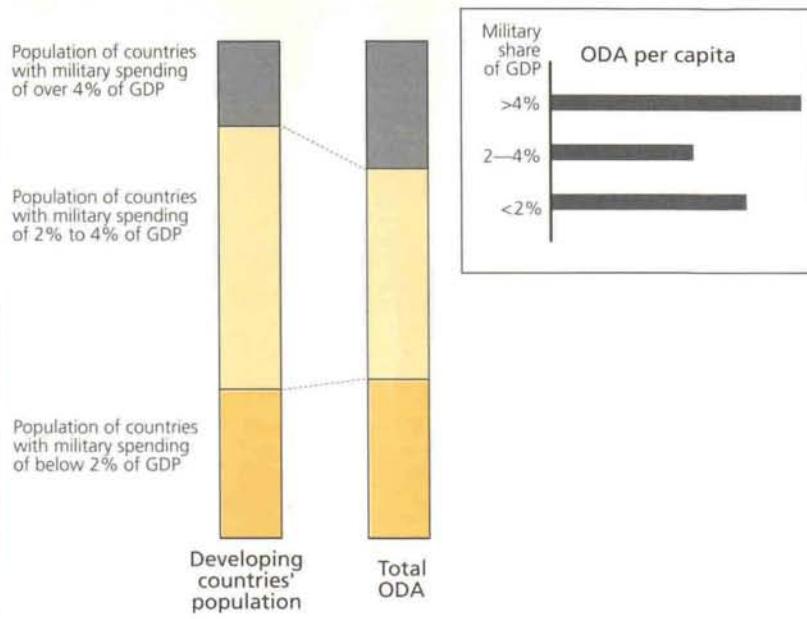


TABLE 3.9
ODA by region, 1989/90

Region	ODA per capita (US\$)	GNP per capita (US\$)	ODA per capita as % of GNP per capita
Arab States	43	1,887	2.3
Sub-Saharan Africa	32	475	6.7
Latin America and the Caribbean	10	1,962	0.5
East and South-East Asia	5	625	0.8
South Asia	5	458	1.1

TABLE 3.10
Top 20 recipients, 1990

Developing country	Total ODA (US\$ millions)	ODA as % of GNP
Egypt	5,584	17.2
Bangladesh	2,081	10.5
China	2,064	0.5
Indonesia	1,717	2.0
India	1,550	0.5
Philippines	1,266	3.0
Turkey	1,259	1.7
Tanzania	1,155	37.5
Pakistan	1,108	2.8
Kenya	989	11.3
Morocco	965	4.4
Mozambique	923	77.4
Jordan	884	16.7
Ethiopia	871	14.6
Zaire	816	9.2
Thailand	787	1.2
Sudan	768	9.5
Senegal	724	15.4
Côte d'Ivoire	674	7.2
Sri Lanka	659	9.1
Subtotal	26,844	2.4
	(61% of total ODA)	

TABLE 3.11
ODA to the poorest

Ten developing countries with highest number of poor	Number of poor (millions)	Poor as % of total world poor	ODA per capita (US\$)	ODA as % of total ODA
India	410	34.2	1.8	3.5
China ^a	120	9.9	1.8	4.7
Bangladesh	99	8.3	18.0	4.7
Indonesia	70	5.8	9.3	3.9
Pakistan	37	3.1	8.8	2.5
Philippines	36	3.0	20.3	2.9
Brazil	33	2.8	1.1	0.4
Ethiopia	30	2.5	17.7	2.0
Myanmar	17	1.4	4.7	0.4
Thailand	17	1.4	14.1	1.8
Total	869	72.4	4.2	26.8

a. The number of poor in China is estimated by the World Bank at about 100 million for rural poor only. A rough estimate of 120 million is adopted here for the entire country, on the basis that the rural poverty rate is two and a half times the urban poverty.

TABLE 3.12
ODA shares by income group

Population by developing country per capita income	Percentage of total ODA		ODA per capita (US\$)	
	1970	1989	1970	1989
Poorest 40%	39	30	2.6	8.2
Richest 40%	61	67	4.1	18.3
Ratio of richest 40% to poorest 40%	1.6 to 1	2.2 to 1	1.6 to 1	2.2 to 1

TABLE 3.13
ODA to big military spenders, 1989/90

	Share of total ODA (%)	Share of population (%)	ODA share as % of population share
Low military spenders (below 2% of GDP)	30.6	27.7	111
Moderate military spenders (between 2% and 4% of GDP)	43.9	54.7	80
High military spenders (above 4% of GDP)	25.5	17.6	145

HOW ODA IS SPENT

FIGURE 3.7
ODA and human expenditure

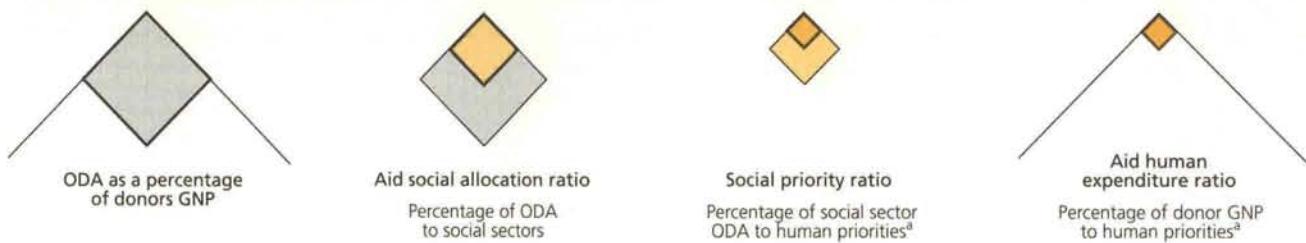


TABLE 3.14
Human priorities in bilateral aid^a

Country	ODA (US\$ millions) 1990	ODA as % of GNP 1990	Aid social allocation ratio 1988/89	Social priority ratio 1988/89	Aid human expenditure ratio 1988/89	Percentage of total ODA for human priorities 1988/89
Norway	1,207	1.17	27.2	72.3	0.230	19.7
Finland	846	0.64	38.0	41.4	0.100	15.7
Denmark	1,171	0.93	19.2	55.4	0.099	10.6
Netherlands	2,580	0.93	21.1	44.5	0.087	9.4
Sweden	2,007	0.90	17.0	41.5	0.064	7.1
Switzerland	750	0.31	35.8	50.6	0.056	18.1
Canada	2,470	0.44	23.8	45.9	0.048	10.9
Italy	3,395	0.32	18.0	47.3	0.027	8.5
United Kingdom	2,639	0.27	13.4	65.8	0.024	8.8
France	6,277	0.52	11.0	35.9	0.021	4.0
Austria	389	0.25	13.4	60.6	0.020	8.1
United States	10,166	0.19	16.4	50.4	0.016	8.3
Germany	6,320	0.42	8.9	21.4	0.008	1.9
Japan	9,054	0.31	10.7	25.5	0.008	2.7
Australia	955	0.34	6.4	31.4	0.007	2.0
Total 15 DAC countries	50,226	0.35	14.8	43.7	0.023	6.5

TABLE 3.15
Human priorities in multilateral aid^a

Agency	Aid social allocation ratio 1988/89	Social priority ratio 1988/89	Percentage of total ODA for human priorities 1988/89
UNICEF	91.7	85.9	78.8
IFAD	16.8	100.0	16.8
IDB (including special)	27.8	54.4	15.1
ASDB (including special)	17.5	64.5	11.3
IBRD/IDA	17.5	47.7	8.3
AFDB/African Dev. Fund	16.6	32.4	5.4
Total	19.1	49.1	9.9

a. Human priorities include basic education, primary health care, safe drinking water, adequate sanitation, family planning, and nutrition programmes.

ODA has critical weaknesses—in quantity, equity, predictability and distribution

tries. But it is far from clear what objective this sum is supposed to fulfil.

If the intention is to help developing countries accelerate economic growth to reasonable levels, the resource shortfall is even greater—some \$200 billion a year if the average growth rate of developing countries is to be increased by two percentage points.

If ODA is intended to serve as a social policy and safety net for the developing countries and their more than one billion poor, 0.35% of GNP can scarcely be enough. Compare this with the roughly 25% of GNP that the industrial nations direct to their 1.2 billion people, of whom only 100 million (less than a tenth of the population) live below the poverty line.

Around 70% of ODA is bilateral—given directly from one country to another and therefore sensitive to political relations between donors and recipients. A donor that disapproves of, say, the human rights record of the recipient can withdraw aid. Poor

people can therefore be penalized for the sins of their rulers, suffering a double punishment—political oppression and a withdrawal of aid.

ALLOCATION. ODA is allocated in ways that seem strange and arbitrary—however you look at it.

- *Regions*—South Asia, with some of the poorest people in the world, receives \$5 per person (table 3.9). The countries receiving aid in the Middle East, with three times South Asia's per capita income, get \$55 per person.

- *Countries*—Allocations as a proportion of the recipient country's GNP can vary dramatically for no good reason—0.5% for India, for example, 17% for Egypt, 38% for Tanzania and 77% for Mozambique (table 3.10).

- *Poverty*—Only a quarter of aid goes to the 10 countries that together have about three-quarters of the world's poorest people (table 3.11). Indeed, the richest 40% of the developing world population receives more

TABLE 3.16
Applying the UN ODA target progressively

Country	GNP per capita (US\$) 1989	Total ODA (US\$ millions) 1990	ODA as % of GNP 1990	Progressive rates of ODA ^a (%)	ODA if progressive rates are applied (US\$ millions)	Difference between current ODA and ODA if progressive rates are applied (US\$ millions)
Switzerland	29,880	750	0.31	1.08	2,380	1,630
Japan	23,810	9,054	0.31	0.86	22,910	13,856
Norway	22,290	1,207	1.17	0.81	800	-407
Finland	22,120	846	0.64	0.80	960	114
Sweden	21,570	2,007	0.90	0.78	1,580	-427
USA	20,910	10,166	0.19	0.76	37,090	26,924
Denmark	20,450	1,171	0.93	0.74	850	-321
Germany	20,440	6,320	0.42	0.74	10,160	3,840
Canada	19,030	2,470	0.44	0.69	3,530	1,060
France	17,820	6,277	0.52	0.65	7,160	883
Austria	17,300	389	0.25	0.63	890	501
Belgium	16,220	891	0.45	0.59	1,060	169
Netherlands	15,920	2,580	0.93	0.58	1,470	-1,110
Italy	15,120	3,395	0.32	0.55	5,320	1,925
United Kingdom	14,610	2,639	0.27	0.53	4,720	2,081
Australia	14,360	955	0.34	0.52	1,330	375
New Zealand	12,070	93	0.22	0.44	180	87
Ireland	8,710	57	0.16	0.32	110	53
Average	19,333	51,267	0.35	0.70	102,500	51,233

a. Each donor's ODA-GNP ratio under a progressive system has been calculated by multiplying 0.7% (the average target for ODA-GNP ratio) by 1 plus the percentage difference between the donor's 1989 GNP per capita and the average GNP per capita of all donors.

than twice as much aid per capita as the poorest 40% (table 3.12).

- *Military expenditure*—Countries that spend a lot on the military (more than 4% of GNP) are rewarded with roughly twice as much aid per capita as countries that spend more modestly—between 2% and 4% of GNP (table 3.13).

- *Human priorities*—The basic human concerns that should have the highest priority get the smallest share of funds. Basic education, primary health care, safe drinking water, family planning and nutrition programmes together are allocated only 6.5% of bilateral ODA. The same is true for aid given through multilateral agencies: the average allocation from those for which data are available is only 10% (figure 3.7 and tables 3.14 and 3.15).

In truth, the quantity of ODA has never been set to meet any clearly defined objectives.

PREDICTABILITY. ODA is determined not by the needs of developing countries, but by the fluctuating goodwill of the people and their parliaments in the rich countries. As a result, it is largely ad hoc and unpredictable.

EQUITY. A progressive system of ODA would mean having richer countries contribute a greater proportion of their income than industrial countries that are less well off. But the practice of ODA falls far short of this ideal.

The United Nations target for ODA is 0.7% of GNP—a flat-rate system of voluntary taxation, not a progressive one. This implies, for example, that people in New Zealand (GNP \$12,070 per capita) should give the same proportion of their income as people in Japan (GNP \$23,810 per capita)—hardly an equitable basis for contributions.

The reality is even worse: some of the richest nations, such as the United States and Japan, give a smaller proportion of GNP than less wealthy countries.

If the system of ODA were truly progressive, the total current shortfall from the overall 0.7% target would be \$51 billion for the DAC countries (table 3.13). In fact, some 80% of this shortfall would be the responsibility of just two countries—the United States and Japan.

International debt

The existing distribution of global opportunities offers inadequate resources to poor nations. But worse than this, it takes significant resources away from them through debt servicing. In 1983-89, rich creditors received a staggering \$242 billion in net transfers on long-term lending from indebted developing countries (figure 3.8).

The total external debt of developing countries has multiplied thirteenfold in the last two decades: from \$100 billion in 1970 to around \$650 billion in 1980 to around \$1,350 billion in 1990. Despite several attempts to find a satisfactory solution, the debt continues to grow.

Much of this debt is concentrated in just a few countries. According to the World Bank, 57% of debt is held by just 20 countries—headed by Brazil, Mexico, Argentina, India and Egypt.

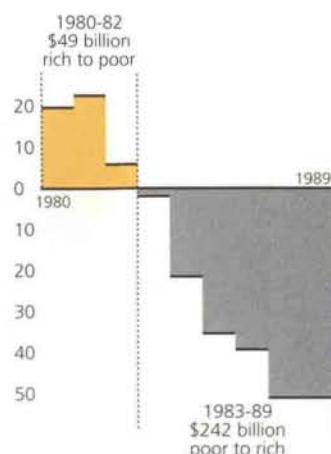
The major impact is felt in Sub-Saharan Africa and in Latin America—with social and economic damage that will persist long into the future, paralysing economic initiatives and blocking much-needed expenditure on human development.

SUB-SAHARAN AFRICA. The debt of Sub-Saharan Africa is currently around \$150 billion—100% of its GNP (in Latin America, the equivalent figure is 50%). The fact that African countries are so dependent on commodity exports further compounds the problem of repayment.

The traditional approach to debt relief is to reschedule: interest payments are postponed, or arrears are added to the capital sum. But this has proved of little benefit to African countries—it has simply made the debt larger.

A more realistic alternative is for official donors to forgive the debt. The Group of Seven industrial countries proposed this at their meeting in Toronto in 1988, but thus far not much has happened. True, nine donor countries in the OECD have announced plans to help the low-income African countries either by writing off bilateral loans or converting loans into grants. But by the end of 1989, only \$6 billion of the \$64 billion of qualifying debt had been can-

FIGURE 3.8
Debt-related net transfers



Official donors should cancel Africa's debt

celled or converted—less than 10%.

Africa's experience here contrasts sharply with that of Poland which, despite a per capita income four times the African average, has successfully had its bilateral debt reduced by 50%.

The multilateral institutions have no such plans for debt reorganization in Africa. The World Bank has neither forgiven Africa's debts nor rescheduled them. It has, however, accelerated its disbursements to some severely indebted African countries to ensure that it does not receive net transfers from these countries. And in the latter half of the 1980s, net transfers to Africa were indeed maintained positive at around \$1 billion a year. This does not mean, however, that each country enjoyed positive net transfers. Major debtors, such as Côte d'Ivoire and Nigeria, suffered negative transfers in 1987-89, as did other significant borrowers, such as Zimbabwe and Mauritius.

The IMF, by contrast, has for several years been taking money out of Africa. Despite new concessional mechanisms—such as the Structural Adjustment Facility and the Enhanced Structural Adjustment Facility—it was absorbing net resource transfers from Africa to the tune of \$0.7 billion a year in 1986-90.

As far as private debt is concerned, whether from commercial banks or other lenders, there has been no significant progress. One proposal, by the African Development Bank, was to retire these debts on favourable terms through a sinking fund, but this was never implemented.

Another initiative on private debt was taken by the World Bank in 1989 when it established an IDA Debt Reduction Facility. This provides grants to poorer countries carrying out structural adjustment programmes so that they can buy back, or exchange, their commercial debt for a relatively small percentage of its face value. Sixteen African countries (with debt of \$16 billion) have applied to use this facility, which offers up to \$10 million per country. As of June 1991, however, the only beneficiaries have been Niger and Mozambique, which were able respectively to buy their debt at 18% and 10% of face value. In these cases, other bilateral donors (France, the

Netherlands, Sweden and Switzerland) also provided assistance for debt purchasing.

The scheme has been slow to start because the commercial banks are reluctant to participate—nervous of setting a precedent for countries where their exposure is much higher. And the scheme is limited in scope, since it is restricted to smaller countries. Major debtors such as Côte d'Ivoire and Nigeria do not participate, partly because they do not qualify for IDA-only funds (which go only to the poorest countries) but also because \$10 million would not make much of a dent in their commercial debt. Nigeria at the end of 1989 owed \$16.8 billion to private creditors, and Côte d'Ivoire owed at least \$4 billion.

So, despite the imaginative and generous efforts of certain international institutions, the overall debt strategy has been weak and uncoordinated—and evidently ineffective since total African debt continued to grow by 10% a year throughout the 1980s.

The best solution would be to implement the "Trinidad proposals" (box 3.2). These envisage a cancellation of two-thirds of the eligible debt and a rescheduling of the remainder over 25 years, with an additional five-year grace period. These proposals do not, however, cover the multilateral institutions—which currently receive one-third of the debt service and which will also have to take fresh initiatives if the debt problem of Sub-Saharan Africa is to be resolved.

SEVERELY INDEBTED MIDDLE-INCOME COUNTRIES. These countries have significantly improved their debt position since the peak crisis years of the 1980s. Back in 1982, the debt-service ratio (the ratio of debt service to exports) for Latin America (excluding Panama) hit a record high of 41%. By the end of 1991, thanks to a stabilization of the debt, an increasing volume of exports and a reduction in dollar interest rates, the ratio fell to less than 30%—though this is still well above the 20% that capital markets normally consider the threshold of financial crisis.

The Brady Plan to reduce commercial debt—launched in March 1989—emphasized that debt needed to be reduced, not merely rescheduled. And with the support

of the World Bank, the IMF and Japan, the Plan has been implemented for five countries: Costa Rica, Mexico, the Philippines, Uruguay and Venezuela. For Mexico, at least, the World Bank's assessment in 1991 is that the results have been very positive. Growth has increased and financial conditions have improved as flight capital has returned. Foreign direct investment has increased. And the country has improved its access to external capital, albeit at higher interest rates. For the other countries, the effect of the Brady Plan is not yet clear.

Originally the Plan was intended to help 39 countries over three years, but it is now clear that far fewer will benefit. And meanwhile, most Latin American countries continue to accumulate interest arrears—which by the end of 1991 were in the neighbourhood of \$25 billion.

That arrears should continue to accumulate while the debt-service ratio is falling illustrates the limitations of using debt-service ratios alone as an index of progress. In practice, the successful servicing of debts depends on interrelated factors, including:

- *Income growth*—to generate a surplus that is sufficient both to service debt and to allow for satisfactory increases in domestic consumption and investment.
- *Fair income distribution*—to sustain social stability.
- *An efficient fiscal system*—to capture sufficient public savings.
- *A trade surplus*—to generate sufficient foreign exchange.
- *High domestic returns on investment*—to offer attractive domestic alternatives to international interest rates.

Many proposals have been made to widen the scope of the Brady Plan and to increase its impact. Of these, the most important have come from an international group of independent experts (box 3.3). The group points out that no concrete estimates have yet been made of the capital injection needed, not just to overcome the debt crisis, but also to restore indebted countries to a satisfactory medium-term rate of growth. Neither the Bretton Woods institutions, nor the international community, have agreed on such estimates country-by-country. The figures discussed for debt re-

lief or reduction tend, therefore, to be based more on guesses about political feasibility than on sound scientific analysis.

The group has made several practical suggestions to improve the position of the severely indebted nations. These include a form of debt resettlement on the pattern of the Indonesian model of 1970 and an interim bridging arrangement that would allow debtors to pay in local currency as well as convert some of their debts into new loans. Both proposals would certainly help, but they still fall short of an overall "global bargain on debt" (see chapter 5).

BOX 3.2

The Trinidad debt reduction proposals

At a meeting of Commonwealth Finance Ministers in Trinidad in September 1990, modifications were proposed to the previously agreed "Toronto terms" for bilateral debt reduction. The Toronto terms of 1988 had offered low-income, debt-distressed countries a series of options that included writing off one-third of their debts with various combinations of reduced interest rates and long repayment periods. The Trinidad modifications were:

- *Total debt*—Instead of negotiating new terms as debts mature each year, the total debt of each country should be dealt

with in one long-term operation.

- *Debt write-off*—Instead of one-third of the debt being written off, this should now be two-thirds. This would mean writing off about \$18 billion of the debt stock of the poorest countries in Africa.
- *Repayment period*—This should be lengthened to 25 years.
- *Capitalization*—Interest payments due in the first five years should be capitalized. Principal and interest could then be repaid in a phased manner—increasing along with the debtor's capacity to repay.

BOX 3.3

Independent expert group proposals

A procedure for dealing with the debt crisis was proposed in 1990 by a group of independent experts. It draws on two historical precedents: the successful debt settlements for Germany in 1953 and for Indonesia in 1970.

The group proposed establishing a team of independent experts for each debtor country. The team would be headed by a prominent person in finance, economics or political life. It would make proposals on debt reorganization and the restoration of economic growth in the country concerned—as well as on the domestic measures needed to achieve this. The team's proposals would be put to debtors and creditors who could then decide whether to accept them.

Such settlements would, however,

take time to agree on and implement. So, the group also proposed a series of interim bridging measures that, without prejudicing the outcome of the final settlement, could provide immediate relief to debtors. These include the postponement of amortization and the payment of interest in three fractions.

1. To be paid, as usual, in foreign exchange.
2. To be paid in local currency.
3. To be capitalized into new loans.

The size of each fraction would depend on the economic position of the debtor.

These interim measures would not apply to concessional debt, or to debts to creditors still making disbursements that exceed the cost of debt service.



Global markets, poor nations, poor people

The lack of market opportunities costs developing countries at least \$500 billion a year

The disparities in the distribution of global economic opportunities between rich and poor nations are, as chapter 3 has shown, widening. There are many reasons for this, both domestic and international. This chapter focuses on only two of the reasons: the role of international markets in this process, and the impact of human development on a country's performance in international markets.

The chapter looks at the international flows of capital, labour, goods and services, assessing them from the perspective of poor nations and poor people.

- *Financial markets*—Real interest rates have been four times higher for poor nations than rich ones. Developing countries effectively paid 17% a year on their foreign debt during the 1980s, while rich nations paid only 4%.
- *Foreign direct investment*—Multinational companies channel most of their investment towards rich countries—83%. And the developing countries that do receive investment tend to be the already better off.
- *Goods and services*—Trade barriers are highest for manufactured goods for which poor countries enjoy a competitive advantage—for labour-intensive exports such as textiles, clothing and footwear. The market for agricultural produce is also distorted—by import barriers and by \$300 billion a year in agricultural subsidies and price supports in industrial countries, reducing the export opportunities for developing countries.

Sub-Saharan African countries have seen their trade share fall to a quarter of its 1960 level. And the least developed countries, with 8% of world population, have been among the greatest losers: their already small share of global trade has been halved over the past 20 years—from 0.8% to 0.4%.

- *Labour*—Immigration laws deny workers the right to equalize the global supply and demand for labour: to move to where they could best earn a living.

This lack of market opportunities for developing countries costs them at least \$500 billion a year, 10 times what they receive in foreign assistance.

But the analysis also shows that some developing countries have fared quite well in international competitiveness. They often share one common characteristic—high levels of investment in their people and in strengthening their national technological capacity.

Financial markets

The financial markets have come a long way from the musty, secretive offices of the City of London. They are global, fast and highly efficient—responding quickly to the supply and demand for investments and to the smallest changes in exchange or interest rates. Computerized dealing systems despatch \$300 billion or more across national borders each day.

Developing countries use these markets to raise funds, but they have to deal with the cycles of markets with short-term fluctuations in interest rates and with longer term cycles in which periods of excessive lending are followed by sudden withdrawals of funds.

Developing countries also have to deal with the fact that some market players are more equal than others. They generally have to pay higher real interest rates and can thus find it very difficult to service debts. And even though they are already short of capital, the international money markets have a strong tendency to move funds out of developing countries to safer

havens in the already capital-rich industrial countries.

Real interest rates

Interest rates rose sharply in the 1980s to a level without precedent in the past 100 years. In the 1980s, real interest rates were more than twice the level that prevailed in most of the period for which data are available (table 4.1). In the United States, real interest rates were five times higher than their average for the preceding 25 years. And even though US interest rates fell sharply during 1991, most analysts believe that this will be only a temporary respite.

When global rates are high, everyone pays more. But in the 1980s, the developing countries effectively paid more than most, partly because they were considered higher-risk borrowers and were charged a commensurate premium (figure 4.1 and table 4.2).

Mauritius, for example, has been relatively stable financially. Yet in early 1983, when the London interbank offered rate (LIBOR) was 10%, the Mauritian sugar industry was paying a domestic rate of 18.5%. And when LIBOR rose to 14.4%, the local rate rose to 23.3%. The domestic interest cost went up on account of the "country (borrower) risk" of 2.5% above LIBOR, banking charges, and a premium for expected currency depreciation of 6%.

The burden for local enterprises in developing countries also increased as international lenders, such as the IMF, imposed a series of devaluations—and the price of repayment in local currency rose accordingly. This had a devastating effect, especially in Latin America, where the amount of local currency to service external debt increased three or four times in one year.

Developing countries also suffered from the collapse in commodity markets. As the international prices for coffee, sugar and other primary commodities fell, developing countries had to export ever greater tonnages to maintain interest payments.

The real interest rates shown here are calculated in different ways for industrial (creditor) and developing (debtor) countries. For industrial countries, the real rates

are arrived at by taking the nominal rate and subtracting the domestic rate of inflation. For developing nations, however, the real interest rate on foreign debt is calculated by adjusting the nominal rate they are charged according to the rate of change in the dollar prices of the goods they export. Since the prices of their exports have generally fallen in the postwar period, the developing countries have effectively paid interest rates much higher than those stipulated in their debt contracts.

While real interest rates in industrial countries averaged around 4% in the first half of the 1980s, in developing countries they were effectively around 17%. It is a sad commentary on the workings of the international financial markets that poor countries and their people have to pay interest rates four times those in rich countries.

And the rates may well stay high as demands for the world's investment resources intensify. The continuing claims of the US budget deficit, the need to strengthen the capital base of US and Japanese banks, the creation of a single internal market in

FIGURE 4.1
Disparity in real interest rates between developing and industrial countries

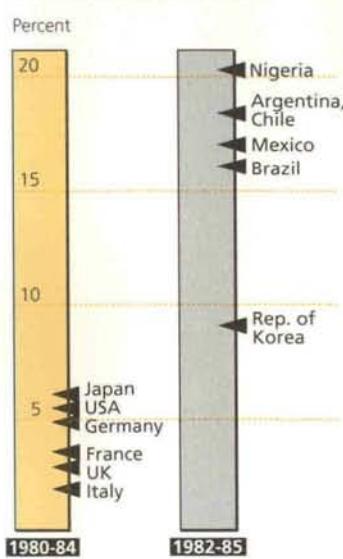


TABLE 4.1
Long-term real interest rates in six industrial countries, 1890-1989
(percent)

Country	1890-99	1900-13	1955-59	1960-73	1974-79	1980-84	1985-89
France	3.6 ^a	2.0 ^a	0.3	1.4	-0.9	3.1	5.1
Germany, Fed. Rep.	3.9	2.7	2.8	4.8	4.0
Italy	4.0	1.5	-3.7	1.9	3.6
Japan	0.5	-0.2	5.7	3.9
United Kingdom	2.6 ^b	2.0 ^b	1.3	2.5	-2.1	2.7	4.1
USA	4.5 ^c	1.7 ^c	0.8	1.5	0.3	5.4	5.4

a. Government stocks.

b. Consolidated annuities.

c. New England municipal bonds.

Note: Long-term real interest rates are calculated by dividing long-term government bond yields by the GDP deflator.

TABLE 4.2
Real interest rates on foreign debt paid by selected major debtors, 1980-85
(percent)

Country	1982	1983	1984	1985	Average 1982-85
Argentina	26.3	23.8	11.3	11.6	18.3
Brazil	22.2	19.6	12.6	12.0	16.6
Chile	33.8	8.9	21.6	8.4	18.2
Mexico	27.4	16.9	9.9	15.0	17.3
Nigeria	25.9	25.4	11.5	18.2	20.3
Korea, Rep. of	14.0	12.5	5.8	7.1	9.9
Average	24.9	17.8	12.1	12.3	16.8

Note: Real rates are nominal (money) rates adjusted by the country's export price index.

TABLE 4.3
Net financial transfers
on long-term lending
to developing countries

Year	Amount (US\$ billions)
1972	7.1
1973	10.8
1974	16.7
1975	..
1976	21.5
1977	25.0
1978	33.2
1979	31.2
1980	29.5
1981	35.9
1982	20.1
1972-82 average	21.0
1983	3.7
1984	-10.2
1985	-20.5
1986	-23.6
1987	-34.0
1988	-35.2
1989	-29.6
1990	-22.5
1983-90 average	-21.5

Europe, the costs of German reunification, the costs of postwar reconstruction in Kuwait and Iraq, the social and physical needs of Eastern Europe and the republics of the former Soviet Union—all these pressures are likely to keep interest rates high in the 1990s. If so, the developing countries will continue to shoulder a heavy debt burden and will receive relatively little new investment—restricting their opportunities for economic expansion, now and for years to come.

High interest rates have their greatest impact on poor people—who cannot afford to borrow on such terms. But such interest rates can also result in serious damage to the environment. They act as a signal from the market that future income will be worth much less, so they encourage the present generation to discount the future at a very high rate.

There is a strong case, therefore, for institutions such as the World Bank and the regional development banks to serve as intermediaries between developing countries and the financial markets—and to take measures to ease the burden of real interest rates (see chapter 5).

Cycles of lending

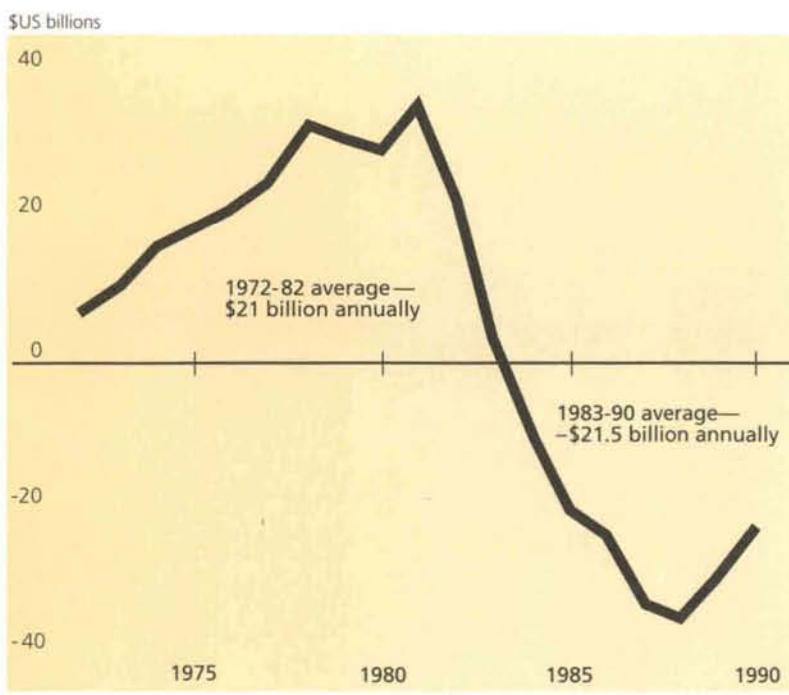
International lending can fluctuate wildly—with rapid increases in flows followed by even more rapid withdrawals of funds. Such cyclical tendencies in the international financial system have been graphically described by the eminent economist Frank Taussig:

Loans from the creditor country, far from being granted at an equal annual rate, begin in modest amounts, then increase and reach a crescendo. Usually, they are granted in exceptionally large sums when a culminating phase of activity and speculative fever approaches, and during this phase they become ever larger from month to month for as long as the upswing continues. With the emergence of the crisis, loans suddenly fall off or even cease altogether. Payment of interest on old loans is no longer compensated by the granting of new ones; interest becomes the net burden for the debtor country; it feels the consequences suddenly in the form of immediate need to make remittances in favour of the creditor country, in pressure on its banks, in a high discount rate, in falling commodity prices. And this sequence may occur not only once but two or three times in a row. After the first crisis and recovery, it is possible that the debtor country will manage to get on its feet. After several years the loans from the creditor country will start flowing again, another period of activity and speculative investment takes place, the old round gets repeated, until finally another crisis comes and another sudden reversal in the debtor country's balance of payments.

This was written in 1927, and the events of the Great Depression proved Professor Taussig right. International banks increased their loans rapidly in the 1920s, but in the 1930s, as many banks collapsed, the lending stopped almost completely. The same pattern was eerily echoed in the 1970s and 1980s, though this time for the developing countries.

During 1972-82, the international capital markets lent developing countries a net amount of \$21 billion a year on average—reaching a peak of \$36 billion in 1981 (table 4.3 and figure 4.2). Unfortunately, real in-

FIGURE 4.2
Net transfers to developing countries



terest rates started to rise dramatically after 1979 as the industrial countries' governments introduced restrictive monetarist policies in response to the second oil shock. This precipitated the Latin American debt crisis in 1982, after which lending suddenly dropped. By 1988, net financial transfers to developing countries were *minus* \$35 billion. The effect was felt not just by the heavily indebted countries but by all developing countries as the commercial banks became overly cautious and cut credit lines all round.

Theoretically, this should not have happened. The IMF and the World Bank were created in the 1940s specifically to avoid repeating the experience of the 1930s. They were supposed to intervene in order to moderate the extreme cycles of unregulated financial markets. In fact, they did try to increase their net credits to the developing countries in the early 1980s. But lacking the necessary resources, as well as the official mandate to intervene in global markets in a meaningful way, they could not sustain such policies. Far from dampening the cycles, they amplified them.

Between 1983 and 1987, net IMF transfers to developing countries turned from plus \$7.6 billion to minus \$7.9 billion (table 4.4). World Bank transfers moved in much the same direction (despite the softening influence of concessional lending through

the IDA). In 1991, net World Bank transfers were minus \$1.7 billion, of which minus \$500 million were to current borrowers (table 4.5 and figure 4.3). The Bretton Woods institutions thus failed many developing countries at their time of greatest need (see chapter 5 for the implications of this failure and the urgent need for reform).

The cyclical nature of the flows has also contributed to the deteriorating terms of trade highlighted earlier. When developing countries were suddenly required to repay debts, they often stepped up production of primary commodities that were already in oversupply, and the prices fell even lower.

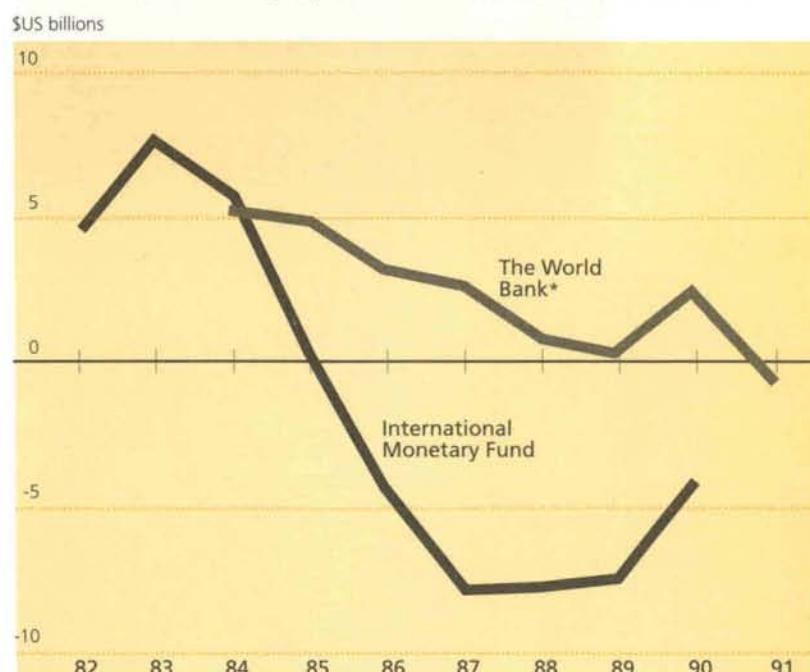
Their situation was remarkably similar to that of Germany in the interwar period following the demands for reparation. As Keynes argued, debtors face a double burden: debt servicing imposes a *budget* burden, while the deteriorating terms of trade impose a *transfer* burden. And Professor Irving Fisher, as far back as 1933, made some profound observations that the experience of the 1980s reconfirmed:

The liquidation of debts cannot keep up with the fall in prices which it causes. In that case,

TABLE 4.4
IMF net transfers to developing countries

IMF financial year	US\$ billions
1983	7.6
1984	5.6
1985	0.2
1983-85 average	4.5
1986	-4.3
1987	-7.9
1988	-7.8
1989	-7.5
1990	-4.2
1986-90 average	-6.3

FIGURE 4.3
Net transfers to developing countries from Bretton Woods institutions



*Current borrowers only

TABLE 4.5
World Bank: higher lending, lower transfers, 1985-91
(IBRD and IDA)

Fiscal year	Gross commitments (US\$ billions)	Gross disbursements (1991 US\$ billions)	Net transfers (current US\$ billions)
1984	17.7	16.9	5.2
1985	18.5	16.4	4.9
1986	19.7	15.3	3.1
1987	20.3	17.1	2.6
1988	21.2	16.4	0.7
1989	22.8	15.9	0.2
1990	21.5	18.3	2.4
1991	22.7	16.0	-1.7

Note: Disbursements from the IDA Special Fund are included. Data for 1984-89 are for current borrowers, those for 1990 and 1991, for all borrowers.

The more debtors pay, the more they owe

the liquidation defeats itself. While it diminishes the number of dollars owed, it may not do so as fast as it increases the value of each dollar owed Then we have the great paradox which ... is the chief secret of most, if not all, great depressions: the more debtors pay, the more they owe.

The human cost of these cycles is very high. In the downward phase, economic stagnation causes real wages to fall, hitting the lower-income groups with particular force. In Latin America during 1981-87, for example, the lowest non-agricultural wages fell 41%. In Brazil in 1987, wages were at their lowest level in 37 years, and over a three-month period from January to March that year, unemployment almost doubled. In Mexico, real wages in manufacturing were cut by 50% over a period of five years.

Africa in many ways fared even worse. Real wages had already fallen in the 1970s, so a further decline of 30% in the first half of the 1980s bit very deeply.

Yet the lending of the IMF and the World Bank throughout the 1980s imposed stringent conditions that were not fully sensitive to the mounting human costs. Future lending from the international financial

markets to developing countries will probably fluctuate just as violently. So, the task for the international community is to create a system of global governance that, among other things, can find ways to moderate such swings and allow developing countries to follow a steady and productive course of human development.

Foreign direct investment

The countries of the South have enormous potential for development, as well as millions of underemployed workers—a combination of opportunities that can attract foreign corporations wishing to build new factories or establish local subsidiaries.

In practice, however, transnational corporations have brought relatively little new capital to the South. Foreign investment dropped off between 1981 and 1986, recovering to its 1981 level in 1988. In 1989, it reached \$30 billion. And of global flows of foreign direct investment, the developing countries have been getting a steadily smaller share: from 31% in 1968 down to 17% in 1988-89 (table 4.6). Even at its peak in 1975, such investment was equal to only 0.9% of the GDP of developing countries, and by 1980-85 a mere 0.4%.

Transnational corporations employ relatively few people in developing countries—less than 1% of the economically active population. And these workers tend to be in the more “modern” sectors of the economy: skilled workers using capital-intensive technology.

Most foreign investment is concentrated in relatively few developing countries. During 1980-89, the average annual flow to the South was \$16 billion, of which 74% went to just 10 countries: Brazil (12%), Singapore (12%), Mexico (11%), China (10%), Hong Kong (7%), Malaysia (6%), Egypt (6%), Argentina (4%), Thailand (3%) and Colombia (3%). And it is rising fastest in countries like Morocco, Chile, Mexico, Botswana and Thailand, where the business climate is improving.

This list shows a strong regional bias towards East and South-East Asia and Latin America. In East and South-East Asia, this attraction of foreign capital has intensified

TABLE 4.6
Inflows of foreign direct investment to developing regions

Host region and economy	Percentage share of global FDI	
	1980-84	1988-89
<i>Developing countries</i>	25.2	16.9
Africa	2.4	1.9
Latin America and the Caribbean	12.3	5.8
East, South and South-East Asia	9.4	8.8
<i>Least developed countries</i>	0.4	0.1
<i>Ten largest host economies</i>	18.1	11.1
Argentina	0.9	0.6
Brazil	4.2	1.5
China	1.1	1.9
Colombia	0.8	0.2
Egypt	1.1	0.8
Hong Kong	1.4	1.2
Malaysia	2.3	0.7
Mexico	3.0	1.4
Singapore	2.8	2.0
Thailand	0.6	0.8

in recent years such that well over one-third of all direct investment now goes to six countries: China, the Republic of Korea, Indonesia, Singapore, Malaysia and Thailand. The share for Latin America and the Caribbean, however, is dropping: it accounted for more than half in the early 1980s but only a third by the end of the decade.

Direct investment tends, therefore, to go to the better-off and faster-growing economies (box 4.1). The poorer countries receive much less—unless they happen to have oil or minerals or other important raw materials. Of all the foreign direct investment channelled to the developing world, Sub-Saharan Africa as a whole currently gets around 6%, and in 1988-89 the least developed countries received just over 2% a year (\$170 million).

Why have these countries attracted so little investment? The major reason is that investment is generally more profitable in rich countries than in poor ones. This might seem strange since capital is theoretically supposed to enjoy a higher return where it is scarce, but in practice this does not seem to be the case. In the major industrial economies, the average rate of return on non-residential capital stock in recent years has been 17% (table 4.7). In the developing countries, the return has been around 12%.

An analysis of the rates of return in developing countries by the International Finance Corporation (IFC), an affiliate of

the World Bank, shows that in 200 projects for which the overall expected real rate of return was 21.4%, the actual rate turned out to be only 11.9%. And the rates varied from one region to another: highest in Europe, the Middle East and North Africa (15.1%), followed by Asia (13.5%) and Latin America and the Caribbean (11.1%). They were lowest in Sub-Saharan Africa (6.6%). The most profitable industry was mining (17.8%), followed by general manufacturing (16.4%), while food and agribusiness were much less successful (5.6%).

Even on the best projects, therefore, the rates of returns in developing countries do not compare very favourably with those in industrial countries. Part of the reason is the lower levels of technology and labour productivity. But other factors have more to do with national governance—including political and financial instability and foreign exchange controls.

Still, none of these obstacles to investment is insuperable—as the examples of the industrializing “tigers” of East and South-East Asia have shown. By adopting sensible macroeconomic policies, by developing in-

Capital gravitates towards richer countries

BOX 4.1

Whoever hath shall be given more

Capital gravitates towards industrial countries, where profit rates are higher. For US foreign investment, the return on investment during 1985-89 was 14.1% a year in developing countries but 16.9% in industrial countries.

This is why developing countries attract such a small proportion of international investment—whether direct investment by transnational companies or portfolio investment by commercial banks and pension funds. It also explains why the wealthy in developing countries send their savings overseas: capital flight is becoming almost an intrinsic feature of the world economy.

Why should capital earn more in countries that are already capital-rich? It might be thought that the same investment could achieve much more where it could take advantage of an abundant supply of workers. But what counts for production is not labourers but labour power, and this depends on the “human capital” embodied in the workforce—on

their nutrition and health and on their education and skill. In this sense, a worker in Japan is very different from one in Ethiopia, Nepal or Bolivia.

Capital also earns more in industrial countries because of economies of scale. For some industries, such as agriculture, there may be diminishing returns to additional capital. But for many others, such as microchip production, profit rates can increase as further capital is invested.

Today, a high proportion of growth comes not just from increasing investment but from technological change—and from the introduction of new goods and services. Since scientific knowledge is concentrated in the industrial countries, this further increases profits and thus attracts yet more capital.

The implications for the developing countries are clear: they must invest in human capital and in higher levels of technology. If they do not, capital may move even faster from poor countries to rich.

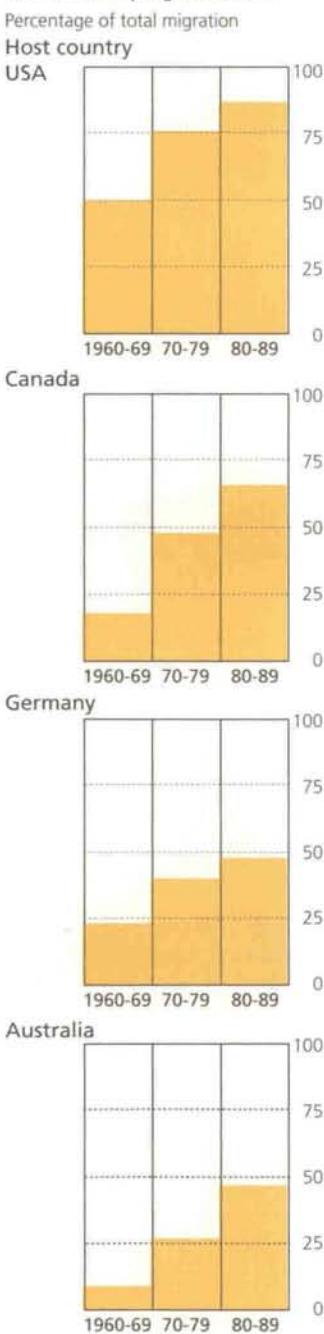
TABLE 4.7
Rate of return on non-residential capital stock in major industrial economies, 1975-90
(profit income as a percentage of capital stock)

Economy or group of economies	1975-79	1980-87	1987-90
USA	17.0	16.8	19.5
Japan	14.9	14.5	15.1
Germany, Fed. Rep.	13.8	13.5	15.6
G-7 ^a	14.8	14.7	16.5

a. United States, Japan, Germany, France, United Kingdom, Italy and Canada.

Note: The measure of return to capital is taken as the difference between value added at factor cost and compensation of employees (the gross operating surplus of enterprises). The capital stock is adjusted for inflation and covers only assets included in non-residential gross fixed capital formation and hence excludes dwellings, inventories, monetary working capital, land and natural resources.

FIGURE 4.4
International migrants from developing countries



digenous technology and above all by making a judicious investment in the education and skills of their people, they have been able to attract considerable foreign capital. The international capital markets may indeed be warped in favour of the better-off economies, but with good national governance they can be penetrated. The annex to this chapter includes case studies that illustrate how investment in human development can help countries improve their competitiveness, strengthen domestic production and break into global markets.

Labour markets

No market is perfect, but the international market for labour is one of the most restricted of all. The supply is there: millions of workers in developing countries are unemployed or underemployed. And so could be the demand, if it were up to entrepreneurs only. But immigration laws block the free flow of labour from poor countries to rich.

International migration has become increasingly significant—and contentious. At least 35 million people from developing countries have taken up residence in the North in the past three decades—around 6 million illegally—and about 1.5 million more join them each year. There are also 20 million or so working overseas on contracts for fixed periods.

Some countries have been much more open to migration than others. The percentage of foreign residents is 21% in Australia, for example, and 16% in Canada, compared with 8% in the United States and 4% for Europe as a whole. The United States, however, has seen the greatest growth in immi-

gration—108% since the 1960s, compared with a 4% increase for Europe.

In all these countries, there has been a marked shift in the source of their immigrants. Until the early 1960s, 80% of immigrants to the United States, Canada and Australia came from other industrial countries, with the rest from developing countries. By the end of the 1980s, the position was almost precisely reversed—82% now come from developing countries (figure 4.4 and table 4.8). In Europe, the trend was less marked but in the same direction—with the proportion from developing countries rising over the same period from 30% to 46%.

These changing patterns of migration reflect changing demographic balances. Most industrial countries are facing reduced fertility rates. Annual population growth in the 1990s is expected to be 0.2% in the European Community and the Nordic countries and 0.7% in North America. So, these regions are less likely to be a source of migration. But the position in the South is very different. Some 38 million extra people join the labour force each year. Added to the more than 700 million people already unemployed or underemployed, this means that one billion new jobs must be created, or improved, by the end of the decade—equivalent to the total population of the North.

Indeed, the world's overall demographic balance is shifting fast. Today's rich nations are rapidly becoming a minority (figure 4.5). Back in 1950, 20% of new babies were born in the industrial world. Today, the figure is 12%, and by 2000 it will have dropped to 11%. The rich populations and the fast-expanding poor ones give a further impulse to international migration. If global opportunities do not move towards people, then

TABLE 4.8
International economic migrants from the developing countries

Receiving country	Millions			As % of all immigrants		
	1960-69	1970-79	1980-89	1960-69	1970-79	1980-89
USA	1.6	3.3	5.5	50	76	87
Germany	1.5	2.8	2.6	23	40	48
United Kingdom	..	1.1	1.1	..	55	52
Canada	0.2	0.7	0.8	18	48	66
Australia	0.1	0.3	0.5	9	27	47
Sweden	(.)	0.1	0.2	6	17	40

people will inevitably start moving towards global opportunities.

The people of developing countries are also much more likely to have their lives unhinged by war, natural disaster and environmental degradation—and thus are more likely to migrate. The problem is particularly acute in Africa, which has nearly half the world's refugees. Undocumented migration and seasonal labour migration have taken place routinely in all regions of Africa, particularly West Africa. But the refugee problem is confined mainly to East Africa and especially to the countries of the Horn, Mozambique and Sudan. The movement of despair takes people from one poor country to another.

Migratory movements in the South are also more prone to dislocations by war. Of the 2.8 million migrants in Kuwait and Iraq affected by the Gulf War, about three-quarters originated from Arab countries, one-quarter from Asian countries and fewer than 2% from other countries. The labour-sending countries of Asia are thus exploring alternative prospects in Japan, Singapore, Hong Kong, Malaysia and the Republic of Korea.

There are around 12 to 15 million internally displaced people in developing countries and probably 14 to 16 million political refugees. On past experience, only about 5% of them are likely to find their way to the North.

Immigration policies

As a response to demographic changes (figure 4.5 and table 4.9), many industrial countries changed their immigration policies in the 1960s and 1970s to allow for more migrants from the South. The United States in 1965 abolished the national origin quotas that favoured other industrial countries, and in 1978 Canada amended its Immigration Act to emphasize that there would be no discrimination by country of origin.

But given the scale of potential migration from the South, and their own problems of unemployment, some of the receiving countries, especially those in Europe, have become much more concerned about the potential for social disruption. There has

been considerable discrimination against migrant workers—not just in employment but also in housing and welfare rights. The International Convention on the Protection of Rights of All Migrant Workers and Members of their Families is addressing some of the problems. But in several European countries, pressure for the repatriation of unemployed migrants is on the increase.

Partly in response to these pressures but also as a result of demographic trends and to protect the living standards of their people, the industrial countries, in what is effectively a "buyers' market" for migrants, have been setting higher and higher levels of qualification—giving preference to highly skilled workers, or to those who bring capital with them, or letting in only political refugees.

- *Skilled workers*—Immigrant workers have traditionally been among the lowest paid—doing the dirty, difficult and dangerous jobs that citizens of the richer countries decline. This is particularly true for illegal migrants. In Japan, for example, illegal migrants from the Philippines and Bangladesh will take jobs in construction and manufacturing that Japanese workers refuse.

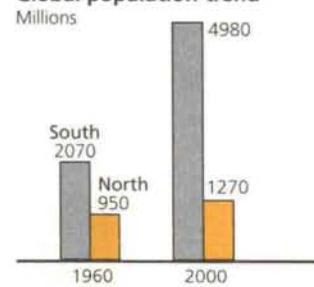
But the receiving countries are now placing more emphasis on the import of skills. Canada's preference for entrepreneur immigrants has been reflected in a sevenfold increase in their numbers between 1983 and 1989. The US has tended to be more liberal in allowing entry to unskilled and semi-skilled workers, but its Immigration Act of 1990 shows that it too is now looking for higher skill levels from its immigrants (figure 4.6).

- *Investors*—The industrial countries are now in a position to ask not just for labour but also for money. Canada and the United States, for example, have been giving pref-

FIGURE 4.5
Shifting demographic balance
Ratio of births in the North to births in the South



Global population trend
Millions



Fertility rate

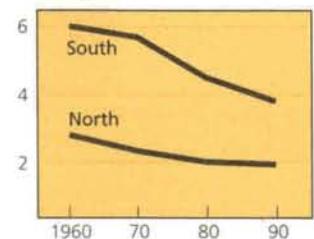
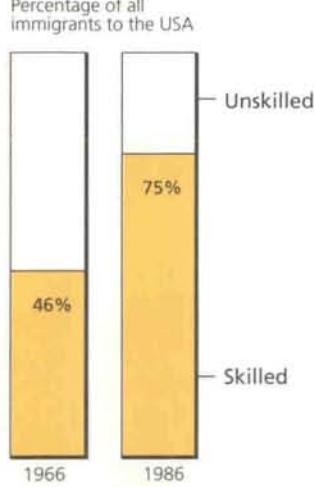


TABLE 4.9
Immigration of skilled workers
(percentage of all immigrants)

Place of origin	Immigrants to USA			Immigrants to Canada		
	1966	1976	1986	1966	1976	1986
All developing countries	45.7	75.3	75.1	12.3	38.8	46.0
Asia	18.0	58.3	49.1	7.8	21.5	30.9
Latin America	24.8	11.8	19.8	3.3	9.1	7.2
Africa	1.6	3.5	4.2	1.1	6.7	4.8

FIGURE 4.6
Migration of skilled workers from developing countries



erence to investors and are said to have attracted millions of dollars in this way.

- *Political refugees*—These have been the major category of migrants besides those for family reunification. Political refugees on average outnumber economic migrants by 10%. In some countries, such as France, the Netherlands, Norway and Sweden, the proportion of political refugees is much higher. The greatest numbers of asylum-seekers in 1989 went to Germany (121,000), the United States (84,000) and France (61,000). Even these numbers, however, are relatively small compared with the number of potential refugees from the South. So, many industrial countries are now much more careful about whom they will accept as political refugees.

For the industrial countries, the benefits of migration are clear enough. It might be argued that in the long term, instead of importing workers, they could increase their levels of technology to reduce the need for unskilled labour. Simultaneously, they could increase training for their own people to avoid importing skilled workers. But in the short term, at least, the receiving countries benefit from a willing and increasingly skilful new workforce.

For the sending countries, too, there can be significant gains. The numbers of people who migrate are relatively small (0.4% of the total labour force) so their absence may have little impact on local levels of unemployment. But they can make an important contribution through the remittances they send home.

Remittances

In 1989, the developing countries received about \$25 billion in official remittances from industrial countries and the Gulf. Of this, Egypt received around \$4 billion, India and Turkey around \$3 billion and Pakistan around \$2 billion (table 4.10). On average, this amounts to more than \$700 per worker per year, or around \$1,000 if unofficial remittances are also taken into account.

Remittances might account for only about 5% of GNP, but they can significantly improve a country's foreign exchange position. For Yugoslavia and Portugal during 1980-85, for example, remittances covered about 30% of their merchandise import bill, and for Turkey and Morocco the figure was around 20%. For Jordan, Pakistan and Sudan in 1989, remittances were equivalent to more than 20% of the import bill. And in Egypt throughout the 1980s, they were the most significant source of foreign exchange.

These are only official remittances. Workers often have to send money clandestinely because they are working illegally. But they may also just find it advantageous to avoid official channels—particularly if there is a black market exchange rate much higher than the official one. For Asian countries, estimates of unofficial remittances vary between 10% and 60% of official remittances depending on the country. In the Philippines in 1985, an estimated one-third of total remittances went unrecorded at the central bank.

Individual households clearly benefit from money sent from abroad—though they do have to take into account the loss of earnings workers could have made if they had stayed at home. One study in Mexico showed that migrants to the US from rural households were remitting \$974 a year on average but forgoing earnings in Mexico of \$411. And rural households may have to replace the missing workers. In Africa, for example, this usually means passing yet more responsibility to the women in the family. Still, since developing countries tend to have high unemployment and underem-

TABLE 4.10
Workers' remittances, 1989

Country	Remittances (US\$ billions)	As % of GNP	As % of exports	As % of imports	As % of ODA
Yugoslavia	6.3	8.8	47	43	..
Egypt	4.3	13.1	166	57	270
Portugal	3.4	7.5	26	18	..
Turkey	3.0	4.1	26	19	..
India	2.7	0.9	17	14	141
Pakistan	1.9	4.7	41	27	17
Morocco	1.3	6.0	40	24	299
Bangladesh	0.8	3.9	59	22	43
Jordan	0.6	10.6	61	27	200
Tunisia	0.5	4.8	16	11	195
Colombia	0.5	1.2	8	9	740
Philippines	0.4	0.8	5	3	43

ployment, it is clear that most households will benefit from migration.

Less clear is the impact on the country as a whole. Apart from improving the foreign exchange position, what effect do remittances have on development? There have been criticisms that most such funds do not go into productive investment but are used for speculative activities or to finance conspicuous consumption or import luxury goods. But most expenditure can add to demand and stimulate the local economy. A study in Egypt suggested a multiplier effect for remittances of 2.2—that is, remittances of 1 million Egyptian pounds increased the GNP by 2.2 million pounds. Similar studies in Pakistan suggest a multiplier of 2.4.

Loss of skilled workers

Offset against the potential remittances must be the potential loss of skills that could have contributed to national development. If the jobs of workers who emigrate can immediately be filled by the unemployed, that loss may not be too significant. India and Pakistan, for example, have an oversupply of skilled workers who can move overseas without significantly affecting national development.

Elsewhere, however, many countries have suffered serious losses of skilled personnel (box 4.2). The Philippines, for example, lost 12% of its qualified professionals to the United States in the 1970s. And of emigrants from Bangladesh in 1976-78, 17% were trained professionals.

Africa has been hit particularly hard. By 1987, nearly one-third of its skilled people had moved to Europe. Sudan lost a high proportion of professional workers: 17% of doctors and dentists, 20% of university teaching staff, 30% of engineers and 45% of surveyors in 1978 alone. More than removing skilled people, this emigration also reduces Africa's capacity to train a new generation of professionals. Ironically, this task falls increasingly to imported and highly expensive foreign experts, and there are now almost 30,000 of them in Africa—many more than before independence, four decades ago.

The cost of immigration controls

Immigration controls prevent workers in developing countries from moving across international frontiers in search of higher wages. A study at the Indira Gandhi Institute of Development Research in India estimates that immigration restrictions will have resulted, by 2000, in a \$1,000 billion loss in global economic growth.

How much does this cost the developing countries in financial terms alone? This is difficult to estimate accurately since it would require data on so many different aspects of migration. How many people would move if the labour market were completely free? What would they earn? How would their absence affect economic growth in their home countries? What remittances would they send—and what multiplier effect would these have on GNP growth? These are just some of the questions that would have to be answered.

A very conservative estimate can still be

Africa has lost a third of its skilled people to Europe

BOX 4.2

The brain drain from poor countries to rich

Developing countries lose thousands of skilled people each year—engineers, doctors, scientists, technicians. Frustrated by low pay and limited opportunities at home, they head for richer countries where their talents can be better applied—and better rewarded.

The problem is partly overproduction. Education systems in developing countries are often modelled on the requirements of industrial countries, and train too many high-level graduates. Somalia produces around five times more graduates than the country can employ. And in Côte d'Ivoire, up to 50% of graduates are unemployed.

Industrial countries certainly profit from immigrants' skills. Between 1960 and 1990, the US and Canada accepted more than one million professional and technical immigrants from developing countries. The US education system is particularly dependent on them. In engineering institutions in 1985, an estimated half of the assistant professors under 35 were foreign. Japan and Australia, too, have tried to attract skilled migrants.

This loss of skilled workers represents a severe haemorrhage of capital. The US Congressional Research Service estimated that in 1971-72 the developing countries as a whole lost an investment of \$20,000 in each skilled migrant—\$646 million in total. Some of this returns as remittances but not on a scale to compensate for the losses.

Some countries may have more educated people than they can use, but others are losing desperately needed skills. In Ghana, 60% of doctors trained in the early 1980s are now abroad—leaving critical shortages in the health service. And Africa as a whole is estimated to have lost up to 60,000 middle and high-level managers between 1985 and 1990.

The major responsibility for reducing such losses lies with the developing countries. They need to tailor their education systems more closely to their practical needs and improve the management of their economies. But for that, they also need better access to international markets.

Immigration controls deny developing countries at least \$250 billion a year

made, however. Developing countries already have extensive unemployment and underemployment, combined with population growth of 2.2% a year. And workers who migrate could expect much higher salaries overseas. So, to suggest that, say, 2% of the labour force in the developing world would choose to move each year if there were no restrictions is a cautious estimate indeed. If such workers earned no more than a poverty-line salary in industrial countries (around \$5,000 a year), they would earn \$220 billion a year. Of this, between \$40 and \$50 billion would be sent home as remittances.

The benefit of remittances would be cumulative at first as more people found a place in richer societies, but would then level off as immigrants started to sever close links with their home country. Over five years, however, they might reach \$200 billion a year. This income would have an even greater impact on GNP (possibly double) through the multiplier effect mentioned earlier. Offset against all this income would have to be the developing countries' reduced growth opportunities because of the loss of skilled workers.

Even using very conservative assump-

tions, immigration controls deny developing countries income (direct and indirect) of at least \$250 billion a year.

The market in international labour is clearly not free. It is steered and controlled by the industrial countries. People in poor countries are unable to grasp opportunities overseas and thus equalize the returns for equivalent skill and effort. But the pressures of migration will continue unless there is development in the South. Economic opportunities—better access to global markets and foreign direct investment—have to migrate towards people if people cannot migrate towards economic opportunities (see boxes 4.3 and 4.4).

Markets in goods and services

The capital and labour markets open few opportunities for developing countries. So, the burden for equalizing returns lies heavily on the markets in goods and services. Even if workers cannot travel to sell their labour abroad, they should be able to see their goods sold freely on the international markets—which would enable them to claim higher wages.

The markets in goods and services do function better than those for labour. But in many instances these markets are inefficient and inequitable, and developing countries and their workers bear a disproportionate share of the costs. First, sales on the international goods and services markets have often been restricted. Second, because most developing countries do not have sufficient finance to time their sales properly, they frequently have been compelled to sell their products on weak markets at distress prices. Third, because of insufficient diversification in developing country production, they have suffered from excessive supplies of some export goods, particularly primary commodities, and shortages of others, leading to a long-term deterioration in their terms of trade. The international economic system and its institutions have not been able to alleviate these basic inefficiencies.

This section briefly analyses the functioning of global markets in three areas: primary commodities, manufactured goods and services.

BOX 4.3

Why people migrate

Poor people may move from village to town, from town to city or from one country to another. But all respond to the same basic forces—the push of poverty and the pull of opportunity.

Poverty in developing countries is greatest in the rural areas—home to around 750 million of the world's poorest people. Of these, around 20 to 30 million move each year to the towns and cities. And an increasing proportion of these migrants are “environmental refugees”, whose land is so eroded or exhausted that it can no longer support them.

People in towns and cities have greater opportunities. They often earn twice as much as those in rural areas—and may live 10 years longer. They have on average twice as much access to health services and safe water—and four times the access to safe sanitation services.

Developing countries have made

enormous progress over the past three decades, but they still have less than one-twentieth of the per capita income of the industrial countries. And around 40% of the labour force is unemployed or underemployed—compared with an average unemployment rate of between 6% and 7% in the North.

People in developing countries are also much more likely to be disrupted by natural disasters, civil strife and war. During the past four decades, there were more than 200 armed conflicts on the developing countries' soil, claiming more human lives than World War II.

Migration from one country to another is usually difficult—and sometimes dangerous. But for many of the world's poorest people, it is the most rational move. About 75 million people from developing countries are on the move each year as refugees, displaced persons, transient workers or legal or illegal migrants.

Primary commodity markets

Developing countries rely heavily on the export of primary commodities—coffee, for example, or cocoa, or sugar, or bauxite or rubber. Many have tried to escape this dependency. Since about 1950, they have been striving to industrialize, and from 1970 onwards more and more have become significant exporters of manufactured goods. But a high proportion still rely substantially on the export of primary products. For example, in Latin America, these products often constitute more than two-thirds of total exports, and in about half of the African countries they account for around 90%.

This reliance has left them very exposed. Commodity prices have fallen steeply in the last decade. Between 1980 and 1991, the weighted index for a group of 33 primary products (excluding energy) declined by almost half—from 105 to 57. And much of this collapse has taken place in the last few years. Between 1989 and mid-1991, the export commodity prices of developing countries fell by about 20%. Tin prices in 1991 were at a level that turned most smelting and mining operations into loss-makers, and the prices of tea and coffee were, in real terms, lower than at any time since 1950.

Superimposed on the overall downward trend is an erratic zig-zag of price fluctuations. Commodity prices are notoriously unstable—sensitive to the smallest changes, real or imaginary, in supply and demand. Sugar prices are the most unstable, with prices fluctuating twice as much as for tin or lead or coffee. But coconut oil, jute and copra are also subject to rapid movements.

The long-term decline in real prices of primary products—which some analysts have traced back to the beginning of the 20th century, and others to the middle of the 19th—is partly caused by the low rate of growth in demand, lower than growth in the capacity to produce. Slow demand growth and frequent declines have been typical for periods of industrial recession.

Another factor is substitution. Technology has developed cheaper replacements for some raw materials—synthetic fibres for cotton or jute, for example, and more recently glass fibres for copper in the world's

communications networks. Because industrial processes have become generally more efficient, raw material costs tend now to represent a smaller proportion of the final selling price of manufactured goods. The prices of most primary products have thus fallen relative to most manufactures.

But prices have also fallen because of overproduction. This may simply have been because most producers have had little chance to diversify. But new producers have continued to enter several markets, and others have also increased productivity. Palm oil and cocoa output, for example, has increased with the introduction of new clones and hybrids. And new technology has allowed many mines to work more efficiently and thus increased the potential flow of minerals.

The short-term fluctuations are partly a response to business cycles in the industrial countries. Manufacturers will raise or lower their requirements for raw materials such as

Commodity prices have fallen steeply in the past decade

BOX 4.4

Workers to work—or work to workers

If labour migration were to remain restricted and if the labour-sending countries were instead offered private foreign capital investment to compensate for the loss of remittances and income, how much capital investment would be required?

A recent study answered this question for five Asian economies by assessing the full income effect of remittances on the workers' home-country economy and the incremental capital-output ratios for the countries of emigration.

The compensatory capital per migrant ranges from \$12,200 in Bangladesh to \$32,400 in the Philippines—and the financing gap from \$3.1 billion to \$20.2 billion for the same countries. In relation to foreign direct investment (FDI), how-

ever, the gap story changes. The required compensatory capital is 1,020 times the FDI in Bangladesh and 25 times that in the Philippines—and less than three times that in Thailand.

Clearly, labour migration appears to be the most viable and practical alternative for countries that do not attract much foreign investment. If migration were to prove unworkable for the recipient countries, the North would have to mobilize the requisite policy commitment to reform and restructure its own economies to be better prepared for letting some economic opportunities travel to countries with high unemployment and underemployment.

Estimated capital required to compensate for migration restrictions

	Remittances times a multiplier of 2.3 (\$ millions)	Incremental capital- output ratio	Estimated compens- atory capital (\$ millions)	Migrants abroad (thousands)	Compen- satory capital per migrant (\$ dollars)	Foreign direct investment, 1989 (\$ millions)	Financing gap: Compen- satory capital minus FDI (\$ millions)
Bangladesh	1,700	1.8	3,060	250	12,200	3	3,057
Pakistan	6,900	2.8	19,320	1,200	16,100	176	19,144
Philippines	3,900	5.4	21,060	650	32,400	854	20,206
Sri Lanka	730	4.4	3,212	130	24,700	18	3,194
Thailand	2,200	3.7	8,140	350	23,260	3,116	5,024

Rich producers are paid more than poor ones for identical goods

metals. And consumers with more or less money in their pockets will be more or less able to satisfy their appetites for foodstuffs such as groundnut oil or cocoa.

Prices of agricultural commodities can also be very sensitive to the weather. A sudden drop in temperature in Brazil may freeze the coffee harvest, but it will heat up dealers' screens all over the world. Industry buyers will also be closely watching for other natural hazards, such as diseases that affect future crop yields, and as traders extrapolate incipient changes in prices, wide disequilibrating price movements will follow.

On top of this, and producing some of the most rapid fluctuations of all, are actions of market speculators. Speculation is sometimes defended as a means of stabilizing the markets—of rapidly matching supply and demand. In practice, speculators can often accentuate even the slightest trend since they can all follow the same signals and make the same decision about buying or selling. But it is the periods of depressed prices that are particularly long, with devastating effects on rural economies and welfare.

As a result, prices for some products may never reach equilibrium at all. This is a problem for producers of tree crops (like coffee) that produce their maximum yield only when they are 7 to 10 years old. They may have been planted at a time of shortage when prices were high, but the new flow of beans leads to a glut, the price collapses, new plantings are inhibited and the cycle starts again. In between, the prices may have lurched erratically.

In recent years, the chief reason for the commodity price collapse is the recession in the industrial world. But the crisis in the former Soviet Union has also had a strong impact—in both supply and demand. The demand, real or anticipated, from the new republics for imported foodstuffs has sustained the prices of grains and meat. But their need for foreign exchange has caused them to step up the sales of the commodities they produce—such as bauxite, nickel, copper and platinum.

The future for commodity prices is always difficult to predict. But projections by

the World Bank suggest that prices for non-oil commodities will remain at roughly their present levels until 1995 and then rise perhaps 10% by 2000.

FINANCE—Industrial countries also export commodities, such as foodstuffs and minerals, so they should also be exposed to the same pressures. In practice, however, they tend to be much less vulnerable. This is partly because they do not depend on commodities for such a high proportion of their exports. But it is mainly because they have sufficient finance available to act as a buffer against market fluctuations.

One of the most significant factors in international trade is unequal access to finance. Developing countries need foreign exchange urgently and cannot afford to finance high levels of stocks. They are often forced into "distress sales" even though they can see that the market is falling and that such sales will depress the market still further. Even the stronger developing countries may then be drawn into this bout of selling if they are nervous about losing market share.

Conversely, when the market is rising, the poorest countries cannot afford to hold back in anticipation of better future prices.

As a result, the developing countries tend to get lower-than-average prices for their exports. A study for a sample of primary products between 1961 and 1965 showed that they received 12% less than the average market price over that period. Between 1971 and 1975, the gap had grown to 15%. And although there is no corresponding analysis for more recent years, the likelihood is that the gap is wider still, because the debt crisis increased the pressure on developing countries to sell at any price.

African countries suffered most. They received 11% less than the world market price between 1961 and 1965, and 19% less by 1971-75.

Sellers in industrial countries are generally in a stronger position to choose to sell only when the prices are higher and thus have received the average market price—or higher. The disturbing result is that rich producers are paid more than poor ones for identical goods.

LOW PRICES, LOW INCOME—The drop in

commodity prices has caused enormous damage. Coffee is, after oil, the largest primary product export of developing countries. During the past two years, coffee export earnings have been cut in half—with a loss estimated at between \$4 and \$7 billion a year. These problems then get passed on to the labour force as large farmers reduce pruning and picking and lay off workers. Cocoa has suffered similar problems. Between 1980 and 1987, the price was around \$2,000 a ton, but by the late 1980s it had fallen to around \$1,000 a ton. Prices have recovered somewhat since then, but the effects have been devastating in West Africa both for wage labourers and for small producers.

Even the most efficient producers, such as Malaysia, have been hit hard by falling prices. Rubber growers' net monthly income dropped 33% from 1988 to 1990 and oil-palm workers were even worse off, with income falling by 50%.

Such price fluctuations can also cause damage to the industry as a whole—and reduce future earnings. This has been particularly evident in mining. Low prices for copper, lead and zinc in 1982-85 made it difficult for mines in developing countries—such as Chile, Papua New Guinea, Peru, Zaire and Zambia—to maintain production capacity. So, when there was a metals boom in 1986-88, they were unable to take advantage of it partly because lack of maintenance led to frequent breakdowns.

Even when there have been increases in productivity, as in agriculture, the benefits have gone to consumers—in lower prices—rather than to the workers producing the commodities. There are some exceptions, such as Malaysia and Mauritius, where booms have led to labour shortages and wage increases, but elsewhere the workers have gained very little. In the agricultural sectors of Côte d'Ivoire, Kenya and Malawi between 1970 and 1984, labour productivity rose but real agricultural wages fell.

Plantation workers in developing countries are among some of the poorest in the world—underpaid and badly housed. And while they used to have some security of employment, studies by the ILO suggest that they are now much more likely to be

employed only as temporary or seasonal workers.

The effects of falling commodity prices are felt far beyond the industries themselves. Governments in many countries depend for a substantial proportion of their revenues on taxation, both of exports and of the producing corporations. A drop in revenue can cause a budgetary crisis and lead to reductions in expenditure on health, education and other social services.

TRADE RESTRICTIONS—The revenues of agricultural producers in developing countries have been further depressed by market distortions that industrial countries have imposed—including agricultural subsidies and quotas, internal taxes on tropical products, and other forms of tariff and non-tariff barriers.

The United States proposed a complete liberalization of all agricultural trade barriers at the Uruguay Round of GATT. An estimate of the possible effects was made in a joint study by UNDP, UNCTAD and the World Institute for Development Economics Research. The developing countries that would gain most would be those that are generally net exporters of agricultural products to the industrial countries. Thus Latin America and the Caribbean would gain \$984 million a year (in 1985-87 prices) and Asia and the Pacific would gain \$428 million. But Africa, which imports large amounts of food from industrial countries, would lose \$700 million a year. These estimates do, of course, capture only the initial impact. Higher food prices would, over time, increase the incentives for food production in developing countries and thus alter the patterns of comparative advantage.

PRICE STABILIZATION—Stable prices for commodities could be in the interests of both producers and consumers. Several attempts have been made to introduce commodity agreements to stabilize prices within agreed bands. But of five agreements—coffee, cocoa, sugar, tin and rubber—only that for rubber is still in operation. The problems ranged from a lack of genuine consensus between producing and consuming countries to a lack of the resources needed to finance buffer stocks.

As an alternative, or complement, to

The long-term solution for the developing countries is diversification

commodity agreements, there have also been efforts to provide compensatory finance to developing countries suffering temporary shortfalls in export earnings—such as those through STABEX, part of the Lomé Convention between the EC and 69 countries in Africa, the Caribbean and the Pacific. But these schemes have also had relatively little effect: they do not cover longer term fluctuations, and they require large amounts of finance. In the end, they might only increase the debts of the recipient country.

The long-term solution for developing countries is diversification. This is easier said than done. It demands investment in physical capital to develop new industries—and in human capital to educate and train a workforce that must acquire skills in new areas. But the developing countries' meagre receipts from exports and poor access to finance deprive them of the means to diversify.

Even if they do diversify, they will not eradicate their commodity problem—industrial countries have diversified and still have problems with primary commodities. But diversification will at least help developing countries solve their income and human development problem, by offering alternative sources of faster economic growth and social progress.

For many countries now suffering low prices, this may not prove to be a realistic option. They may be too dependent on the revenues from primary commodities to be able to engineer such fundamental structural changes. But countries that have been able to do so (particularly in East and South-East Asia) have achieved much greater prosperity.

Markets in manufactured goods

The more dynamic economies in the developing world have been able to switch export output to manufactured goods. As a result, the developing countries have increased their share of world exports of manufactures—from 4% to 19% between 1955 and 1989. Indeed, their share in 1989 exceeded that of the then Federal Republic of Germany (15%), Japan (13%) and the United States (12%), and left many other countries far

behind—including France, Italy and the United Kingdom.

The bulk of exports from developing countries comes from a small number of countries. In 1988, 54% of developing country exports came from the top five: the Republic of Korea, Taiwan, province of China, Singapore, Hong Kong and China. Nevertheless, the number of countries exporting more than \$1 billion a year has been increasing rapidly. Even Sub-Saharan Africa increased its manufactured exports by 5.7% a year between 1980 and 1987.

This has been a remarkable achievement. Developing countries have overcome many trade barriers and broken the monopoly of the industrial countries. They have penetrated many lucrative world markets and opened the door for self-reliant growth in the South.

They have not, however, received the financial returns they should have from these exports. Between 1980 and 1990, the prices of developing country manufactures increased in nominal terms in US dollars by 12%. But the prices of manufactures by the Group of Seven industrial countries over the same period increased 35%. In real terms, compared with industrial countries, the prices received by the developing countries have been falling.

Why? Many countries were obliged to step up exports during periods in the 1980s when external demand was falling. They were under considerable pressure to do so from creditors demanding repayment of debts, and from institutions requiring increases in exports as a condition of financial support. Another major problem developing countries face in exporting manufactured goods is the rising level of protectionism.

Industrial countries have been raising the barriers to imports from developing countries. Of 24 industrial countries, 20 are more protectionist overall than they were 10 years ago. And they discriminate more against goods from developing countries. The effective rate of protection against exports from developing countries is considerably higher than the rate against exports from industrial countries. Such restrictions cost developing countries dearly: at least \$40

billion a year in forgone exports of goods and services and, according to the World Bank, they reduce developing countries' GNP by 3%—an annual loss of \$75 billion.

These restrictions include:

- *Tariff escalation*—Import tariffs in many industrial countries increase with the level of processing—for spices, jute and vegetable oils, as well as tropical fruits, vegetables and beverages. This system is designed to discourage developing countries from processing their primary commodities. The average tariff on processed cocoa, for example, is more than twice that on raw cocoa—to keep out exports of chocolate. And while the tariff on raw sugar is less than 2%, for processed sugar products the rate is around 20%.
- *Non-tariff barriers*—These have proliferated in recent decades and now affect many of the key product groups in which developing countries have a competitive advantage. Non-tariff barriers include, for example, the setting of quotas, the requirement for import licenses, voluntary export restraints and special countervailing and antidumping measures taken when domestic producers complain that they are subject to “unfair” foreign competition. Between 1987 and 1990, these increased by 20%.

Non-tariff measures are now the main obstacle to developing country exports and in 1987 are estimated to have affected almost a third of OECD imports from developing countries. The most significant is the Multi-Fibre Arrangement (MFA), which denies developing countries an estimated \$24 billion a year in export earnings. In 1987, about half the developing country exports of textiles and clothing were subject to controls, of which 70% were binding.

By the end of 1990, GATT members had instituted, in all, 284 export-restraint arrangements, many of them covering product groups in which developing countries are substantial exporters, actual or potential: agricultural products (59 arrangements), textiles and clothing (51), steel and steel products (39), electronics (37) and footwear (21).

New types of non-tariff barriers continue to be introduced. Developed countries have also often used price restraints or

health and safety regulations as non-tariff measures. Now, environmental considerations are being linked to trade liberalization (box 4.5).

These trade restrictions are not just costly for developing countries. They are also very expensive for consumers in industrial countries. In the United States in 1980, the restrictions on imports of textiles and clothing are estimated to have cost consumers \$18.4 billion. Quotas, for example, double the price of sugar for consumers. Overall, American consumers pay as much as \$75 billion a year more for goods due to import fees and restrictions—a sum equal to about a sixth of the US import bill.

The aim of such restrictions is primarily to protect jobs. But this is a very inefficient way of achieving this objective. In Canada,

Trade restrictions are also very expensive for consumers in industrial countries

BOX 4.5

Environmental protection and international trade

Sustainable development strategies highlight some new—and difficult—issues for international trade.

One general concern is whether the environmental costs of transportation outweigh the economic benefits of trade.

But the most immediate issue is how liberalized international markets will affect the environment. Countries should not try to gain competitive advantage by lowering environmental standards. It may appear that the country is benefiting, but the human development consequences will generally be negative. People in developing countries who absorb dangerous pesticides or inhale industrial fumes in polluted cities effectively subsidize their country's exports at the expense of their health.

Environmental issues may also become the source of new forms of protectionism. Industrial countries could use production methods in developing countries as the basis for new types of non-tariff barriers. The US, for example, has banned imports of tuna from Mexico and several other countries, because dolphins were being snared in the same driftnets.

The answer to both problems must be agreed minimum international environmental standards. This would mean, for example, that countries all over the world would have to enforce minimum international norms of emission control on factories producing for export. And

while importing countries would be able to block goods whose production did not meet such standards, they would not be able to set arbitrarily high standards in order to protect their own industries.

Although the minimum standards should be universal, there would still be differences between countries in the actual standards they choose. Countries with low income stand to gain proportionally much more in human development by increasing production and are forced to do so at the expense of the environment. They need to be able to choose their own balance between income and pollution.

And importing countries with higher environmental standards should still be permitted to keep out imports (such as inefficient cars) whose use would violate their own environmental codes.

The international community has already made a start by including trade provisions in multilateral environmental agreements. These include the Montreal Protocol (ozone-depleting substances), the Washington Convention (endangered species) and the Basel Convention (toxic waste).

Much of the debate will still have to take place. A Group on Environmental Measures has existed in GATT since 1971—though it has only been convened recently. But the next GATT round may well be a “Green Round”.

The impetus for trade liberalization is now coming from the developing world

for example, every dollar earned by workers who held their jobs because of protection of the textile and clothing industries cost society an estimated \$70. In the United States, consumers paid \$114,000 a year for each job saved in the steel industry.

Quite apart from the short-term costs to consumers, the long-term benefits to workers are questionable. In the textile industry of many countries, protection through quotas has, along with subsidies, allowed companies the breathing space to invest in new capital-intensive technology for textile production—and displaced many more workers than imports ever did.

While the industrial countries have become more restrictive in international markets, developing countries have become much more liberal. Indeed, for the first time in economic history, the impetus for trade liberalization is coming from the developing world. In many cases, the removal of restrictions has been a key condition for structural adjustment loans from the World Bank and the IMF. But other countries, such as Brazil, have also acted unilaterally to reduce tariffs and remove many non-tariff measures.

Unfortunately, there are few rewards for virtue in international trade. The GATT system of negotiations is based on reciprocity. So, a country actually needs tariffs as bargaining chips to persuade other countries to drop theirs. In international trade at present, the most profitable behaviour is misbehaviour.

In these circumstances, it is remarkable that the developing countries have made so much headway. The volume of their manufactured exports increased fivefold between 1975 and 1989 (while that of the industrial countries merely doubled). And some countries (particularly in East and South-East Asia) increased their exports at a much faster rate than the overall growth in world trade.

Trade between developing countries is also rising. In 1989, one-third of their exports were sold to each other, compared with one-quarter 10 years before. Much of this trade is in raw materials, but trade in manufactures is also increasing. There is clearly much more potential for South-South trade.

The creation of the single European market could also increase the demand for imports from developing countries. One estimate suggests that exports to the EC could increase by about \$10 billion—equivalent to 7% of total developing country exports in 1988.

Developing countries are clearly poised to penetrate global markets much more widely. They have always had the advantages of ready raw materials and an abundant supply of cheap labour. Now they are struggling to acquire the technology that could allow them to leapfrog decades of industrial development. If global markets became less protective, developing country exports could really take off—particularly for labour-intensive goods like textiles, clothing, footwear and processed agricultural products. Indeed, if the Uruguay Round of multilateral trade negotiations succeeds, developing country exports of manufactured goods could increase by \$35 billion a year.

Markets for services

The service sector has expanded dramatically in recent years. In 1989, it contributed nearly half of global GDP. Even in the least developed countries, services now make up about a third of GDP.

The most important services in international trade include transportation, travel, telecommunications, media, business services, engineering and construction, and banking and financial services. International trade in services increased between 1970 and 1990 by an average of 12% annually, reaching \$800 billion by 1990. By 2000, it could reach \$2,500 billion.

Since the service trades are normally associated with labour-intensive activity, it might be thought that developing countries with an abundance of labour would have a comparative advantage. In fact, this is an area where they have had little success. They are net importers of services, with rapidly growing deficits.

In reality, the service sector offers industrial countries the opportunity to exercise their traditional strengths—their access to finance, their accumulated knowledge and skills, their access to telecommunications

and information technologies, as well as a history of established relationships and contacts.

Of these, financial muscle is the most significant. This might be expected in industries such as banking, securities trading and insurance where, even in industrial countries, corporations are having to merge into ever larger enterprises to compete. But the same is now true throughout the service sector. International airlines, for example, need ever larger investments in the most modern fleets and reservation systems if they are to compete internationally.

Not surprisingly, developing countries find it difficult to compete in sectors that require large amounts of capital. Even in areas where they have more obvious potential, they often lack the finance to make significant progress. In the tourist trade, for example, they have considerable natural endowments. Most governments have promoted tourism in recent years and removed many of the obstacles to international and internal travel. Most of the obstacles that now remain are financial—the lack of funds for investment in roads and in adequate supplies of water and electricity.

Construction is another area where developing countries have had high hopes of increasing international trade. The problem here is that the overall market has shrunk in recent years. From \$134 billion in 1981, it fell to \$94 billion in 1988. Much of this market is in developing countries since they represent the largest source of international construction contracts. They provided 80% of the contracts in 1981, but after years of economic crises, their market share was only 60% in 1988.

As construction suppliers, they have played a much less significant role. Since the early 1980s, their market share has fallen from 15% to less than 5%. Here again, the problem is often finance, since the industrial countries can offer buyers much more attractive financial packages.

Technology is also playing an increasingly important role in service industries and demanding higher levels of skill. Here, too, the developing countries are in danger of falling further behind, not only because they lack the necessary human skills, but because

many technological improvements in services require substantial financial backup, often missing in banking, construction, engineering design, communications and professional and business services.

The new technology has, in addition, created new industries. Developing countries have made some progress here—notably India in the development of advanced computer software. Other countries, such as Barbados, Jamaica and the Philippines, have also taken on data processing contracts—keying in data that are then transmitted by satellite to clients in North America or Europe. These could rapidly become obsolete, however, as more data are captured either at the point of sale or through more advanced forms of scanning.

If developing countries are to seize the initiative in services, they will need access to substantial amounts of finance. They will also have to invest heavily in the relevant skills to bring their industries up to an internationally competitive standard. This may mean giving temporary promotion and fiscal incentives to their infant service industries. It would also be helpful if they could attract foreign direct investment from service companies in the industrial countries.

But even qualified people in developing countries face restrictions when they try to compete internationally—particularly in banking, media services and professional consultancy. With a much freer regime of international trade and with greater institutional access to financial capital—as well as wise investment in human skills and technological capacity—the developing countries could be staffing much of the world's service industries.

The developments in new service fields for export in some developing countries are both impressive and promising, despite the risks of rapid technological changes in the newly established activities. Except in very small countries where the labour force is small, these developments cannot change the fundamentals of unemployment and low real wages. In countries with large populations, sustained and broadly based changes in agriculture, other primary activities and manufacturing are needed in addition to the

**Lack of finance
is the most
crippling constraint
facing developing
countries**

Most trade in technology is among the industrial countries

welcome growth of modern export-oriented service industries.

Markets for technology

The international markets for technology are among the most restricted, and the large inequalities among the actors in many cases amplify differences in technological levels, widening the gaps.

Most trade in capital goods—and the technology embodied in them—is among industrial countries. In 1988, exports of capital goods from industrial countries to developing countries were only a third of the exports of industrial countries to other industrial countries. The same is true of the growth of that trade. Between 1981 and 1988, the trade in capital goods among industrial countries rose on average by 10.2% a year, while that from industrial to developing countries rose only 1.5% a year. And even this growth was due to an increasing flow of capital goods to a small group of countries.

So, most developing countries are left out of a flow that carries technological innovations and substantial scope for adaptation to local needs and conditions. And the technological exchanges among industrial countries strengthen their technological dynamism and competitiveness—and make it increasingly difficult for developing countries to share the fruits of research.

It is also proving to be increasingly difficult for developing countries to gain access to opportunities provided by new or existing technologies. The application of intellectual property rights protection (patents, copyrights and trade marks) has widened in recent years. As the Uruguay Round of multilateral trade negotiations has shown, countries investing heavily in R&D are pressing to increase this protection—in stark contrast to the prevailing economic philosophy of openness and liberalization.

Buying rights to technology is not the answer either, for the prices are shooting up. Only a few developing countries have the money or the needed economies of scale to finance their own R&D at a level that would put them on a par with the industrial countries' technological leaders. Today's pattern

of R&D spending reveals some of the widest gaps among countries.

Some developing countries have nevertheless been able to strengthen their domestic technological capacity through an outward-oriented trade regime, an open climate for foreign direct investment, a conducive macroeconomic policy and institutional framework and—most important—active, broadly based investment in their people.

Losses from unequal access

Developing countries suffer major losses because they are denied market opportunities (figure 4.7).

These losses arise in two ways. First, even where markets work freely, the poor nations participate as *unequal partners*. Second, where developing countries might have a competitive advantage, the markets are often restricted.

Consider capital markets. The developing countries have paid extremely high real interest rates in some periods—because of their economic weakness, because of falling commodity prices, and because of perceptions of the risks of lending to them.

During the 1980s, when industrial countries were paying 4%, the developing countries were effectively paying 17%. On a total debt of over \$1 trillion, this cost them about \$120 billion of real costs, in addition to a reverse debt-related net financial transfer that reached \$50 billion in 1989.

The weakness of developing countries is also evident in commodity markets and in the markets for services—where they would probably gain some \$20 billion if they did not lack the necessary access and finance to compete on an equal footing.

The second major cause of losses—*market restrictions*—is most evident in the labour market. Immigration controls cost, at a conservative estimate, \$250 billion—though some studies suggest that the figure could be much higher. Restrictions on the flow of goods because of tariff and non-tariff barriers cost at least \$40 billion a year. Of this, \$35 billion are due to restrictions on manufactures (the Multi-Fibre Arrangement alone accounts for \$24 billion), and \$5 billion are due to restrictions on tropical, resource-

based and agricultural products. Technology markets are also closely guarded. The losses there for developing countries may be in the range of \$20 billion, though it is difficult to make an accurate estimate.

There are, of course, interlinkages between the various markets. And the losses are cumulative, since opportunities denied at present become greater with the passage of time. Overall, the cost of global markets to developing countries can be broadly estimated at \$500 billion a year.

These \$500 billion in losses constitute about 20% of the developing countries' present combined GNP—and roughly seven times their current spending on human development priorities.

Millions of people have suffered from international trade protectionism, rising interest rates, declining terms of trade and inadequate financial resource transfers. Some examples can help illustrate the human cost:

- Trade barriers have translated directly into lost income for sugar-cane growers—they may have lost as much as \$7 billion each year.
- Although Uganda's volume of coffee exports went up by one-fourth between 1986 and 1989, its total export revenues dropped from \$395 million to \$273 million due to declining world market prices and the shift from robusta to arabica coffee. The country's coffee farmers took the brunt of that fall as did coffee farmers in other parts of the world.
- The economic crisis of the 1980s and the ensuing structural adjustment programmes have, in many highly indebted countries, put social expenditures in a severe squeeze and directly affected people's lives—infant mortality, school enrolment and nutrition. External debt payments have, in many developing countries, absorbed a quarter to a third of the government's budget.

Estimates of global market losses can not be made accurately. The foregoing attempt is intended to capture the *dimensions* of the problem—not to gauge its exact extent. This broad estimate does, however, indicate that developing countries could benefit enormously from global markets—

if the restrictions to their full participation were lifted, and if their current weaknesses were overcome.

Regional economic groups

Countries throughout the world have been grouping themselves in larger regional trading blocs. Even the largest countries are aware that, as trade is increasingly globalized, they cannot survive on their own.

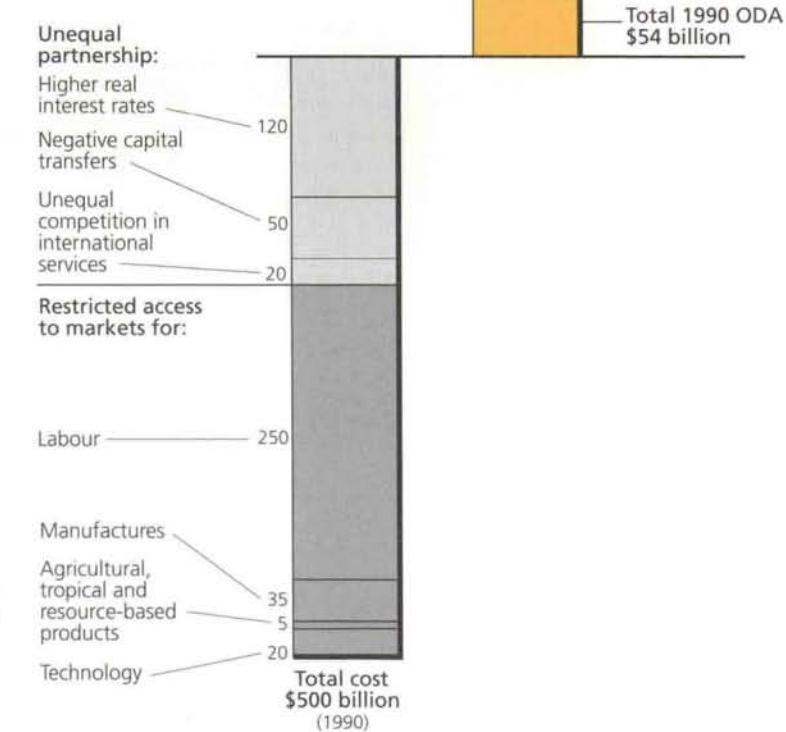
In Europe, the European Community will have a single market by the end of 1992 when all internal barriers among member states are removed. And by the end of the decade, Europe may well have a single currency with all the economic coordination that implies.

In North America, the United States and Canada are negotiating a new extended agreement with Mexico. And the United States has also expressed its willingness, through the Enterprise for the Americas Initiative, to enter free trade agreements with other countries, or groups of countries,

**Regional groupings
can complement
global trading
arrangements**

FIGURE 4.7
Cost of global markets to developing countries

\$US billions



Unless national governance improves, global reforms cannot benefit poor people

in Latin America. More than 16 countries have already expressed interest in pursuing this proposal.

This initiative has given a fresh impulse to Latin America's own efforts at regional integration. Argentina, Brazil, Paraguay and Uruguay signed a treaty in early 1991 preparing the basis for a Southern Cone Common Market, to be in operation by 1995. In addition, the Andean Group (Bolivia, Colombia, Ecuador, Peru and Venezuela) decided in early 1991 to accelerate progress towards the establishment of a common market in their subregion by 1995. And the Caribbean countries already have a 12-member common market in their subregion.

In Africa, the Organization for African Unity, at its summit meeting in Nigeria in 1991, adopted a treaty for the establishment of an African Economic Community. The treaty sets out a timetable for the necessary steps—including a phased removal of barriers to intra-African trade. These are expected to culminate in the formation of an Africa-wide economic community and monetary union by 2025.

In Asia and the Pacific, the Association of South-East Asian Nations has recently decided to create an ASEAN Free Trade Area over the next 15 years. In a looser fashion, there is cooperation within the South Asian Association for Regional Cooperation and the Pacific Rim countries.

The Arab States are also more loosely linked—through the Arab Maghreb Union and the Arab Cooperation Council.

What effect will such trading blocs have on human development within individual countries? Since most of them tend to be grouped around one or two dominant nations, there is the danger that these nations could increase their dominance. But in many of the regions, it is clear that there could be transfers of income from richer to poorer countries—as between the countries of northern and southern Europe.

Some may argue that such regional groupings run counter to the steady process of globalization in trade. Rather than assisting multilateral negotiations through GATT, they tend to fragment the world economy.

This appears unlikely. The pressures for globalization seem unstoppable. East Asia's

trade with the European Community, for example, grew by 12.4% a year between 1980 and 1989, and that with North America by 12.8%. Much of this increase comes from transnational enterprises as they exchange goods and services between subsidiaries and affiliates in different countries. For Japan in 1983, such intrafirm transactions made up 31% of the country's exports.

Regional groups can complement the global trading arrangements, helping to reduce disparities among countries and protecting them against the worst shocks of the global markets.

National policies for global competitive advantage

The analysis shows that global markets are not very friendly to poor nations and poor people. Developing countries enter the markets as unequal partners and leave with unequal rewards. Their path is restricted precisely in areas where they enjoy a comparative advantage—such as labour-intensive manufacturing.

Fundamental reforms are needed if global markets are to benefit all nations and all people. But the reforms in global markets do not reduce the responsibility of developing countries to take all the steps they can to increase their access.

National governments carry the primary responsibility for accelerating economic growth and for boosting levels of human development. Unless national governance improves, global reforms stand little chance of benefiting poor people.

CREATING AN ENABLING POLICY FRAMEWORK. The first two *Human Development Reports* showed just what national governments could do to improve macroeconomic management, to increase savings and investment, to enhance productivity and to translate economic growth into improved well-being for their people.

The potential is enormous. The 1991 Report illustrated what could be achieved by reorienting public spending priorities. If developing countries reduced military expenditure, for example, and privatized inefficient and loss-making public enterprises,

they could release an estimated \$50 billion a year for human development concerns.

In recent years, economic reform in Latin America and the chance of further debt restructuring agreements have brought back to the economies of this region significant amounts of national "flight" capital and foreign investments. Foreign direct investment in Mexico quadrupled in 1991 to \$17 billion. For 1991, Argentina expects its investment growth to have been around 10%, Venezuela 18% and Bolivia 5%.

The earlier Reports also showed how growth in a country's economy could be directed into improved well-being for its people. Reforms in land distribution, access to assets and income-earning opportunities, new fiscal policies to benefit the lower income groups, credit expansion to make more funds available to the poor, a reorganization of social-spending priorities—all could help smooth the translation of economic growth into human development.

INVESTING IN PEOPLE. Poor countries find that restrictions on the functioning of markets deny them full access to free international trade—and the benefits this could bring to their people. Even so, some countries have managed to overcome such biases (table 4.11). Although the overall gaps between North and South may be widening, 10 countries have increased their share of both global GNP and global trade. Determined national action can sometimes overcome perversity in global markets.

How did they do this? How have they

managed to progress even with the odds stacked against them? The secret seems to be *dynamic competitiveness*. They have striven to increase their competitiveness as the demands of the market change.

Each country has, of course, taken its own individual line, but there have been several common elements. Good economic governance seems to have played an important role. And this has not been limited to pursuing appropriate macroeconomic policies. All these governments have, to a greater or lesser extent, been actively involved in supporting industrialization. And some have intervened to offer some forms of market protection. The Republic of Korea, for example, built up its industry by serving a protected local market before gaining its current international competitive position.

But these governments have also had outward-oriented trade regimes and an open climate for foreign direct investment. This openness to foreign capital has brought them into close contact with international markets and new technological developments. The Republic of Korea built

Investments in education and technology help countries leapfrog several decades

BOX 4.6

Productivity benefits from education

Education is one of the best investments any country can make. Educated people are more productive—and they contribute more to a country's economic growth.

In agriculture, for example, studies covering 31 countries concluded that if a farmer had completed four years of elementary education, his or her productivity was on average 8.7% higher than that of a farmer who had no education at all.

In industry, most evidence is at the enterprise level, but a series of studies—from engineering factories in Bangladesh to car plants in China—shows that educated workers are more productive.

Education also increases equality. One study of 49 countries showed that about a fifth of income inequality could be explained by educational inequality. Another has indicated that an increase in the literacy rate from 10% to 60% has been associated with a 2.8% increase in income share for the poorest 40% of the population. Expanding education could, of course, also increase inequality, par-

ticularly at lower levels of development. But as development proceeds, education does seem to generally have an income-levelling effect.

As well as promoting equality, education promotes economic growth. A study for 88 countries compared their economic growth rates for the periods 1960-63 and 1970-73 and found that an increase in literacy from 20% to 30% was associated with an increase in real GDP of between 8% and 16%. Another study of 37 middle-income and 29 low-income countries indicated that a 1% difference between their primary enrolment ratios was associated with a 0.035% difference in per capita income growth rates.

The poorer countries get much higher rates of returns than richer countries from investing in education. And for the poorest countries, the highest returns are from primary education. For African countries, the estimated rate of return for primary education is 26%—compared with 17% for secondary education and 13% for higher education.

TABLE 4.11
Top 10 developing countries' manufactured exports

Country	1988 export value (US\$ billions)	Annual rate of growth in volume of manufactured exports (%)	
		1970-80	1980-88
Korea, Rep. of	56.4	23.4	13.7
Singapore	27.6	18.2	7.3
Hong Kong	26.6	10.5	11.2
China	22.0	8.3	12.5
Brazil	17.3	18.8	6.0
Mexico	10.4	6.3	19.1
Yugoslavia	9.9	7.2	0.5
Malaysia	9.2	15.1	14.8
India	8.6	7.5	4.5
Thailand	8.0	16.2	17.6

***Most important
is supporting
broad investments
in people***

much of its manufacturing output on the basis of “borrowed” technology.

Most important, they have continuously supported broad investments in their people—in education, in health and in national capacity building in policy formulation, planning, development management and science and technology (box 4.6). This should come as no surprise. It was, after all, the experience of Western Europe. According to a recent study, improvements in nutrition and health between 1970 and 1980 accounted for 20% to 30% of per capita income growth. And the most successful of the industrial countries today, Japan, is remarkable, among other things, for the education of its workforce—about 90% of managers have a university degree (compared with 45% in the US and 30% in the UK).

The faster-growing developing countries are following a similar path, showing how investments in education and technology

have helped them leapfrog several decades of progress and lay the skill base for future growth (see the annex to this chapter).

Individual countries can, therefore, overcome many international barriers if they make the necessary domestic policy choices. That is an important lesson from development experience: addressing the dual challenge of meeting basic education and health needs as well as leapfrogging through rapid technological change. But it is also time that the obstacles to liberalizing the international markets are removed. The global community must make it easier for developing countries to sell their goods. If it does not, millions of the world’s people will be left even further behind—and tempted to catch up not through development but through migration.

Global economic expansion and political stability demand urgent changes in global governance (see chapter 5).

Country studies

Singapore

Human development index	0.848
GDP annual growth (1965-89)	8.5%
Export annual growth (1965-89)	6.0%

Singapore has had one of the world's highest economic growth rates—an annual average of 8.3% between 1965 and 1980, and 5.7% between 1980 and 1989. This growth is largely based on exports—which grew 8.1% annually between 1980 and 1989.

Singapore has invested heavily in its people. The combined primary and secondary enrolment ratio is now 87% and the proportion of students now graduating from tertiary education (one-third of them in science) is among the highest in the developing world. Currently, 11.5% of total public expenditure is on education, of which nearly a third, 30%, goes to higher education.

People have benefited considerably from Singapore's social expenditure. Its HDI increased between 1970 and 1990, from 0.730 to 0.848.

The economy has also benefited. Singapore's educated workforce attracts large amounts of foreign investment (about two-thirds of industrial investment is foreign). The Government has also had relatively open trade policies and provided tax incentives to encourage foreign capital. Its investments in efficient infrastructure have also been important.

This city state's original comparative advantage was in unskilled labour-intensive production. But with high levels of employment it has been moving to higher levels of technology. Capital goods now make up 38% of exports. The tight labour position has also attracted more female workers—they now make up 40% of the workforce. Many of the unskilled jobs are taken by immigrants, mostly from Malaysia.

The service sector, too, is taking advantage of the country's skills. Services grew considerably in the 1980s and now employ 70% of the labour force. As well as social services, such as education and health, the service industry is also expanding in sophisticated business services such as engineering and consultancy, computer software development, regional warehousing and banking and finance.

The Republic of Korea

Human development index	0.871
GDP annual growth (1965-89)	9.8%
Export annual growth (1965-89)	22.2%

The Republic of Korea is now the tenth largest trading economy in the world. Between 1965 and 1989, exports grew on average by 22% a year.

This success has been driven by many factors—a rather equitable distribution of assets and income, a macroeconomic policy framework conducive to investment (especially foreign direct investment) and relative stability which, as some say, has had political costs. Another significant factor is education: sustained investment in people. By 1960, Korea had achieved virtually universal literacy and was acquiring higher levels of technical education (much of it overseas).

Between 1963 and 1979, labour productivity grew 11% a year—only half due to increased capital investment. Assembly work and labour-intensive industries (such as textiles and footwear) generated the first phase of export growth. The country gained a comparative advantage by adapting foreign (mostly Japanese) technology for use by a low-wage labour force. At the same time, the Government exercised rigid political control, keeping industrial unrest to a minimum.

Today, Korea's comparative advantage has shifted to skill-intensive high-quality production. This has benefited from the development of vocational training and science-based education (nearly a third of Korea's graduates choose a science-related field for specialization). The country now has some 50 scientists and technical personnel per 1,000 people, compared with an average of less than 10 in the developing world as a whole.

Workers have shared in the export growth and productivity gains. Manufacturing wages grew 20% annually in the three years to 1990.

Korea will, however, still face considerable challenges in the 1990s. The currency is appreciating, export growth has slowed and the country remains highly dependent on Japanese technology. But the political challenges may be greater still as the highly educated workforce demands a greater political voice.

Japan

Human development index	0.981
GDP annual growth (1965-89)	5.6%
Export annual growth (1965-89)	8.4%

Japan's astonishing economic ascendancy has been based on a combination of good economic management and decisive investment in human capital formation.

This chain of volcanic islands holds few obvious advantages. It has 0.3% of the world's land area and just 2.3% of world population. Yet it now contributes 16% of the world's output. GNP per capita grew 4.3% a year between 1965 and 1989 (compared with the OECD average of 2.5%).

Education is highly prized. Around 90% of managers have a university degree (compared with 30% for the UK, for example). And teachers in Japan have a higher status than those in many other countries.

While US firms have to spend \$25 billion each year to boost workers' entrance-level education, Japanese companies can concentrate wholly on on-the-job training. Since workers generally stay many years with the same company and are encouraged to participate in management, each company reaps the benefit of its own investment in training.

The Japanese workforce has also been rewarded—through increased job opportunities and rising wages. Hourly earnings grew at an average 11% a year between 1973 and 1982, and growth has remained positive even through the recession of the 1980s.

Japan has maintained a competitive edge over its trading partners thanks to a technological dynamism that has pushed forward the frontiers of efficiency. It is, for example, a major exporter of steel even though it has to import most of the inputs. And the Japanese are determined to maintain their advantage in skill-based production through a new 10-year plan to construct and improve social investment in the 1990s.

Brazil

Human development index	0.739
GDP annual growth (1965-89)	6.8%
Export annual growth (1965-89)	7.9%

Brazilian industry is an example of enclave development—with clusters of competitive export industries in a sea of general industrial and agricultural stagnation. There have been periods of rapid growth: the Brazilian "economic miracle" produced annual GDP growth of around 6% in the 1960s and around 8% in the 1970s as local industry was nurtured to produce substitutes for imported goods. But the investment was based on heavy borrowing, and the debt crisis put an end to growth. Industrial employment fell 20% between 1980 and 1984.

The debt overhang and international economic contraction continue to limit Brazil's options. But the country's disappointing progress can also be blamed on

severe internal problems—pernicious inequality (between both regions and social groups) and a persistent neglect of human development.

The failure of the Brazilian education system holds back efforts to increase productivity. Only 20% of all children pass to the standard eighth year level of primary school and only a fifth of those complete the programme in eight years. Instruction is poor, often involving three hours or less of schooling a day—and much worse in the poorest regions.

Educational weaknesses are compounded by health and nutritional deficiencies—and have contributed to underperformance and productivity losses.

Public policy has tended to favour capital-intensive industry, such as chemicals and machinery, and neglected the development of more labour-intensive production. Of the world's 10 biggest manufacturing economies, Brazil has the lowest employment-to-output ratio. An increasing proportion of people have, therefore, been driven into the informal sector—and can make little direct contribution to international competitiveness.

Mauritius

Human development index	0.793
GDP annual growth (1965-89)	5.5%
Export annual growth (1965-89)	5.9%

The economic performance of Mauritius in recent decades has been impressive. Its annual economic growth, 5.2% during 1965-80, increased to 5.9% in the 1980s. From a plantation-based colony, it transformed itself into a diversified economy. Its human development index has also increased dramatically—from 0.525 in 1970 to 0.793 in 1992.

This success has been firmly based on investment in human development. Education is free at all levels. The combined primary and secondary enrolment rate rose from 62% in 1970 to 77% in 1989, and the literacy rate is now estimated at 86%.

But as well as increasing human capabilities, Mauritius has been giving people the opportunity to use those skills. An export-processing zone was established in the 1970s, and investment in industry and tourism increased sharply—with a considerable contribution from foreign capital. The manufacturing sector grew by more than 10% a year in the 1980s. And gross domestic investment is now 29% of GNP.

Employment is based 50% on services (largely tourism), 30% on industry and 20% on agriculture. Industry has been able to rely so far on relatively cheap labour, with women providing a third of the labour force. The annual growth rate of exports was 3.1% between 1965 and 1980, but it rose to 10.5% between 1980 and 1989. Clothing exports were worth \$460 million in 1989.

With full employment, there is now upward pressure on wages. Mauritius will need to diversify its economy still further. Agriculture is still heavily depen-

dent on sugar. And 90% of the output of the export-processing zone is textile products.

Mauritius will have to increase its levels of skill and technology if it is to compete in markets for higher quality products.

Tunisia

Human development index	0.582
GDP annual growth (1965-89)	5.3%
Export annual growth (1965-89)	8.3%

Tunisia's export record in the 1980s has been impressive; not so much in volume as in composition. The balance has shifted from raw materials to manufactured goods—a change of direction that profited greatly from earlier investments in human development.

In 1980, the bulk of export income came from oil and phosphates. But with the collapse in world prices and declining reserves, exports dropped 30% by 1986. A dynamic manufacturing sector, which emerged in the 1970s, expanded to fill the gap so that total exports are now back to the 1980 level.

The average rate of manufacturing growth between 1965 and 1989 was 8.4% a year, and manufacturing value added has been one of the highest in Africa—16% of GDP. This growth was accompanied by rises in productivity of 2% a year in the 1980s—so wages could rise as well.

This dynamism was possible only because Tunisia had made human development a priority. A healthy and educated population provided an efficient workforce. Tunisia has made more progress in this respect than many other (generally wealthier) Arab states. Life expectancy is greater than average, and under-five mortality per 1,000 live births fell between 1960 and 1990—from 254 to 62.

Tunisia has made similar advances in education. Adult literacy is now 65%. Tunisia's women have made significant progress. The women's literacy rate in the average Arab state is only 63% of the male rate while in Tunisia the figure is 76%—and rising.

Tunisia still has growing problems of unemployment and underemployment, but its higher levels of human development leave it well positioned to benefit from trade opportunities in the 1990s.



A new vision for global human development

The world is close to creating a single, unified global system

For the first time in human history, the world is close to creating a single, unified global system. But an agreed and participatory system of global governance remains a distant dream. This has left an urgent and disturbing question wandering unanswered round the corridors of power: In a period of rapid economic globalization, who will protect the interests of the world's poor?

National governments find it increasingly difficult to offer such protection. The speed and efficiency of the international money markets, the autonomy and reach of multinational corporations, the dominance of a group of rich nations over the ever-expanding flows of international trade—these and a host of other forms of global integration have greatly weakened the economic authority of the nation-state and its ability to promote human development and protect its citizens.

A remarkable globalization of the world economy has taken place in the past few decades. While world output tripled, world trade quadrupled. World commercial bank lending has also grown rapidly—twice as fast as world trade.

Many of the global movements today are information-based—through ever-expanding networks of cables and satellites. The world capital markets transmit more than \$300 billion a day through international data networks. And TV crews roam the globe collecting and transmitting information on world events as they happen.

Today, more than ever, a new global culture is emerging. From music to movies to books, international ideas and values are being mixed with, and superimposed on, national identities. Such common information flows are an achievement, but they carry a risk—the loss of cultural identity and

diversity. But they also allow the world to face up—as a community—to issues of common concern and common survival.

The traffic in drugs, the spread of pollution, the streams of illegal migrants—these and many other problems are becoming impossible for individual countries to control unilaterally. And if global opportunities continue to be unevenly distributed, the consequences of the most persistent human problem of all—poverty—will increasingly overflow national frontiers.

The existing framework of global institutions

The existing framework of global governance is weak, ad hoc and unpredictable, with international economic decision-making dispersed over numerous institutions and forums, mostly dominated by the rich countries, leaving developing countries powerless and vulnerable.

The Group of Seven

The Group of Seven industrial countries (G-7) represents the closest approximation to governance of the global economy. It consists of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States—with additional participation from the European Community as a whole. These countries have only 12% of the world's population. The G-7 is an elite group, hardly representative of a broad spectrum of political and economic interests and unlikely to defend the global interest if this conflicts with its own.

Alternative forums and proposals are already appearing to offer representation to developing countries. The "G-15" summits

bring together leading Third World nations, and there are proposals for some representation of the developing countries in the G-7. The developing countries have also organized themselves in other forums, such as the G-24 and the G-77, to exert pressure on the industrial nations. But these have had only marginal influence.

A more likely development is that the G-7 will expand itself through a careful process of co-option to pre-empt any challenge to its global economic clout. Russia is the most likely new candidate for membership.

The International Monetary Fund

The International Monetary Fund (IMF) has drifted away from its original mandate. It was created to maintain monetary stability and allow payments imbalances to be resolved in an equitable and controlled fashion—with the burden of adjustment reasonably shared between surplus and deficit countries.

This has not happened—certainly not in recent years. Why? Largely because the Fund cannot exert any authority over the rich industrial nations, whether they generate surpluses or deficits. Floating exchange rates and sophisticated money markets have taken care of many of the temporary imbalances between industrial countries. And a new monetary system has been created in Europe.

One development that might have given the IMF a more central role in global monetary management was the introduction of Special Drawing Rights (SDRs). But the richest nations would not allow SDRs to make any significant contribution to international monetary assets.

Developing countries do need the IMF, however. They have often fixed their exchange rates to the currency of a major trading nation and exercised tight controls on foreign exchange—policies that inevitably result in temporary balance of payments deficits. Even for short-term problems, however, the IMF has been in no position to create and supply the liquidity that developing countries needed. These limitations were fully exposed when the debt crisis struck in

the early 1980s. IMF lending to developing countries certainly shot up between 1980 and 1986. As a result, their debt to the Fund increased from \$9.5 billion to \$42.4 billion. But in the subsequent period, 1986-90, the IMF was actually withdrawing funds from developing countries—a net transfer of \$6.3 billion a year.

The IMF has exerted a strong influence over developing countries by setting stiff conditions on the loans it offers. This conditionality has generally been monetarist and deflationary, obliging governments to reduce their demand for imports by curtailing overall demand—cutting back on both private and public spending. These cutbacks have often reduced consumption, investment and employment—and stifled economic growth.

An alternative strategy would have been *adjustment with growth*, which would have aimed more at promoting production, both to increase exports and to meet a higher proportion of local demand from local production. Although there have been indications of a change of IMF policy in this direction, there is as yet no well-articulated agenda of reform.

The World Bank

The World Bank is no closer to meeting its mandate, either. It was established to borrow the savings of the rich nations and to lend them to poor nations—to finance sound development projects and programmes, particularly where private investment failed or was inadequate. In fact, it has done little to recycle global surpluses to deficit nations. In 1990-91, the current account surpluses of seven of the world's countries were over \$150 billion (40% generated by Japan). The private financial markets recycled most of this to richer industrial countries (with some \$100 billion going to the United States). The World Bank, rather than sending some of the rest to poor countries, actually withdrew \$500 million from them.

Nor did the Bank offer developing countries much protection from the harsh terms of the international money markets. It lends money through two main channels. The most significant is the International Bank

*The IMF and
the World Bank
have drifted away
from their
original mandates*

The GATT mandate is fairly limited at present

for Reconstruction and Development (IBRD), which offers funds at rates that now float in sympathy with world market rates. This is a major shift from the Bank's original role of cushioning developing countries against fluctuations in market interest rates. The Bank was supposed to raise capital and lend it at rates that it could afford to subsidize because of its own strength and that of its industrial country partners.

The Bank's concessional channel, the International Development Association (IDA), provides more of a cushion—lending interest-free money over longer repayment periods (40 years plus a 10-year grace period) to countries whose per capita GNP is below \$700. But even with absolute poverty increasing, IDA's share in total World Bank lending ranges between 20% and 30% of the total.

The quantity and composition of World Bank lending is clearly inadequate for the challenges it faces in developing countries.

Regional development banks

The total assistance of the African Development Bank, the Asian Development Bank, the Caribbean Development Bank and the Inter-American Development Bank to developing countries is quite substantial (\$11.3 billion in commitments in 1990). The influence of the regional banks is growing as they are becoming more responsive to the special needs of their own constituencies.

GATT

The General Agreement on Tariffs and Trade (GATT) is the main regulating framework for world trade. It came into existence in 1947 with the declared objective of pursuing reciprocal and mutually advantageous arrangements dedicated to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce.

In January 1982, the GATT membership comprised 86 countries. Now, 94 countries are contracting parties, and 30 more are negotiating membership. Together, they account for more than four-fifths of world trade. But the percentage of trade fully

complying with the principles of GATT is less than 7%.

The value of world trade covered by the different GATT negotiating rounds has nevertheless grown during the past decades—more than fifteenfold. If the present Uruguay Round of multilateral trade negotiations were to succeed, the volume of trade falling under GATT rules would expand considerably—in agriculture, tropical products and textiles, as well as in services, intellectual property rights and investment flows.

But the negotiations have been very difficult, and at the time of writing this Report, it is still not clear what the final outcome might be.

As far as the developing countries are concerned, a successful conclusion to the Uruguay Round should mean a 6% gain in their exports. The main benefits would go to Asia and then to Latin America. It is, therefore, not surprising that developing countries have, in recent years, made much greater efforts than the industrial countries to forge ahead with trade liberalization, domestically and internationally. Most of the issues now holding back progress are of special concern to industrial countries—the question of agricultural subsidies, the question of stricter protection (rather than liberalization) of intellectual property rights and the question of liberalization of trade in services, especially the application of the most-favoured nation rule in shipping and telecommunications.

The United Nations system

The United Nations system has so far played only a peripheral role in global economic management. When it comes to economic issues, the powerful industrial countries have been reluctant to use the UN forum because each member state has an equal vote. They prefer instead to use the Bretton Woods organizations in which industrial countries enjoy a weighted voting advantage.

Many global incentives that actually started within the UN system have later moved out. One example is the International Development Association (IDA), now linked to the World Bank. Another example is in trade. Despite UNCTAD's work, espe-

cially in commodities and services, GATT is today the main forum for trade negotiations. And important global issues—such as debt, monetary stability and international resource transfers—are not dealt with in any concrete way in the UN forums.

The combined financial resources of the United Nations specialized agencies are small compared with those of the international and regional institutions (\$6 billion compared with \$35 billion in 1990). And the UN system has been a marginal player on the global economic scene, despite (or maybe because of) its attributes of universality and neutrality.

The weak support from many of the industrial nations and the paucity of financial resources have certainly reduced the effectiveness of the UN. But there are other reasons why it has not played a very effective development role.

First, the specialized agencies are restricted to specific sectors—such as education, food, health or the environment. They often lack an overall development perspective, and there are few vigorous attempts at UN systemwide policy coordination.

Second, the technical assistance programmes of the UN system, including those of UNDP, have had limited success at building up the national capacity of developing countries. This is evident from the low levels of human development in these countries—and the inadequate development of national expertise and national institutions. True, the UN system agencies are not solely responsible for this, but it is also true that they have not offered bold, imaginative yet pragmatic policy options. There are too few examples of successful technology transfer or self-reliant growth. Instead, there is an increasing number of foreign advisers.

In resources and ideas, the UN has carried relatively little weight in recent years. Its heyday was the 1950s and 1960s, but since then its intellectual influence in the global development policy debate has declined.

Transnational corporations

The evolution of the international economic system has vested immense power in

transnational corporations, particularly in relation to developing countries. In 1989, foreign direct investment surpassed all other forms of private financial flows to developing countries. Transnational corporations are becoming increasingly involved in various forms of joint ventures in developing countries. These arrangements may or may not involve foreign equity participation. In Malaysia, for example, in the period 1979-87, only 12% of 1,432 agreements with foreign enterprises had equity participation. This example and many others show that beyond capital, transnational corporations also allocate—or withhold—most other resources needed for industrialization, especially if it is export-led. They are particularly important in transferring technology.

Transnational corporations wield power in the corporate interest, with a geographic frame that is global and a time frame that is frequently short. Contrast this with the perspective of host countries, with a geographic frame that is national and a time frame that is long.

Some regulatory mechanisms are needed to reconcile these differences in objectives. At the national level, Host-Country Councils (of government and private sector representatives) should be established in the offices of individual transnational corporations to offer a conciliation mechanism and to deal with problems as they arise. At the international level, external regulatory instruments, such as the United Nations code of conduct, should be adopted and enforced.

International civil society

Many actors in international civil society influence policy and action. Non-governmental organizations (NGOs), including trade unions, church groups, action groups and ethnic organizations bring together people who share a common concern or a common social attribute. Acting as interest and advocacy groups, they influence the minds of decision-makers and the people.

Groups bringing together vulnerable sections of the population reaffirm publicly the need for affirmative action and the need to attend to the uneven spread of human deprivation. A recent study of a sample of

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on the global
economic scene*

Many actions have resulted from international NGO pressure

about 5,000 NGOs in Pakistan showed that nearly two-thirds are providing programmes and facilities to local communities to promote human development.

An equally important force is the media. It is a provider of news and information—but it is also a public conscience, drawing the attention of public authorities and the people to acts of omission or commission. The recent starvation deaths among weavers in South India were first brought to public attention by the press. It has been argued that no country with a free press has faced famine, even though hunger and deprivation may persist.

Consider how the participation of NGOs in multilateral institutions, now formalized, influences international thinking and action. More than 500 NGOs from around the world have consultative status with the United Nations Economic and Social Council. The United Nations maintains a listing of an additional 550 NGOs associated with issues of international cooperation. The concerns and perspectives that they represent are given weight in multilateral development activities. Most international meetings and conferences—whether on trade, education, the environment or women and development—have benefited from active NGO participation. The June 1992 UN Conference on Environment and Development is an example.

International NGOs generally raise funds in industrial countries for use overseas—for emergencies or for long-term development in developing countries. They provide funds (usually for projects run by national NGOs) amounting to around \$4 billion a year, or 8% of official development assistance (ODA). But they also have strong advocacy roles that can bring them into dialogue or conflict with government or commercial organizations. Action on many issues—from human rights to environmental protection to the marketing of baby foods—have resulted from international NGO pressure. Many NGOs have also highlighted the need to alleviate the social impact of structural adjustment programmes.

But as in other areas, the vastly superior resources available to them have meant that the international civil sector is also domi-

nated by northern-based organizations. Fewer than 15% of NGOs with ECOSOC consultative status are headquartered in developing countries. The NGO community is increasingly recognizing the biased nature of the current arrangements, even though many of the northern-based institutions speak in what they consider to be the interests of the South.

Global institutions for the 21st century

In practice, there are no development institutions managing the new integrated global economy—much less doing so democratically in the interests of the world's people. Democracy may be sweeping through individual nation-states, but it has yet to assume a global economic dimension. Global governance, if it comes at all, risks arising by default rather than by design. This situation is dangerous for the health of our shrinking planet, and it bodes ill for the majority of the world's people.

What other form could global economic governance take? This must be a subject of urgent discussion in the years ahead. But any new system should be based on two fundamental principles. First, a set of rules and procedures that all nation-states accept as governing their actions and interactions. Second, a fair and effective system for enforcing such rules on nation-states.

Considerations of future patterns of global governance can be idealistic and visionary, or they can be cautious and realistic—seeking a pragmatic blend of idealistic realism. Visionary blueprints must at least be prepared. Circumstances sometimes change suddenly, unexpectedly, dramatically. Unless equipped with detailed blueprints, reformers lose by default.

The visionary approach, which the following discussion starts with, does have the merit of offering a sense of direction—a path for some of the intermediate steps.

Human society is increasingly taking on a global dimension. Sooner or later it will have to develop the global institutions to match. These are likely to include:

- *A global central bank*—to create a common currency, to maintain price and exchange-rate stability, to channel global sur-

pluses and deficits, to equalize international access to credit—and to provide the liquidity and credits poor nations need.

- *A system of progressive income tax*—to be collected automatically from the rich nations, and to be distributed to the poor nations according to their income and development needs. The administration of this tax would have to represent equally the interests of both donors and recipients. And funds would be allocated on the basis of a shared policy dialogue, rather than a system of formal conditionality.
- *An international trade organization*—to ensure free and equal access to all forms of global trade, to manage commodity stabilization schemes and to do research and make recommendations for commodity policies. This new organization would merge the current functions of GATT and UNCTAD, but it would also be strengthened by effective regulatory powers and by a small and manageable executive board.

- *A strengthened UN system*—to create new structures of peace and security in the post-cold-war world. But the UN should also assume a much greater responsibility for development policy formulation. This would be exercised through a new Development Security Council, which would establish the broad policy framework for all global development issues. These issues range from food security to ecological security, from humanitarian assistance to development assistance, from debt relief to social development, from drug control to international migration.

A transitional strategy

The institutions above are likely to become the cornerstones of a new global economic system. In the meantime, realism demands that we proceed through reforms in the existing global institutions and examine the role that they might play in the transitional period.

Reforms in the IMF

The IMF's role as an economic manager has been greatly weakened over the past 45 years. Any reforms must first concentrate on

a few fundamental issues.

ADJUSTING EXTERNAL ACCOUNTS. In the normal process of international trade and finance, some countries run deficits and others surpluses. Today, the onus for correcting such imbalances is assumed to lie with the deficit countries: they must import less by making (often painful) adjustments to their economies, and they must reallocate resources to potential export sectors. The surplus countries feel no corresponding obligation to increase their imports.

This lopsided approach usually means shrinking the economies of deficit countries—with a corresponding reduction in world trade. To counter this deflationary tendency, Keynes' original proposal for an International Clearing Union (the prototype for the IMF) included the possibility of a penalty on surplus countries—1% of the surplus per month to encourage them to make adjustments too.

This kind of approach clearly is still needed, and the IMF should open a dialogue on this issue with the surplus countries—since timely reduction in their surpluses through long-term lending would be in their own interests. The current system is both inefficient and unjust.

PROVIDING LIQUIDITY. The IMF must find a way to help developing countries build up their foreign exchange reserves.

The industrial countries tend to have fewer problems here. When their reserves run short, they can simply borrow to cover their needs. The United States has also had the option of running a permanent deficit since other countries have been content to hold dollars.

But developing countries have a narrower range of options. Many of them are not considered creditworthy, so they cannot borrow at all unless they are given concessional terms. Others can borrow only at very high rates. And the alternative to borrowing—a sustained balance of payments surplus—is very difficult to achieve, as well as being costly in sacrificed opportunities for development.

The IMF's creation of Special Drawing Rights (SDRs) in 1967 was a missed opportunity to meet this need. SDRs were a new form of international asset designed to in-

***A new
Development
Security Council
should be set up
within the UN***

The IMF should serve as the world's central bank

crease global liquidity and help promote international trade. These new reserves could have been preferentially issued to the central banks of developing countries. But the industrial countries rejected this option, and the SDRs were distributed according to prevailing economic power.

The rich nations are unlikely to allow the SDR mechanism to be revived, especially when the United States has a major balance of payments deficit—creating significant international liquidity every year. An alternative would be to allow countries below a certain per capita income to have a larger reserve tranche at the IMF. This mechanism could also be used to roll over the debts of the poorer nations—linked, of course, to domestic reforms.

A CENTRAL BANKING ROLE. The real role of the IMF should be to serve as the world's central bank. This was its original *raison d'être*, though developments over the past 45 years have conspired to usurp this function. It should now therefore take some of the steps that would allow it to move in this direction.

National central banks help dampen swings between euphoria and despair—the swings that can cause enterprises to collapse. In the good times, the central bank limits excess lending—generally by suggestion rather than by direct order. And in crisis, the central bank can support banks in danger of failing.

Given the great increase in cross-border lending, this function is now desperately needed at the international level. The first step would be for the IMF and the central banks of the major trading countries to form a coordinating committee to manage world liquidity. Member countries would deposit foreign exchange into a substitution account and receive, in exchange, certificates denominated in SDRs (or in whatever international liquid asset is decided on). As the IMF increases its role in providing world liquidity, its regulatory function would grow.

If countries all over the world agreed to the establishment of a global central bank, they would contribute to stability and growth in the world economy—and avoid the need to take mutually destructive measures. They would, however, have to coordinate their

fiscal and monetary policies and permit the freer movement of capital goods and labour. And they might even consider the adoption (as Keynes suggested) of a single world currency.

Reforms in the World Bank

The World Bank must rediscover its original mandate as well—to mediate between the capital markets and the developing countries. Achieving this will mean adopting not just new lending instruments but also new philosophies of development.

AN INTERNATIONAL INVESTMENT TRUST. In the face of declining resource transfers from the World Bank, some creative new thinking is needed to enable international surpluses to be recycled to developing countries. One possibility would be for the World Bank to take on the role of an international investment trust. This would enable it to sell bonds to surplus nations and lend the proceeds to developing countries.

Such bonds would have to compete with those issued by governments, so they must appear attractive. This could be achieved by multilaterally guaranteeing the new bonds against currency fluctuations and perhaps indexing them against inflation. So, although such assets might have a lower rate of return, they would actually be safer than government bonds that carry no such guarantees.

The terms for loans to developing countries would depend on their level of development. The newly industrializing countries could pay commercial rates, while the low-income countries might receive some interest subsidy.

Such innovations would need to be accompanied by other changes in the mandate and workings of the World Bank. There should be a mechanism for the more automatic replenishment of the World Bank's capital, as well as a change in the Bank's capital-gearing ratio—to allow it to make loans equivalent to a higher proportion of its capital.

AN INTERMEDIATE ASSISTANCE FACILITY. Developing countries taking World Bank loans have to fall into one of two categories: developed enough to afford the stiff terms

demanded by the IBRD, or poor enough to qualify for concessionary funds from the IDA. But many countries, such as those in South Asia, are poised uncertainly between the two. The World Bank has tried to cope with the limitations of its lending instruments by skilfully blending IBRD and IDA resources, but there are limits to what can be achieved by such adroit juggling.

The IDA now represents only 30% of World Bank lending—at a time when poverty has increased in the developing world. As a result, even India, with a per capita income of only \$340 and a third of the world's absolute poor, has been obliged to borrow on commercial terms. India's debt increased from \$5 billion at the beginning of the 1980s to \$70 billion in 1991—making it the third largest debtor among developing countries.

A further limitation to both the IBRD and the IDA is the size of the funds available. The United States is the largest contributor to both—and so has the most votes. The United States is, however, not only reluctant to increase its own contributions. It is also reluctant to let other countries do so—since its own voting power would be correspondingly reduced. Japan, for example, would be able to offer a lot more, if not for this constraint.

A solution to both these problems would be to create a new loan window—an Intermediate Assistance Facility (IAF). This would have its own Board of Governors and a separate voting structure, and donors could give funds directly. The Facility could help countries ready to graduate from the extremely concessional IDA terms but not yet sufficiently robust to meet the tougher terms of the IBRD—such as India and Pakistan. They might borrow at, say, 4% interest over 25 years, and pay two-thirds of the going interest rate.

This would allow the World Bank to concentrate its IDA resources mainly on the long-term development of Africa (as it did for Asia in the first 25 years of the IDA's existence). And it could concentrate IBRD funds on the most creditworthy of the newly industrializing countries (and help protect the high credit rating of IBRD bonds in the international capital markets).

Bretton Woods and human development

Both the organizations created at Bretton Woods in 1945 will need to refocus their work on human development if they are to make a constructive contribution in the 1990s.

So far, they have often focused more on the means of development—GNP growth—and tended to exclude human beings from their calculations. The World Bank has, for example, met concerns about poverty by tacking "poverty" programmes onto efforts to promote economic growth—not as an integral part of new development strategies.

In reality, people (especially poor people) have to be the means of development as well as its end. Poverty eradication should, therefore, be tackled at the outset by judicious investment in human beings. Healthy, well-educated people who can participate in the planning and execution of development programmes will not only raise their own standards of living. They will promote their country's economic growth.

The World Bank and the IMF must, therefore, also assess projects and programmes with a vision that extends beyond economic and financial feasibility. They must take into account the effect such projects and programmes will have on the human beings concerned. Projects need to be examined for the ways they affect a country's fundamental balances: between rural and urban communities, between men and women, between rich and poor, between the majority community and minority ethnic groups, between human beings and the environment.

The IMF and the World Bank also need to be much more sensitive to the recipient country's pattern of social spending. They must help to check excessive military spending, for example—a theme both are beginning to take up with greater courage.

If the World Bank and the IMF are to encourage participatory styles of development, they must also address some fundamental issues about democracy in their own management structures. The developing countries are likely to respond more willingly to IMF and World Bank advice if they are

The World Bank should create a new loan window

GATT principles must apply to all trade

confident that they have an influential voice in the running of these organizations.

The Bretton Woods organizations are at a critical stage in their history. They could continue to be pushed to the margin—or, with honest self-criticism and fresh thinking, they could play new and more constructive roles in the decades ahead.

Reforms in GATT

The world needs new ways of organizing international trade—to avoid protectionism, to stabilize primary commodity prices, to maintain a liberal trading framework and to police violations and keep discipline among restless trading partners. A successful outcome of the ongoing Uruguay Round of multilateral trade negotiations would be a vital contribution. But a more fundamental reform is now needed: either a new trade organization or a greatly strengthened GATT.

A reformed and up-to-date GATT would need to incorporate the following changes:

EXTENDED COVERAGE—to apply GATT principles to all products, including textiles and agricultural and tropical products; to adopt rules for trade-related aspects of in-

tellectual property rights, investment measures and activities of transnational cooperation; and to adopt a special agreement for trade in services. Not all these areas are of equal significance. Textiles and agriculture are extremely important. But for intellectual property rights, each country may legitimately come to different conclusions about the economic efficiency of protective measures, as well as their optimum design and duration.

ENLARGED MEMBERSHIP—from the present 94 to all countries in the world, including the countries of Eastern Europe and the republics of the former Soviet Union.

CLEAR RULES AND EFFECTIVE POWERS—GATT works on the basis of reciprocal concessions, which means that the big and rich countries have all the power. GATT should instead negotiate clear and fair rules—to encompass such issues as antidumping, subsidies, safeguards (emergency measures against imports) and restrictions on foreign investors. But these rules will also need to be enforced. It would help if GATT had an executive board with extensive powers to monitor and regulate the expansion of world trade.

UN Development Security Council

BOX 5.1

A Development Security Council

- **Rationale**—A manageable forum for global policy coordination, trusted by both industrial and developing countries.
- **Mandate**

—To design a global policy framework in all key economic and social areas, including food security, ecological security, development assistance, humanitarian assistance, debt, commodity price stabilization, technology transfers, drug control, women's issues, children's issues and human development.

—To prepare a global budget of development resource flows for a revolving five-year period, to identify shortfalls between global development potential and resource availability, and to identify policies and programmes to meet these shortfalls.

—To provide a policy coordination framework for the smooth functioning of international development and financial

institutions.

- **Composition**—A Council of 22 country members, 11 permanent and 11 on the basis of rotational election. The Council membership to be chosen on such criteria as GNP, population, share of international trade, strategic political importance and considerations of regional balance. The 11 permanent members may include China, France, Germany, Japan, Russia, the UK and the US. These could be joined by the most populous country in each developing region: India, Brazil, Nigeria and Egypt. The 11 rotating members can be chosen to represent various regional and economic groupings.

- **Secretariat**—A professional secretariat, under the direct guidance of the UN Secretary General. The secretariat will propose various policy options for discussion by the Council.

The United Nations offers the world community a potentially effective system of global governance. Indeed, in many ways, the UN's structure already parallels those of national governments: the General Assembly of 166 nations resembles a form of parliament, the 15-member Security Council is a cabinet and the individual UN agencies from FAO to UNESCO can be thought of as ministries.

Economic and social issues are supposed to be coordinated by the Economic and Social Council (ECOSOC). In practice, they are not. ECOSOC's 54-member structure is too large and unwieldy, and the most powerful industrial countries have regarded this and other UN forums as unmanageable and unprofessional.

Effective economic management would require a much smaller and more tightly organized forum—a Development Security Council, perhaps, made up of a small body

of decision-makers representing the universal body of nations at large (box 5.1). This Council could consider all major issues on the global agenda, including poverty and human development, food security, drug trafficking, humanitarian assistance, commodity prices, trade negotiations, debt and environmental safeguards. The basic idea should be to develop a consensus on policy—which could then be implemented by the agencies concerned. Such a Development Security Council would need the support of a competent and thoroughly professional secretariat.

Creating such a forum would require considerable patience and experimentation. The major industrial countries would need reassurance that their voices will not be drowned in unmanageable meetings. And the developing countries, too, will need to know that their interests will be better protected. But it should be possible to accommodate their concerns and use the United Nations much more effectively for international economic management.

Policies for sustainable development

If countries, rich and poor, are to accept sustainable human development as a goal, adjustments will be needed in global governance, including stricter international legislation. The UN Conference on Environment and Development—the Earth Summit—offers an opportunity to move ahead.

Our objective must be to ensure that poor countries and poor people have access to technologies that enable them to attain human development in a sustainable way. Countries and communities must be enabled to manage their natural resources wisely. Innovative financial transfers will have to be found to mobilize the necessary resources. Several proposals are most critical:

NEW INSTITUTIONS FOR ENVIRONMENTAL FINANCE—The Global Environment Facility (GEF), jointly administered by UNDP, UNEP and the World Bank, is one of the few mechanisms for funding international environmental projects (box 5.2). There are several proposals at present for new funding mechanisms for sustainable development. Donors seem to be averse to creating new

institutions. If the GEF remains as the sole funding mechanism, several changes are required. The three most important would be to expand its resource base, to provide for more participation from developing countries and to enlarge its mandate to cover national capacity building and the environmental priorities of developing countries for water and land.

CAPACITY BUILDING—Few developing countries have either the trained people or

BOX 5.2

Restructuring the Global Environment Facility

The Global Environment Facility finances environmental projects in developing countries. This three-year pilot scheme began in 1991 and has core funding from 24 countries, nine in the developing world.

The Facility's purpose is to assist developing countries in exploring ways to protect the global environment and to transfer environmentally benign technologies. But to be effective, the direct interests of people would also have to be protected. A reformed GEF would, therefore, also have to promote an optimum balance between the environment and human development.

Grants can be made for projects in developing countries with per capita incomes of less than \$4,000 (in 1989) and a UNDP programme in place. The funds can be used for investment projects, technical cooperation and pre-investment as well as research and development.

The four priority areas of concern are:

- Global warming
- Destruction of biological diversity
- Pollution of international waters
- Depletion of the ozone layer

The Facility has core funding of \$800 million in the Global Environmental Trust Fund, with a further \$300 million available through several associated co-financing arrangements.

There is no set formula for allocating funds, but the rule of thumb is that 40%-50% should go to global warming concerns, 30%-40% to biological diversity, and 10%-20% to protection of international waters. Ozone protection projects would receive practically all other funding from the Montreal Protocol's Interim Multilateral Fund.

Each of the organizations co-implementing the Facility has a distinct role.

UNDP uses its worldwide network of offices to help identify projects and carry out pre-investment studies—and is then responsible for technical cooperation activities. In addition, UNDP runs the "small grants programme"—a \$5 million fund to support community activities by developing country NGOs and grassroots organizations. UNEP provides environmental expertise as well as the secretariat for the Scientific and Technical Advisory Panel. The World Bank acts as a repository for the Trust Fund, administers the Facility and is responsible for investment projects.

All the funds will be committed by the end of the pilot phase in mid-1994. The Facility will be modified, both in the light of experience and of the final recommendations of the United Nations Conference on Environment and Development in June 1992 in Rio de Janeiro. It is already becoming clear that some fundamental changes will be essential in three major areas:

- **Mandate**—This will need to be enlarged to recognize more fully the links between national, regional and global problems, and to include such concerns as desertification, acid rain, urban degradation, water scarcity, land-based pollution and capacity building.
- **Funding**—Some \$5 to \$10 billion a year would be needed for the enlarged mandate. This could come both from voluntary contributions and new forms of international taxation—such as the proposed "carbon tax".
- **Governments participating**—The Facility's management and policy-making structure should be broadened to provide for more participation from developing countries.

the institutions to cope with the demands of sound environmental practice. Building this national capacity will be just as important as finding the resources for new technology (see box 1.4 in chapter 1). One way of doing this could be to create "Sustainable Development Networks" for the exchange of information on sustainable development within and among developing countries. Such networks would be supported by industrial countries.

TRANSFERRING ENVIRONMENTALLY SOUND TECHNOLOGY—Changes to industrial, agri-

cultural, and other productive processes to make them more environmentally sound will certainly promote more efficient and sustainable human development. But such technologies can be expensive to introduce.

Developing countries would have to increase investment to achieve this—in some cases by up to 10%. Where is the money to come from?

Since the whole world benefits from the introduction of environmentally sound technologies in each country, there is a strong case for industrial countries to foot the bill. They could, for example, establish a special grant fund to subsidize the transfer of such technologies from industrial and other developing countries.

PAYING FOR POLLUTION—Ecological resources—such as the atmosphere, the rivers and the seas—have so far generally been considered "free". Polluters have plundered these resources without being charged for the damage to human welfare. One interesting suggestion for tackling this problem is to issue "greenhouse gas permits" to all nations on the basis of their populations (box 5.3).

INTERNATIONAL ENVIRONMENTAL TAXATION—Another proposal is a global tax on the use of natural resources both to defend the global commons and to raise funds for environmental projects. The simplest, and perhaps most acceptable, form would be a one dollar per barrel tax on oil collected at the source. This would increase consumer prices by less than 5% but raise around \$24 billion a year. Of this, more than 73% would come from the industrial countries, with the rest from Asia (11%), Latin America (8%), the Middle East (5%), and Africa (3%). An equivalent tax should also be levied on other fossil fuels, particularly coal, which will yield additional revenues of about \$16 billion a year (box 5.3). The levy could be increased over time, depending on the requirements of environmental programmes and the need to encourage global energy efficiency as well as a shift towards non-fossil fuels.

New structures of peace and security

The end of the cold war has opened the possibility for new structures of peace and

BOX 5.3

International taxation for sustainable development

Several proposals have been made in recent years for systems of international environmental taxation. Such taxes could penalize countries degrading the environment—and give them an incentive to improve their management of natural resources and cut down on pollution. The taxes could also raise funds for environmental protection and development.

The proposals for international taxation include:

- *A global income tax*—say 0.1% of the GNP of every country, to be spent on environmental programmes.

- *Fossil fuel consumption taxes*—a tax on oil of one dollar per barrel (about 5%) would yield about \$24 billion a year. Taxing coal consumption as well would raise the revenue to about \$40 billion. This rate is not likely to reduce energy consumption very significantly. If such a tax were used to encourage greater energy efficiency, rather than to mobilize revenues, the rate would be much higher. It has been estimated, for example, that the tax rate needed to reduce carbon emissions by half by the year 2000 would have to be about 80%.

Some countries (such as Finland, the Netherlands and Sweden) already have environmental taxes on fossil-fuel consumption at the national level, and the European Community is considering the introduction of a carbon tax in stages, starting in 1993.

- *Pollution taxes*—on carbon dioxide or other pollutants. Since these would have to be imposed on outputs rather than inputs, they would be more difficult to monitor and administer.

- *Greenhouse gas permits*—these could

grant permission to emit a certain quantity of greenhouse gases. An international authority could issue the permits to each country, based preferably on population size. The permits could either be free, or leased for a certain period, to generate revenue for environmental projects. They should be internationally tradable, or leaseable. So countries that do not need all their quota (usually developing) could gain revenue. Countries that generate more pollution as a result of high consumption and inefficiencies, or that do not control their population growth rate, would end up paying more. "Ecological space" would thus get priced for all nations rather than remain free for plunder by a few.

- *Global commons taxes*—these could reflect each country's usage of the global commons: the oceans (for fishing, transportation or seabed mining); the Antarctic (for mining); or space (for communications satellites).

- *Taxes on international trade*—these fall on environmentally sensitive products, such as tropical hardwood.

- *Taxes on weapons*—on defence expenditure or on arms trading.

- *Taxes on consumer items*—such as energy-inefficient cars or household equipment.

Developing countries would need to be assured, however, that after the distribution of revenues they would be net beneficiaries. It has also been suggested that the least developed countries be totally exempt from any international taxation, while they should receive significant benefits from the revenues.

security—based not just on reduced military expenditure but on building economic and ecological security for the whole of humanity.

Global military spending is already falling (table 5.1 and figure 5.1). Industrial countries reduced their total military spending from a peak of \$838 billion in 1987 to \$762 billion in 1990. Developing countries have achieved a similar reduction—from a peak of \$155 billion in 1984 to \$123 billion in 1990. After decades of military build-up, a refreshing new trend has emerged.

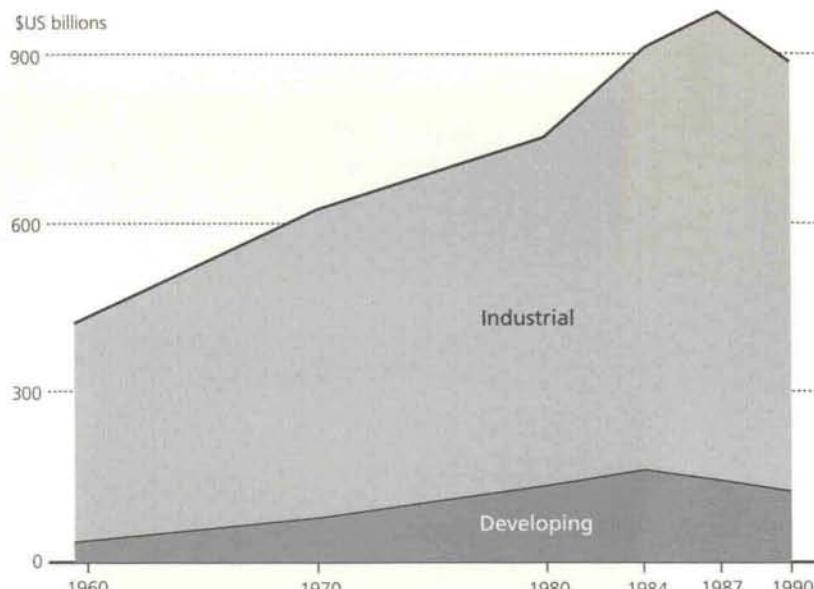
This means a large immediate peace dividend—\$158 billion for the industrial countries and \$119 billion for the developing countries (table 5.2 and figure 5.2). Indeed, considering what might have been spent in 1990 if the previous increasing trend had continued, the possible dividend is even larger—around \$200 billion for the industrial countries and \$125 billion for the developing countries. Unfortunately, the only regions where military spending has not yet started to decline also happen to be the poorest—South Asia and Sub-Saharan Africa.

The peace dividend opens a window of opportunity for both rich and poor nations. For the rich nations, it is a chance to direct more resources to their lengthening social agenda—drug addiction, urban violence, pollution, homelessness and strained social services—and to assisting poorer countries. For the developing countries, it is a chance

to invest more in the health and education of their people.

Some developing countries can expect a bigger peace dividend than others. Military spending in Latin America and the Caribbean, for example, has not been so excessive—1.5% of GNP—and has been less than one-third of social expenditures. But other countries are still spending two or three times as much on their military as on health or education (table 5.3). The number of soldiers in many countries far exceeds the num-

FIGURE 5.1
Global military spending, 1960-90



Regional comparison of trends in military spending

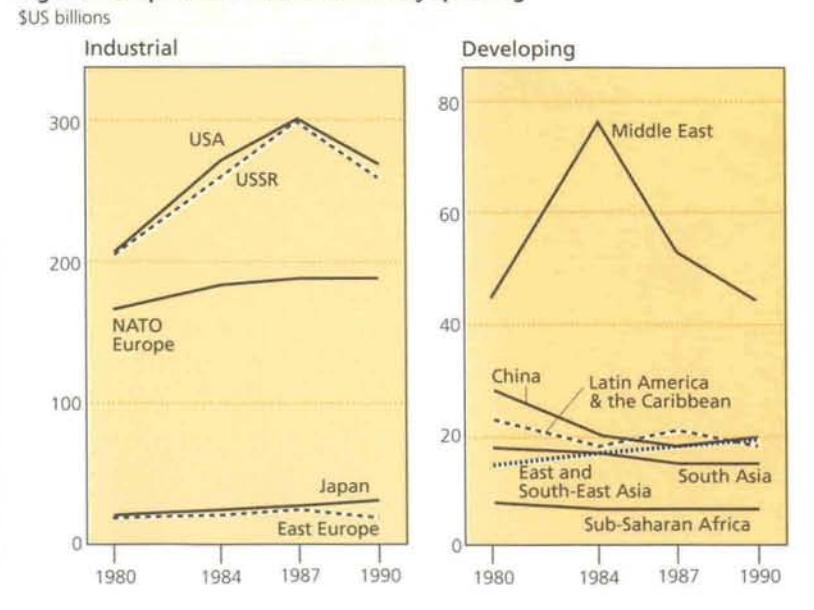


TABLE 5.1
Trends in global military spending

	Developing countries	Industrial countries	Developing countries as % of world
<i>Military expenditures (US\$ billions)</i>			
1960	35	385	8.3
1970	75	545	12.1
1980	137	618	18.1
1984	155	750	17.1
1987	132	838	13.6
1990	123	762	13.9
<i>Annual growth rates (%)</i>			
1960-70	7.9	3.5	4.0
1970-80	6.2	1.3	2.0
1980-90	-1.1	2.1	1.6
1980-84	3.1	5.0	4.6
1984-87	-5.2	3.8	2.3
1987-90	-2.3	-3.1	-3.0

All military assistance should be converted to development assistance

ber of teachers. So, there is still some way to go in reorganizing priorities (table 5.4).

The chief responsibility for such changes lies with the governments of developing countries. But the international community can also do much to accelerate the process.

AID CONDITIONALITY—Many aid donors are beginning to take the military spending levels of recipients into account when allocating aid—a welcome adjustment to the new realities. But they should also recognize that the recipients do have legitimate security needs and that changes take time—and will require considerable adjustment to a country's economic and social policy. More can be achieved by persuasion than coercion, by a vigorous policy dialogue than by formal conditionality.

REDUCING MILITARY ASSISTANCE—Much of the arms build-up was due to proxy cold-war conflicts fought on developing country soil—and sustained by massive military aid. The big powers should now accept the responsibility of eliminating or greatly reducing military assistance, military bases and the shipment of sophisticated military equipment. Bilateral donors should agree to convert existing military assistance into devel-

opment assistance—over a specific, say three-year, timetable.

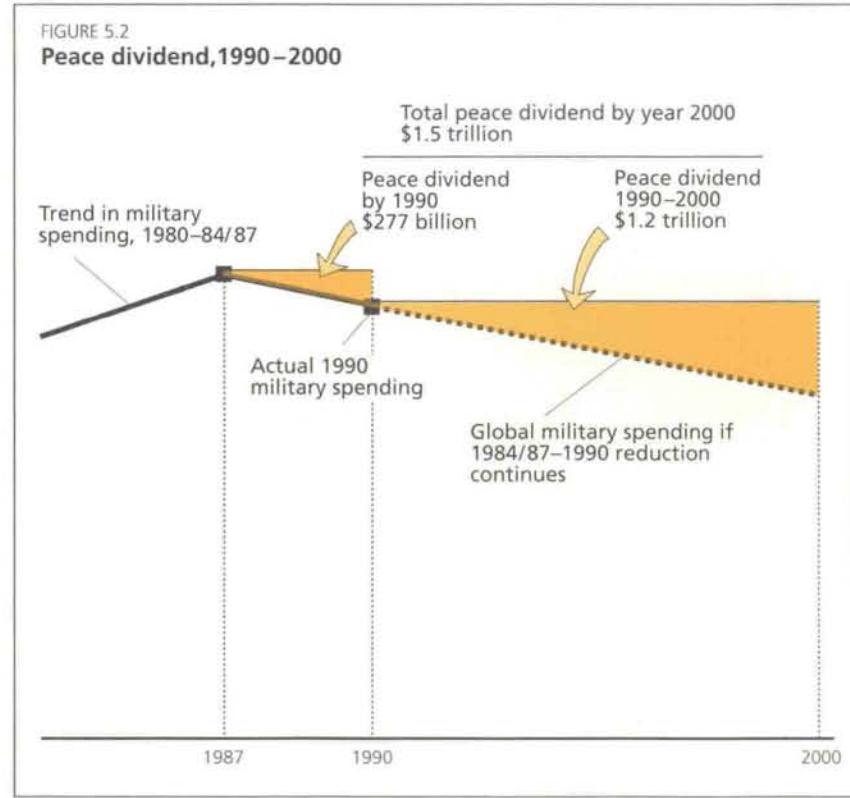
REDUCING ARMS PRODUCTION—The shrinking defence requirements of industrial countries are causing arms suppliers to look more to markets in developing countries. Oddly, some industrial country governments are even considering assisting manufacturers with export subsidies while simultaneously demanding that developing countries reduce imports. More helpful would be subsidies to help arms producers switch to more peacefully oriented production.

CONTROLLING ARMS SALES—Private arms traders should be discouraged from shipping equipment, and suppliers should not be able to offer buyers credit on easy terms. National legislation to control export of arms and related materiel should be strengthened. Governments that export and import arms should provide all required data to the UN "Register of Conventional Arms" agreed in the UN General Assembly and established with effect from 1 January 1992. To enhance transparency and openness, governments should rapidly implement the envisioned second stage of the Register and supply data and background information on their military holdings and procurement through national production. The proposed UN Register to record and monitor the flow of arms would help here by making such dealing more transparent—and should be implemented as soon as possible.

ALLIANCES FOR PEACE—The big powers should help foster new alliances to reduce tension at the world's trouble spots. Regional structures for peace and security should be based on a greater understanding and cooperation between the countries concerned—supplemented by protection from a strengthened UN. The defusing of conflicts in Central America by the meetings of the five Central American presidents offers a pertinent model.

A STRENGTHENED UN POLITICAL UMBRELLA—The new world order should be based on greater justice and a more equal sharing of power among nations. The UN has already begun to assume a greater role in political and security matters, with the tacit approval of the big powers. This role now

FIGURE 5.2
Peace dividend, 1990–2000



needs to be strengthened so that bilateral deals based on the exercise of raw political power can be replaced by multilateral discussions under the UN umbrella. To perform such a role, the UN would need to be reformed in several respects. It would need a larger and more assured source of financing as well as a more streamlined structure for decision-making (box 5.4).

International civil society

Many actors, not just governments and international agencies, make up the dynamic and complex web of global governance. Individuals, families, community groups, non-governmental organizations, international foundations, trade unions, multinational corporations, the communications media—these and many others help determine the shape our civil societies take.

Governments can often be intolerant of such groups since they can represent alternative focuses of power and influence. But such intolerance is short-sighted—and in the long run almost always doomed to failure. Governments genuinely interested in

human development will allow them the space to contribute both their ideas and their energies.

Non-governmental organizations in general can be of great assistance in developing countries. But they often work under great duress, in opposition to powerful vested interests, both official and unofficial. Agencies that deal with human rights are particularly exposed. That is why governments need to ensure that NGOs can work within a supportive legal framework that affords them the necessary rights, financial and legal.

One sensitive issue that NGOs have not yet tackled systematically is corruption—a persistent cancer on civil society the world over. By analogy with the human rights organization, Amnesty International, there seems to be a need for a new “Honesty International” to monitor corruption at both national and international levels (box 5.5).

Towards a new global compact

The world has a fresh opportunity to create a new global order—an order based on

**TABLE 5.3
Military-social spending imbalance in the Third World (1987-89)**

<i>Highest military/social spending ratios (%)</i>	
Iraq	511
Somalia	500
Nicaragua	318
Oman	268
Ethiopia	239
Pakistan	239
Syria	204
Saudi Arabia	177
United Arab Emirates	174
Bolivia	144
<i>Lowest military/social spending ratios (%)</i>	
Algeria	18
Botswana	16
Côte d'Ivoire	14
Ghana	13
Sierra Leone	11
Fiji	9
Jamaica	9
Mexico	8
Mauritius	5
Costa Rica	4

**TABLE 5.2
Peace dividend: actual and potential
(US\$ billions, 1988\$)**

	Military spending in 1987	Military spending in 1990	Peace dividend by 1990 (cumulative 1987-90)	Military spending in 2000 (if 1987-90 annual rate of change continues)	Potential peace dividend by 2000 (cumulative 1991 to 2000)	Total potential peace dividend	If 1984-90 annual rate of change continues			
							In 1984	In 1980	Cumulative 1984-90	Total
<i>Industrial countries</i>										
Total	838	762	158	579	1,078	1,236				
USA	301	268	66	182	473	539				
USSR	299	258	82	158	550	632				
East Europe excl. former USSR	24	19	10	9	55	65				
NATO Europe and others	187	187		187						
Japan	27	30		43						
<i>Developing countries</i>										
Total	155	123	119	98	160	279				
Middle East	76	44	112	18	143	255				
China	20	20		20						
East and South-East Asia excl. China	17	19		23						
South Asia	18	18		18						
Sub-Saharan Africa	7	7		7						
Latin America and the Caribbean	17	15	7	12	17	24				

**TABLE 5.4
Soldier-teacher ratios in the Third World (1987-89)**

<i>Highest soldier/teacher ratios (%)</i>	
Iraq	625
Somalia	591
Ethiopia	416
Nicaragua	350
Syria	302
Mauritania	300
Viet Nam	291
Singapore	280
United Arab Emirates	269
Cyprus	260
<i>Lowest soldier/teacher ratios (%)</i>	
Zaire	17
Mexico	17
Trinidad	15
Sri Lanka	15
Indonesia	15
Côte d'Ivoire	14
Jamaica	10
Ghana	9
Kenya	8
Costa Rica	0

A world summit on human development should be convened

mutual respect among nations, on greater equality of opportunity for their people and on new structures of peace and security. It would be tragic if the conflict between East and West were replaced by one between North and South. Instead, there must be a greater mutual understanding and cooperation between industrial and developing countries. This could also lay the foundation for greater peace and development security in the South.

The dustbin of history is full of grand global designs that were never implemented—a sobering reflection before making yet another attempt. But the failures of the past should be a source of inspiration, not of political paralysis. Past proposals often came to nothing for several reasons. Many were unilateral—based on concessions by the North to the South, rather than on mutual interest. Often they were overly

ambitious—demanding from industrial countries substantial and politically unpopular increases in foreign assistance, rather than offering well-considered reforms in global markets from which everyone could gain. Many were narrowly focused—on either an economic or political issue. And some proposals were just made at inappropriate moments—when the time for change was not ripe.

With the cold war over, military spending on the decline, economic and political freedom expanding, and a growing public awareness of environmental issues, the world now has a unique opportunity to make a substantial break with the past. The time has come for a new *global compact on human development*—an agreement to put people first in national policies and in international development cooperation.

But a realistic global compact must be very clearly defined—in the objectives it plans to fulfil, in the resources it needs, in the strategy for its implementation and in the institutional framework required to support it. And it would have to involve give and take on all sides.

Such a compact would also have to be prepared through a process of worldwide consultations. A world summit on human development should be convened to enlist the support of the world's political leaders for the objectives of the compact and their commitment to the resource requirements it will entail.

Objectives

While the overall objective of the new global compact would be to improve levels of human development worldwide, developing and industrial countries may want to make this objective more concrete.

DEVELOPING COUNTRIES might want to see the compact help them achieve at least the following:

- *Essential human goals*—to be attained by the year 2000. These should include universal basic education for men and women, primary health care and safe water for all, the elimination of serious malnutrition and at least 80% access to family planning.
- *Employment*—to create sufficient job

BOX 5.4

Reforming the United Nations

Many people doubt that the United Nations can cope with the demands of an increasingly interdependent world. Some have gone so far as to demand a "third generation" world organization—as a successor to the League of Nations and the United Nations. But most see the solution lying in reform of the United Nations system.

Many reform proposals suggest how the UN might deal more effectively with economic issues—to build a more secure global economic system and to promote development for the world's poorest people. Similar proposals have come from different directions, including:

- *The UN Joint Inspection Unit*—an internal review body of the UN system—in a report prepared by Maurice Bertrand in 1985 called for a limited-membership "Economic Security Council".

- *The World Institute for Development Economics Research*—part of the UN University—made a similar proposal in 1989 for the establishment of a "World Economic Council". This was envisaged both as a vehicle for changes in the world economic system and eventually as a mechanism for overseeing a set of reformed global institutions.

- *The Stockholm Initiative on Global Security and Governance*—a group of

world political leaders—suggested in 1991 that issues of economic and ecological security should be handled either by a reformed UN Security Council or by a new organization.

- *The Nordic UN Project*—a three-year study by the Nordic countries—proposed in its final report in 1991 the creation of a high-level "International Development Council" to direct the UN's development operations.

- *The Group of 15*—comprising the largest developing countries—emphasized at its summit meeting in Caracas in 1991 the need for practical ways of placing economic development and international cooperation at the top of the global agenda.

Another basic issue is how international funding can match international needs. The Nordic UN project has also submitted a proposal on this point. It stresses that the objective must be predictability, stability and fair burden-sharing among nations. A combination of funding mechanisms—assessed contributions, negotiated pledges and voluntary contributions—is suggested. But for increased funding to lead to a greater development impact, the organization also needs more effective decision-making and management structures.

opportunities to absorb the new additions to the labour force and reduce absolute poverty by 50%.

- *GDP growth rate*—to be accelerated significantly to implement the foregoing objectives.

INDUSTRIAL COUNTRIES might want the compact also to cover some of the shared global objectives that are of immediate priority concern to them:

- *Drug trafficking and pollution*—to be tackled by close cooperation among all countries in the world.
- *Immigration pressures*—to be relieved through creating more job opportunities within poor nations.
- *Nuclear threats*—to be eliminated as international tensions are defused and countries willingly accept reductions of nuclear weapons, including non-proliferation policies.

Certainly, developing and industrial countries would *jointly* agree that the foregoing goals can be successfully pursued only with firm policy commitments to the following:

- *Global peace and disarmament*—besides strengthening global and regional peace arrangements, military spending to be reduced progressively in both industrial and developing countries.
- *Development security*—to prevent the accumulation of unmanageable debt burdens, whether environmental, financial or social.

Resource needs

The global human development compact will have costs. And these will not only be financial. First and foremost, the compact calls for a firm policy commitment to the set objectives. Only if policy-makers are committed to the *ends* will they agree on the *means*.

But to reach agreement on the financial resource requirements of the compact, it is important that its objectives are, as far as possible, fully costed and that there is a clear identification of the funding sources to be tapped. These could include:

- *The peace dividend*—All countries, industrial and developing, should commit

themselves to reducing military expenditures during the 1990s by at least 3% a year. This would yield by the year 2000 a total peace dividend of around \$1.5 trillion—\$1.2 trillion in the industrial countries and \$279 billion in the developing countries.

- *A reformed ODA system*—The world needs a new ODA system that is progressive, predictable and equitable. Since it will take time to develop such a comprehensive reform, the major focus should be on improving the quality of current ODA. At least two-thirds of ODA should be channelled to the poorest nations (compared with the present one-quarter) and at least 20% should go to human priority expenditure (compared with the present 7%).

- *A global debt bargain*—A new bargain must be struck with the severely indebted nations to halt the current debt-related net transfer of \$50 billion a year from the developing to the industrial countries. This will involve a major write-down of debts by official donors and commercial banks as

A comprehensive global development compact should be prepared and fully costed

BOX 5.5

Honesty International

Every country declares corruption illegal, and some have set up anticorruption agencies. Hong Kong, for example, has an Independent Commission Against Corruption. Others have set up "vigilance committees" to control corruption. But there are relatively few such organizations, and none operates at an international level.

There are always two sides in corruption: those who take bribes and those who offer them. Both sides should be held accountable: the corrupt leaders and officials in developing countries—and the multinationals that offer bribes to win valuable contracts.

Much of the corrupt money flies out of developing countries to be parked comfortably in the banks of the industrial countries. The discovery of such embezzled funds should not await the fall of a corrupt dictator. There should be an international system to monitor for the arrival of dubious money.

The first weapon against corruption is transparency of information and publicity. Corruption can flourish only in secrecy. Information, carefully researched and widely publicized, could therefore

achieve a great deal. This suggests that just as Amnesty International publicizes abuses of human rights, there is an opportunity for combating corruption through an analogous "Honesty International".

Such a non-governmental international organization would be funded from private contributions. It would have its own specialist investigators and agents, but it could also glean information from third parties, such as the media and banks, as well as from the general public. "Whistle-blowers" within organizations might indicate, for example, when people were living beyond their government salaries or when corrupt leaders were transferring funds abroad. Honesty International would investigate all such allegations and publish the results.

This would have two main benefits. The real prospect of discovery—and shameful exposure—would deter many officials and multinational staff who might otherwise be tempted. But the information gained would also give the country's legal system the evidence necessary to pursue its own investigation and to enforce the law.

Human destiny is a choice, not a chance

well as by multilateral institutions.

- *Sustainable development funding*—Collective responsibility will eventually lead to new forms of international financing. A beginning might be made with the protection of the global commons. Various promising ideas could be considered. A consumption tax of a dollar per barrel of oil, collected at source, would yield around \$24 billion a year (73% from industrial nations). An equivalent tax on coal would yield \$16 billion a year. Rationing certificates for carbon dioxide emissions can lead to an automatic transfer of resources from energy-consuming rich nations to poor nations. These could provide added financial backing for international cooperation in support of sustainable human development worldwide.

- *Open global markets*—Global markets should be liberalized both in goods and services, to accelerate global growth and to ensure much better distribution of this growth. In particular, the existing restrictions on the export of textiles, clothing and agricultural, tropical and resource-based products should be eliminated. This should enable developing countries to increase their exports by \$40 billion a year and thus gain new employment and income earning opportunities for their people.

Strategy

To ensure that the resource mobilization measures are linked to the attainment of the agreed-on objectives of the compact, it will be necessary to base the design of the compact and its implementation on carefully crafted strategies. These are needed not just internationally but within regions and countries. Although the strategies will naturally differ from one country and one region to

another, there are likely to be common elements.

DEVELOPING COUNTRIES should adopt improved policies of national governance to make them fully responsive to the needs of their people. This might include more open government, based on respect for human rights and on wide participation, both in political life and in development planning. Public administration should run with greater transparency and accountability. And public policy should provide a framework combining private initiative, energetic entrepreneurship and the efficient functioning of national and international markets with well-defined policies and targets for human development.

INDUSTRIAL COUNTRIES will have to ensure that their peace dividend is carefully managed. The resources released will be needed for structural adjustment programmes if industrial countries are to liberalize their markets in goods, capital, technology and labour—as well as to finance higher levels of human development at home and abroad.

ALL COUNTRIES will need to come together in joint action programmes to combat some of the most serious global problems—including poverty, hunger, illiteracy, drug trafficking and abuse, nuclear proliferation, international terrorism, illegal migration, the depletion of non-renewable resources and the spread of pollution. These must be based on a recognition that the world cannot be made safe without the full collaboration of all—rich and poor, North and South. Only through cooperation can the world achieve sustainable human development.

Needed today are a clear vision of human goals over the next decade and a concrete plan of action for their implementation. Human destiny is a choice, not a chance.

Technical notes

1. The human development index

Construction of the human development index (HDI)

The HDI has opened new perspectives on measuring and analysing development. But there can be no doubt that the work in this area is still at its beginning. Much more research is needed—as is more experience with using the HDI for various practical purposes of assessing, planning or programming development. UNDP would welcome any contributions to this topic, to be taken up in next year's *Human Development Report*, from interested development research scholars and practitioners.

The HDI includes three key components: longevity, knowledge and income, which are combined in a three-step process to arrive at an average deprivation index (for a full technical description, see *Human Development Report 1991*, technical note 1, pp. 88-89). Longevity is measured by life expectancy at birth as the sole unadjusted indicator. Knowledge is measured by two educational stock variables: adult literacy and mean years of schooling. The measure of educational achievement is adjusted by assigning a weight of two-thirds to literacy and one-third to mean years of schooling:

$$E = a_1 \text{ LITERACY} + a_2 \text{ YEARS OF SCHOOLING}$$

$$a_1 = \frac{2}{3} \text{ and } a_2 = \frac{1}{3}$$

For income, the HDI is based on the premise of diminishing returns from income for human development using an explicit formulation for the diminishing return. A well-known and frequently used form is the Atkinson formulation for the utility of income:

$$W(y) = \frac{1}{1-\epsilon} \times y^{1-\epsilon}$$

Here, $W(y)$ is the utility or well-being derived from income, and the parameter measures the extent of diminishing returns. It is the elasticity of the marginal utility of income with respect to income. If $\epsilon = 0$ there are no diminishing returns. As ϵ approaches 1, the equation becomes:

$$W(y) = \log y$$

The value of ϵ rises slowly in the HDI as income rises. For this purpose, the full range of income is divided into multiples of the poverty line y^* . Thus, most countries are between 0 and y^* , some between y^* and $2y^*$, even fewer between $2y^*$ and $3y^*$ and so on. For all countries for which $y < y^*$ —that is, the poor countries— ϵ is set

equal to 0. There are no diminishing returns here. For income between y^* and $2y^*$, ϵ is set equal to 1/2. For income between $2y^*$ and $3y^*$, ϵ is set at 2/3. In general, if $a y^* \leq y \leq (a+1)y^*$, then $\epsilon = a / (a+1)$. This gives:

$$\begin{aligned} W(y) &= y \text{ for } 0 < y \leq y^* \\ &= y^* + 2(y - y^*)^{\frac{1}{2}} + 3(y - 2y^*)^{\frac{1}{3}} \text{ for } y^* \leq y \leq 2y^* \\ &= y^* + 2(y^*)^{\frac{1}{2}} + 3(y - 2y^*)^{\frac{1}{3}} \text{ for } 2y^* \leq y \leq 3y^* \end{aligned}$$

So, the higher the income relative to the poverty level, the more sharply the diminishing returns affect the contribution of income to human development. Income above the poverty line thus has a marginal effect, but not a full dollar-for-dollar effect. This marginal effect is enough, however, to differentiate significantly among industrial countries. This method does not take $\epsilon = 1$, but allows it to vary between 0 and 1.

For example, Singapore has a real GDP per capita of \$15,108. With the poverty line set at \$4,829, there are four terms in the equation to determine the well-being of Singapore:

$$\begin{aligned} W(y) &= y^* + 2(y^*)^{\frac{1}{2}} + 3(y - 2y^*)^{\frac{1}{3}} + 4(y - 3y^*)^{\frac{1}{4}} \\ &= 4,829 + 2(4,829)^{\frac{1}{2}} \\ &\quad + 3(4,829)^{\frac{1}{3}} \\ &\quad + 4(15,108 - 14,487)^{\frac{1}{4}} \\ &= 4,829 + 139 + 51 + 20 = \$5,039 \end{aligned}$$

In calculating the HDI of Singapore using the improved variables and applying the methods described here, the following steps are taken:

Maximum country life expectancy	= 78.6
Minimum country life expectancy	= 42.0
Maximum country educational attainment	= 3.00
Minimum country educational attainment	= 0.00
Maximum country adjusted real GDP per capita	= 5,079
Minimum country adjusted real GDP per capita	= 380
Singapore life expectancy	= 74.0
Singapore educational attainment	= 2.04

Singapore adjusted GDP per capita	= 5.039
Singapore life expectancy deprivation = $(78.6 - 74.0)/(78.6 - 42.0)$	= 0.126
Singapore educational attainment deprivation = $(3.00 - 2.04)/(3.00 - 0.00)$	= 0.320
Singapore GDP deprivation = $(5,079 - 5,039)/5,079 - 380)$	= 0.009
Singapore average deprivation = $(0.126 + 0.320 + 0.009)/3$	= 0.152
Singapore human development index HDI = $1 - 0.152$	= 0.848

Making the HDI gender-sensitive

Of the many inequalities in human development, the most striking is that along gender lines. Women typically live longer than men once they have gone beyond the age when differential treatment of boys and girls makes life shorter for girls. They work harder and more hours than men, but they often do work that is unpaid or underpaid. Women cook, take care of children, the elderly and the sick, look after the upkeep of the house and work on the farm or in the shop. Only a small proportion of women find that their work gets paid and recorded as participation in the labour force. Labour force participation as a concept and in its measurement grossly understates

women's work even in the productive, commodity-producing sphere. It completely leaves out much work that is useful to the continuing existence of the household.

Any attempt to measure gender inequalities is thus bound to err on the low side. Even allowing for that, the inequalities are striking. An attempt is made here to calculate the ratio of female income to male income. We do not have suitable data on income, but for 33 countries we do have comparable data on the relative wage ratios and the relative ratios for labour force participation.

These data reveal a remarkable pattern of discrimination. The female-male wage ratio for these 33 countries ranges from a low of 50% (Japan) to a high of 89% (Sweden).

In labour force participation, the lowest female-male ratio is 40% (Costa Rica) and the highest is 92% (Sweden). Multiplying these two ratios gives the female-male wage-income ratio.

This wage-income ratio combines two identifiable correlates of gender discrimination. The male wage is greater than the female wage, and the gap in labour force participation rates is even wider. When this is translated into absolute income levels, we see the profound consequences. To do this, a basic assumption has to be made that is clearly gender-biased: that the ratio of non-wage income to wage income is the same for men and women.

TECHNICAL NOTE TABLE 1.1
Gender-sensitive HDI

	Female as % of male						Percentage difference between HDI and gender-sensitive HDI
	Life expectancy ^a	Educational attainment	Adjusted real GDP	Human development index	Female HDI	Male HDI	
Sweden	101.13	100.11	81.90	96.16	0.825	0.857	0.938
Norway	102.14	100.48	69.54	93.48	0.814	0.870	0.914
Finland	103.80	99.63	68.33	94.47	0.781	0.826	0.900
France	104.16	100.48	60.97	92.72	0.798	0.860	0.899
Denmark	101.21	99.93	70.56	92.20	0.775	0.841	0.879
Australia	102.26	99.28	62.33	90.48	0.790	0.873	0.879
New Zealand	101.53	101.96	61.69	89.95	0.756	0.841	0.851
Canada	102.48	98.21	50.05	85.73	0.781	0.911	0.842
USA	102.97	100.72	48.73	86.26	0.771	0.893	0.842
Netherlands	102.12	101.82	49.73	86.26	0.769	0.891	0.835
Belgium	102.25	100.35	52.47	86.57	0.744	0.860	0.822
Austria	103.14	96.07	53.57	86.47	0.740	0.856	0.822
United Kingdom	101.02	100.54	51.55	85.09	0.752	0.884	0.819
Czechoslovakia	103.83	97.52	61.35	90.25	0.692	0.766	0.810
Germany	102.06	96.36	48.37	83.32	0.736	0.883	0.796
Switzerland	102.07	97.41	40.65	80.92	0.752	0.929	0.790
Italy	102.22	100.64	47.31	83.82	0.702	0.838	0.772
Japan	100.81	99.66	33.88	77.56	0.743	0.958	0.761
Portugal	102.69	86.02	57.67	83.36	0.617	0.741	0.708
Luxembourg	102.46	100.21	29.16	74.88	0.661	0.883	0.695
Ireland	100.86	102.48	30.43	74.89	0.658	0.878	0.689
Greece	102.68	89.14	38.18	76.10	0.632	0.831	0.686
Cyprus	100.06	88.62	35.51	72.32	0.639	0.883	0.659
Hong Kong	100.58	75.47	39.79	71.10	0.635	0.893	0.649
Singapore	101.09	80.50	39.54	70.87	0.557	0.785	0.601
Costa Rica	99.76	104.4	26.31	70.61	0.583	0.826	0.595
Korea, Rep. of	102.42	80.84	27.46	65.53	0.548	0.836	0.571
Paraguay	100.04	96.49	67.43	88.82	0.457	0.515	0.566
Sri Lanka	99.63	83.70	46.49	79.59	0.478	0.601	0.518
Philippines	99.52	98.64	35.41	78.67	0.396	0.503	0.472
Swaziland	100.68	96.27	43.23	68.74	0.193	0.280	0.315
Myanmar	99.31	73.78	57.67	74.07	0.210	0.283	0.285
Kenya	100.24	52.78	54.00	58.60	0.147	0.251	0.215

a. Adjusted for natural biological life expectancy advantage for females.

This ratio therefore understates the inequality.

In adjusted real GDP per capita, female incomes as a percentage of male incomes range from a low of 26% (Costa Rica) to a high of 82% (Sweden). But of the 33 countries for which we have comparable data, only nine have a ratio of 60% or above, while 10 are below 40%. So, even in a statistic that understates the inequality, the differences are stark.

The female HDI gains from the near-equal or better ratio in life expectancy but loses somewhat from unequal access to education, particularly in the developing countries. In education, the developed countries show very little gender difference: though the value for female achievement, as a proportion of male, never goes above 102%, in five countries it goes below 98%. In poorer countries the differences become substantial. Women's educational attainment in Kenya shows a low ratio of 53%. In Myanmar it is 74%, and in Hong Kong 75%. Costa Rica shows a figure of well over 100%.

The overall HDI for men and women calculated separately reflects this pattern. Much of the data, 22 of the 33 countries, relate to the industrial countries. So, technical note table 1.1 does not capture the full extent of gender inequality. Even then, the female HDI as a percentage of the male HDI is as low as 59% in Kenya, 66% in the Republic of Korea and 69% in Swaziland. Of the 33 countries, 10 have ratios below 75%, and only five countries—Sweden, Finland, Norway, France and Denmark—have ratios of over 90%. No country attains full gender equality even in this biased measure, though Sweden comes close with a ratio of 96%.

How should this inequality be reflected in the overall HDI for any country? A simple approach is to multiply the overall HDI for any country by the ratio of female-to-male HDI. If a country has full equality, its HDI is unaffected. Although Japan has the second highest overall HDI (0.981), its low female-to-male ratio brings it down to being 18th of the 33 countries with a gender-adjusted HDI of 0.761. Sweden, by contrast, has a very high female-to-male ratio and moves from fifth to first position with a gender-adjusted HDI of 0.938. Whereas Japan has a high overall HDI with a high degree of gender inequality, Sweden has a high overall HDI with a low degree of gender inequality. Among the 11 developing countries, there is usually both a low HDI and a high degree of gender inequality.

Adjusting the HDI for income distribution

The HDI is a national average, just like real income per capita, one of its components. The use of any such overall average hides the considerable differences in the distribution of the basic indicators, whether by gender, race, region, ethnicity or simply among individuals. The HDI therefore needs to be made sensitive to these distributions.

The HDI has the advantage that two of its three basic variables—life expectancy and educational attainment—are naturally distributed much less unequally than is income, the third variable. Thus, life expectancy in any population is not likely to be distributed more unequally than, say, three to one. A rich person cannot live a thousand times longer than a poor person, though their

incomes may be in that ratio. Across countries, the range of life expectancy is 42 to 79, less than 2:1.

The same is true in educational attainment. The range of the percentage of adults who are literate varies from 18% to 99%, a range of under 6:1. Mean years of schooling show a variation from 0.1 to 12.3, more unequal than life expectancy, and hide even greater variations in the within-country distribution.

Apart from per capita income, all the variables used in the HDI have an obvious maximum. Life expectancy

TECHNICAL NOTE TABLE 1.2
Income-distribution-adjusted HDI

	HDI value	Income-distribution-adjusted HDI value	Percentage difference between HDI and income-distribution-adjusted HDI
Japan	0.981	0.979	-0.26
Netherlands	0.968	0.964	-0.34
Sweden	0.976	0.957	-1.97
Switzerland	0.977	0.957	-2.09
Norway	0.978	0.956	-2.37
Canada	0.982	0.947	-3.68
Belgium	0.950	0.944	-0.67
USA	0.976	0.943	-3.44
United Kingdom	0.962	0.943	-2.03
France	0.969	0.936	-3.53
Australia	0.971	0.933	-4.04
Finland	0.953	0.931	-2.32
Denmark	0.953	0.923	-3.23
Israel	0.939	0.913	-2.93
New Zealand	0.947	0.909	-4.11
Ireland	0.921	0.904	-1.88
Spain	0.916	0.894	-2.49
Italy	0.922	0.890	-3.51
Korea, Rep. of	0.871	0.884	1.44
Hungary	0.893	0.878	-1.68
Hong Kong	0.913	0.871	-4.82
Singapore	0.848	0.835	-1.57
Yugoslavia	0.857	0.833	-2.90
Costa Rica	0.842	0.820	-2.75
Chile	0.863	0.817	-5.59
Portugal	0.850	0.799	-6.30
Argentina	0.833	0.792	-5.20
Venezuela	0.824	0.771	-6.91
Mauritius	0.793	0.744	-6.59
Mexico	0.804	0.736	-9.22
Malaysia	0.789	0.731	-7.93
Colombia	0.758	0.722	-5.07
Panama	0.731	0.648	-12.91
Thailand	0.685	0.644	-6.43
Brazil	0.739	0.635	-16.38
Jamaica	0.722	0.631	-14.37
Sri Lanka	0.651	0.623	-4.5
Syrian Arab Rep.	0.665	0.617	-7.83
Turkey	0.671	0.608	-10.34
Philippines	0.600	0.572	-4.94
Tunisia	0.582	0.566	-2.81
Iran, Islamic Rep. of	0.547	0.510	-7.37
Indonesia	0.491	0.495	0.75
El Salvador	0.498	0.483	-3.18
Honduras	0.473	0.420	-12.84
Egypt	0.385	0.373	-3.01
Kenya	0.366	0.341	-7.28
Pakistan	0.305	0.297	-2.56
Zambia	0.315	0.292	-7.75
India	0.297	0.278	-6.66
Côte d'Ivoire	0.289	0.249	-16.07
Bangladesh	0.185	0.168	-9.95
Nepal	0.168	0.136	-23.20

TECHNICAL NOTE TABLE 1.3
Changing HDI over time

	HDI 1970	HDI 1990	Difference		HDI 1970	HDI 1990	Difference
Saudi Arabia	0.386	0.687	0.301	Iran, Islamic Rep. of	0.464	0.547	0.083
Korea, Rep. of	0.589	0.871	0.282	Dominican Rep.	0.513	0.595	0.082
Mauritius	0.525	0.793	0.268	Uruguay	0.799	0.880	0.081
Malaysia	0.538	0.789	0.251	Ireland	0.840	0.921	0.081
Tunisia	0.335	0.582	0.247	Pakistan	0.226	0.305	0.079
Syrian Arab Rep.	0.432	0.665	0.233	Sri Lanka	0.573	0.651	0.078
Botswana	0.319	0.534	0.215	Côte d'Ivoire	0.212	0.289	0.077
Turkey	0.492	0.671	0.179	Haiti	0.200	0.276	0.076
Indonesia	0.316	0.491	0.176	Guatemala	0.416	0.485	0.069
Gabon	0.370	0.545	0.175	Ghana	0.246	0.310	0.064
Algeria	0.358	0.533	0.175	Hungary	0.831	0.893	0.063
Brazil	0.569	0.739	0.170	Czechoslovakia	0.836	0.897	0.061
Morocco	0.268	0.429	0.161	Philippines	0.542	0.600	0.058
Jordan	0.428	0.586	0.158	Senegal	0.124	0.178	0.054
Hong Kong	0.762	0.913	0.151	Nigeria	0.189	0.241	0.052
Thailand	0.535	0.685	0.150	USSR	0.821	0.873	0.051
Colombia	0.617	0.758	0.141	Bulgaria	0.815	0.865	0.050
Portugal	0.710	0.850	0.139	Argentina	0.784	0.833	0.049
Yemen	0.093	0.232	0.139	Togo	0.170	0.218	0.048
Israel	0.806	0.939	0.133	Poland	0.829	0.874	0.045
Mexico	0.675	0.804	0.129	Nepal	0.126	0.168	0.042
Japan	0.853	0.981	0.128	India	0.258	0.297	0.039
USA	0.848	0.976	0.128	Liberia	0.194	0.227	0.033
Chile	0.736	0.863	0.128	Madagascar	0.292	0.325	0.033
Canada	0.860	0.982	0.123	Zimbabwe	0.365	0.397	0.032
Australia	0.849	0.971	0.122	Paraguay	0.607	0.637	0.031
Singapore	0.730	0.848	0.119	Zaire	0.232	0.262	0.030
France	0.854	0.969	0.116	Burundi	0.135	0.165	0.030
Finland	0.838	0.953	0.115	Panama	0.703	0.731	0.028
Switzerland	0.863	0.977	0.114	Mali	0.054	0.081	0.028
Kenya	0.253	0.366	0.113	Somalia	0.061	0.088	0.027
United Kingdom	0.850	0.962	0.113	Niger	0.054	0.078	0.024
Austria	0.838	0.950	0.112	Angola	0.147	0.169	0.023
Venezuela	0.715	0.824	0.109	Central African Rep.	0.138	0.159	0.021
Greece	0.793	0.901	0.108	Malawi	0.149	0.166	0.017
Norway	0.870	0.978	0.108	El Salvador	0.483	0.498	0.015
Lesotho	0.317	0.423	0.106	Bolivia	0.383	0.394	0.012
Belgium	0.846	0.950	0.104	Bangladesh	0.174	0.185	0.011
Sweden	0.873	0.976	0.103	Chad	0.083	0.088	0.006
Netherlands	0.866	0.968	0.101	Peru	0.595	0.600	0.004
Yugoslavia	0.757	0.857	0.100	Sudan	0.155	0.157	0.002
Iraq	0.489	0.589	0.100	Sierra Leone	0.060	0.062	0.002
Ecuador	0.542	0.641	0.100	Rwanda	0.184	0.186	0.002
New Zealand	0.848	0.947	0.098	Burkina Faso	0.073	0.074	0.001
Egypt	0.286	0.385	0.098	Myanmar	0.384	0.385	0.000
Spain	0.819	0.916	0.098	Benin	0.117	0.111	-0.006
Congo	0.278	0.372	0.095	Zambia	0.320	0.315	-0.006
Trinidad and Tobago	0.784	0.876	0.093	Afghanistan	0.083	0.065	-0.019
Italy	0.830	0.922	0.092	Papua New Guinea	0.342	0.321	-0.021
Iceland	0.866	0.958	0.091	Guinea	0.074	0.052	-0.022
Denmark	0.864	0.953	0.089	Uganda	0.241	0.192	-0.049
Honduras	0.385	0.473	0.088	Mozambique	0.205	0.153	-0.052
Luxembourg	0.841	0.929	0.088	Nicaragua	0.549	0.496	-0.053
Cameroon	0.228	0.313	0.085	Romania	0.798	0.733	-0.065
Costa Rica	0.759	0.842	0.084	Jamaica	0.797	0.722	-0.076

will rarely go beyond 100, literacy never beyond 100% and mean years of schooling seldom beyond, say, 15. Income, however, has no upper bound. For GNP per capita the intercountry range is \$80 to \$29,880, a range of 375:1. As for real GDP per capita, the range is \$380 to \$20,998, or 55:1. Such inequalities in income are reproduced just as sharply within countries.

So, a high average value for life expectancy or educational attainment can be obtained only by a reasonably equitable spread among individuals, a result of the fixed maximum possible. Although it is of great interest to know the distributions of those variables, an average is a better statistic for these variables than for income, where it can

be very misleading.

The ranking of countries by per capita income could be adjusted if per capita income were multiplied by a factor indicating distributional inequality—1 minus the Gini coefficient. This method can be extended to all the countries having statistics on distributional inequality. Some 41 countries have data on the ratio of the income share of the highest 20% to the lowest 20%. Of these 41 countries, 17 have data on the Gini coefficient as well, and there was found to be a very strong association between the two—the logarithm of the ratio being a good predictor of the Gini coefficient. This regression result was used to interpolate the Gini coefficient for the remaining 24

countries. Some countries had data only on the Gini coefficient. In all, 53 countries with directly estimated or interpolated Gini coefficients were available.

A word of caution. The Gini coefficients are registered for various years between 1975 and 1988, and the ratios of the top 20% to the lowest 20% are for years between 1980 and 1988. This is not a serious problem, since these coefficients are unlikely to change quickly. But the Gini coefficient is not always truly representative of the entire country. It is sometimes only for a subsection, such as the urban population.

Adjusted income was multiplied by $(1 - G)$ with G being the Gini coefficient to modify income even further. Because this was done for the adjusted income, $W(y)$, rather than for the actual income, the diminishing return effect could be incorporated before the distributional adjustment modifies incomes further. This modified income $W(y)[1 - G]$ is then used as the third variable in addition to life expectancy and educational attainment to compute a distribution-adjusted HDI.

For all but two countries, the HDI is reduced by making it sensitive to income distribution, and in a half of them, it is reduced by 4% or more. This is particularly marked in the developing countries, where 24 of the 32 developing countries have a reduction of 4% or more and seven show a reduction in excess of 10%.

Much better data are needed to pursue the sensitivity of income distribution more thoroughly. The analysis shows that caution is needed in interpreting a country's HDI value as a measure of achieved well-being for all its people.

Measuring progress in human development over time
The human development index (HDI) ranks countries relative to each other for a particular period. The maximum and minimum values that define the maximum distance to be travelled for each variable are specific to that year. Over time, the actual achieved values of life expectancy, literacy and income change, as will the maximum and minimum values of these variables across all countries.

For example, Ruritania's life expectancy in year 1 may be 40, halfway between a minimum of 20 and a maximum of 60. By year 10, Ruritania may have improved its life expectancy to 50, but the minimum may now be 30 and the maximum 80. In such a case, the numerical value of the index indicating Ruritania's life expectancy will drop in the HDI calculations from $0.5 [= (40 - 20)/(60 - 20)]$ to $0.4 [= (50 - 30)/(80 - 30)]$, despite the 25% improvement in life expectancy.

So, improvements in the components of human development in any country over time may be reflected as a decline in its HDI value, if in the meantime its relative position has deteriorated. To combine a measure of progress over time with intercountry comparisons at one point of time, the HDI has to be modified.

The way to tackle this problem, without changing the logic of the HDI, is to say that the minimum and maximum should be defined, not for each point of time, but over a period of time. Thus if we are measuring progress between 1970 and 1990, the minimum would be the minimum of all values of, say, life expectancy for all

countries over the 20 years. Similarly for the maximum. The distance to be travelled is thus stretched out as the maximum over the 20-year period.

In the example of Ruritania, the minimum stays at 20 but the maximum is now 80. In year 1, the life expectancy variable is $0.33[(40 - 20)/(80 - 20)]$, and in year 10 it is $0.5 [(50 - 20)/(80 - 20)]$.

With this adaptation, the human development index becomes comparable over time as well as across countries. The difference in the value of the human development index over time can be shown to be a weighted sum of the growth rates in the three variables: the weights are given by the ratio of the initial value of a variable to the maximum range.

To express this algebraically—with X_1 as life expectancy, X_2 as literacy and X_3 as income—the contribution of each variable to the HDI can be written as Z_{ijt} where:

$$Z_{ijt} = \frac{[X_{ijt} - \min X_{ijt}]}{\max X_{ijt} - \min X_{ijt}}$$

In the formula, j denotes country, t the time period. Note now that the denominator will remain unchanged for all time periods and for all countries.

$$MHDI_p = \frac{1}{3} \sum Z_{ijt}$$

MHDI stands for the modified HDI since we have a new definition of the maximum and minimum. Countries are ranked by the size of the difference between the 1970 and 1990 values for the *MHDI*. These differences range from 0.301 for Saudi Arabia to -0.076 for Jamaica. Jamaica is, however, a country where the HDI in 1970 was already quite high, 0.797, and the lack of change does not reflect absolute deterioration.

A summary of the differences between the 1970 and 1990 HDI values follows:

HDI difference	Number of countries
> 0.300	1
0.250 to 0.299	3
0.200 to 0.249	3
0.150 to 0.199	9
0.100 to 0.149	27
0.050 to 0.099	29
0.000 to 0.049	28
< 0.000	10
Total	110

At the bottom, with Jamaica, are 10 countries that register a negative change, and above them is a group of 28 countries that register a change between 0 and 0.049. Twenty-one of these 38 countries are from Sub-Saharan Africa, seven from Latin America and seven from Asia. These low achievers are usually countries with a comparatively low initial HDI value. Only Poland (0.829 in 1970), Romania (0.798) Jamaica (0.797) and Argentina (0.784) would qualify as such. The remainder are poor initially, and 23 of them remained below 0.300 in 1990. Many of these countries experienced low rates of growth of real GDP per capita over this period, or even had a negative growth. So, income growth may not be sufficient for achieving a high HDI, but it cannot be dispensed with.

Fifty-six countries show a moderate improvement, between 0.05 and 0.15, 16 show a greater improvement and 43 show a total increase in excess of 0.10. Since the maximum distance to traverse is 1.00, some 40% of the countries, starting at different levels, covered 10% or more of the maximum distance. Almost all the countries

with high HDIs in 1990 are in this group. They have continued to improve despite their already high levels for 1970. But, a few countries in this fast-moving group began in 1970 with low levels of HDI, notably Yemen (0.093 in 1970), Kenya (0.253), Morocco (0.268) and Indonesia (0.316).

2. Measurement of global economic disparity

A standard practice, though possible for relatively few countries and only infrequently updated, is to distribute a country's income according to quintile groups of households ranked by total household or per capita income. Data along these lines are available for 41 countries in table 30 of the *1991 World Development Report*.

We have tried to adapt this national quintile approach to the world by ranking countries according to their per capita income and presenting them in the form of a continuum of population—with the population accumulated in a way similar to designing a population sample frame for a country. The world is then divided into quintiles, and the attributes of each quintile are calculated.

In technical note table 2.1, the first column is the estimated GNP per capita in ascending order, the second column is the population, the third column is the cumulative population, and the fourth column is the cumulative population percentile.

A problem arises because countries are not units, and the quintile break will not necessarily occur at or near a point between two countries. This can be seen in the break between the first and second quintiles, where India straddles the two, between the second and third quintile where China straddles the two, and between the fourth and fifth quintiles where the former USSR straddles the two. Accordingly, the three straddling countries have been divided along the quintile break with the same GNP per capita but with different populations reflecting this break.

The average GNP per capita for each quintile is given in column 1 of technical note table 2.4 at the end of each group, and columns 5, 6, 7 and 8 give the wealth, trade, domestic investment, and domestic savings pertaining to each group—in absolute terms and as a percentage of global wealth, trade, domestic investment, and domestic savings. The income disparity between the top

and bottom quintiles is 59 to 1, and the other economic disparities are even greater.

Each country is treated as one unit with an average per capita income, and the analysis is based on comparisons of the average per capita incomes of rich and poor countries. In reality, of course, there are wide disparities within each country between rich and poor people as can be seen from table 30 of the *1991 World Development Report* table referred to at the beginning of this note.

We tried to estimate what effect it would have on our analysis if we could produce a global economic disparity table that measures the income differences both between countries and within countries. This is possible to do with the 41 countries in the *World Development Report* table.

In technical note table 2.2, we treat the universe as limited to these 41 countries and apply the same methodology as we did in table 2.1. The income disparity between the top and bottom quintiles is 65 to 1. We then divide each country into its own quintiles and treat our 41-country world as if it were 205 countries, each country having five parts. We apply the same methodology to this 205-country world technical note table 2.3. Apart from some fascinating glimpses into the comparative wealth of rich quintiles in poor countries and poor quintiles in rich countries, the most significant result is that the income disparity between the top and bottom quintiles increases from 65 to 1 to as much as 140 to 1—that is, it more than doubles.

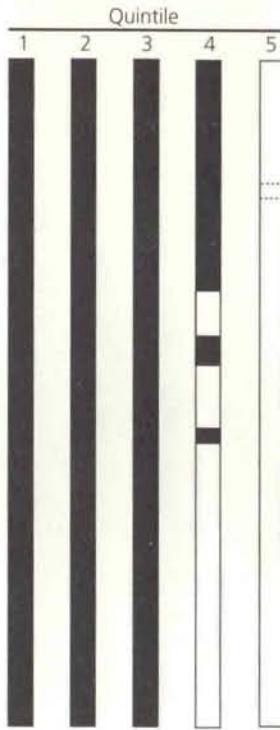
The industrial countries, where income disparities tend to be smaller, are overrepresented in our 41/205 country universe, and it is reasonable to assume that, if we were able to do this analysis of inequality between and within countries for the world, the global disparity ratio would be higher still. The inequality ratio for the world is probably at least three times higher than the inequality ratio in technical note table 2.1 and may be well over 150 to 1.

TECHNICAL NOTE FIGURE 2.1

Beyond national averages

The population of 41 countries is divided into quintiles of average per capita income...

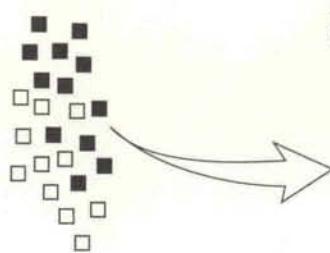
Developing country Industrial country



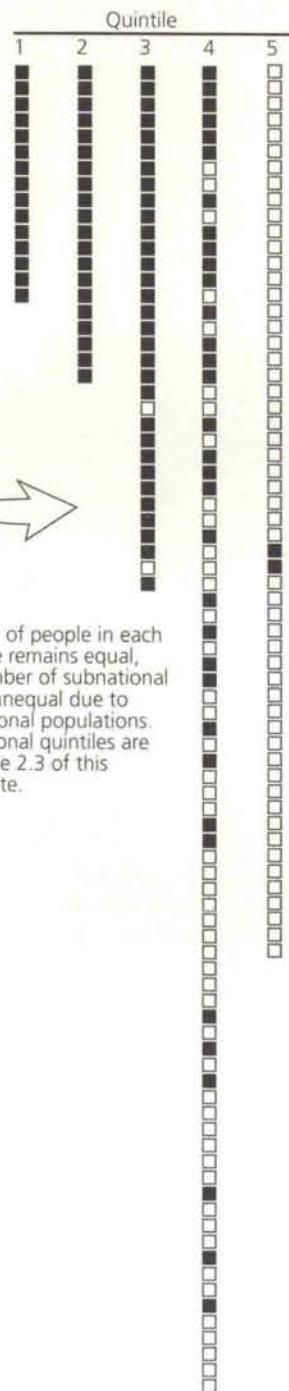
In each of the 41 countries the population is divided into quintiles of income...

one country
1 Poorest
2
3
4
5 Richest

The 205 subnational quintiles are then redistributed into quintiles of per capita income.



Subnational quintiles grouped into quintiles of average per capita income



TECHNICAL NOTE TABLE 2.1
Global economic disparities, 1989

	GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)	Cumulative global wealth (US\$ billions)	Cumulative global trade (US\$ billions)	Cumulative global domestic investment (US\$ billions)	Cumulative global domestic savings (US\$ billions)
Poorest 20%	262				276.3 (1.40%)	56.1 (0.95%)	54.9 (1.25%)	42.7 (0.98%)
Mozambique	80	15.7	16	0.3	1.3	0.8	0.4	-0.24
Ethiopia	120	49.2	65	1.2	7.2	2.3	1.2	0.06
Cambodia	130	8.2	73	1.4	8.2	2.5	1.4	0.13
Tanzania, U. Rep. of	130	27.3	100	1.9	11.8	3.6	2.1	-0.05
Somalia	170	7.5	108	2.0	13.1	3.8	2.4	-0.23
Bangladesh	180	115.6	224	4.2	33.9	8.6	4.9	-0.02
Bhutan	180	1.5	225	4.3	34.1	8.8	5.0	0.03
Guinea-Bissau	180	1.0	226	4.3	34.3	8.9	5.0	0.04
Lao People's Dem. Rep.	180	4.1	230	4.4	35.1	9.0	5.1	0.03
Malawi	180	8.8	239	4.5	36.6	9.7	5.4	0.09
Nepal	180	19.1	258	4.9	40.1	10.5	6.0	0.33
Chad	190	5.7	264	5.0	41.2	11.1	6.1	0.19
Afghanistan	200	16.6	280	5.3	44.5	12.3	6.7	0.41
Myanmar	200	41.7	322	6.1	52.8	12.7	8.1	1.6
Burundi	220	5.5	327	6.2	54.0	13.0	8.3	1.6
Sierra Leone	220	4.2	332	6.3	54.9	13.3	8.4	1.7
Viet Nam	220	66.7	398	7.5	69.6	16.3	10.7	2.6
Madagascar	230	12.0	410	7.8	72.4	16.9	11.1	2.9
Gambia	240	0.9	411	7.8	72.6	17.2	11.1	2.9
Nigeria	250	108.5	520	9.8	99.7	29.8	14.7	8.6
Uganda	250	18.8	538	10.2	104.4	30.7	15.3	8.7
Zaire	260	35.6	574	10.9	113.6	35.0	16.5	10.1
Mali	270	9.2	583	11.0	116.1	35.8	17.1	10.4
Niger	290	7.7	591	11.2	118.4	36.4	17.4	10.5
Burkina Faso	320	9.0	600	11.4	121.3	36.9	17.9	10.5
Rwanda	320	7.2	607	11.5	123.6	37.3	18.3	10.7
Equatorial Guinea	330	0.4	608	11.5	123.7	37.4	18.3	10.7
Guyana	340	0.8	608	11.5	124.0	37.8	18.3	10.7
Sao Tome and Principe	340	0.1	609	11.5	124.0	37.8	18.3	10.7
India I	340	447.9	1,056	20.0	276.3	56.1	54.9	42.7
Second 20%	346				365.0 (1.85%)	80.2 (1.35%)	114.9 (2.62%)	110.7 (2.53%)
India II	340	405.2	1,462	27.7	414.0	72.6	87.9	71.6
China II	350	649.3	2,111	40.0	641.3	136.2	169.8	153.4
Third 20%	427				453.1 (2.30%)	149.9 (2.53%)	128.3 (2.92%)	113.1 (2.59%)
China III	350	489.8	2,601	40.0	812.7	184.2	231.5	215.1
Haiti	360	6.5	2,607	49.3	815.1	184.8	231.8	215.3
Kenya	360	24.0	2,631	49.8	823.7	188.0	233.9	217.0
Pakistan	370	122.6	2,754	52.1	869.1	199.8	242.1	222.0
Benin	380	4.6	2,759	52.2	870.9	200.3	242.2	222.1
Central African Rep.	390	3.0	2,762	52.3	872.0	200.5	242.3	222.1
Ghana	390	15.0	2,777	52.6	877.9	202.5	243.1	222.4
Togo	390	3.5	2,780	52.6	879.3	203.2	243.3	222.6
Zambia	390	8.5	2,789	52.8	882.6	205.4	243.6	222.8
Maldives	420	0.2	2,789	52.8	882.7	205.5	243.7	222.8
Guinea	430	5.8	2,795	52.9	885.1	206.4	244.1	223.2
Sri Lanka	430	17.2	2,812	53.2	892.5	210.2	245.7	224.1
Liberia	450	2.6	2,814	53.3	893.7	210.8	245.8	224.3
Comoros	460	0.6	2,815	53.3	894.0	210.9	245.8	224.3
Lesotho	470	1.8	2,817	53.3	894.8	211.4	246.4	223.9
Djibouti	480	0.4	2,817	53.3	895.0	211.8	246.4	223.9
Sudan	480	25.2	2,842	53.8	907.1	213.7	247.2	223.6
Indonesia	500	184.3	3,027	57.3	999.2	251.8	279.5	257.7
Mauritania	500	2.0	3,029	57.3	1,000.2	252.5	279.6	257.7
Solomon Islands	580	0.3	3,029	57.3	1,000.4	252.7	279.7	257.8
Angola	610	10.0	3,039	57.5	1,006.5	256.0	280.8	259.0
Bolivia	620	7.3	3,046	57.7	1,011.1	257.4	281.4	259.4
Egypt	640	52.4	3,099	58.6	1,044.6	267.4	289.4	261.8
Senegal	650	7.3	3,106	58.8	1,049.4	269.2	290.1	262.3
Yemen	650	11.7	3,118	59.0	1,057.0	270.8	291.7	261.2
Zimbabwe	650	9.7	3,127	59.2	1,063.3	273.2	293.0	262.5
Samoa	700	0.2	3,127	59.2	1,063.4	262.5
Philippines III	710	43.7	3,171	60.0	1,094.4	286.1	298.0	266.5

	GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)	Cumulative global wealth (US\$ billions)	Cumulative global trade (US\$ billions)	Cumulative global domestic investment (US\$ billions)	Cumulative global savings (US\$ billions)
Fourth 20%	2,203				2,319.6 (11.75%)	825.8 (13.94%)	555.4 (12.65%)	584.9 (13.39%)
Philippines IV	710	18.7	3,190	60.4	1,107.7	291.7	300.2	268.3
Cape Verde	780	0.4	3,190	60.4	1,108.0	291.8	300.2	268.3
Côte d'Ivoire	790	12.0	3,202	60.6	1,117.5	197.2	301.2	269.6
Dominican Rep.	790	7.2	3,209	60.7	1,123.1	300.3	302.6	270.6
Nicaragua	830	3.9	3,213	60.8	1,126.3	301.6	303.3	270.5
Vanuatu	860	0.1	3,213	60.8	1,126.5	301.6	303.3	270.5
Lebanon	880	2.7	3,216	60.9	1,128.9	304.6	303.8	271.0
Mongolia	880	2.2	3,218	60.9	1,130.8	306.0	304.2	271.5
Morocco	880	25.1	3,243	61.4	1,152.8	314.8	309.5	275.6
Papua New Guinea	890	3.9	3,247	61.5	1,156.3	317.6	310.3	276.0
Honduras	900	5.1	3,252	61.6	1,160.9	319.7	310.9	276.5
Swaziland	900	0.8	3,253	61.6	1,161.6	320.5	311.1	276.7
Guatemala	910	9.2	3,262	61.7	1,170.0	321.2	312.2	277.3
Congo	940	2.3	3,265	61.8	1,172.1	322.7	312.5	277.8
Syrian Arab Rep.	980	12.5	3,277	62.0	1,184.4	327.8	314.1	280.7
Cameroon	1,000	11.8	3,289	62.3	1,196.2	330.0	316.2	282.9
Peru	1,010	21.6	3,311	62.7	1,218.0	335.5	320.6	287.7
Ecuador	1,020	10.6	3,321	62.9	1,228.8	339.8	323.0	289.9
Namibia	1,030	1.8	3,323	62.9	1,230.6	341.6	323.3	290.2
Paraguay	1,030	4.3	3,327	63.0	1,235.0	342.8	324.2	290.8
El Salvador	1,070	5.3	3,332	63.1	1,240.7	344.6	325.1	291.2
Albania	1,200	3.2	3,336	63.1	1,244.5	345.2	326.0	292.0
Colombia	1,200	33.0	3,369	63.8	1,284.1	356.0	333.9	301.5
Saint Vincent	1,200	0.1	3,369	63.8	1,284.3	356.1	333.9	301.5
Thailand	1,220	55.7	3,425	64.8	1,352.2	401.9	355.0	321.2
Korea, Dem. Rep. of	1,240	21.8	3,446	65.2	1,379.2	407.4	360.9	326.9
Jamaica	1,260	2.5	3,449	65.3	1,382.3	410.2	361.8	327.7
Tunisia	1,260	8.2	3,457	65.4	1,392.6	417.5	364.2	329.7
Turkey	1,370	55.9	3,513	66.5	1,469.2	444.9	381.0	345.7
Botswana	1,600	1.3	3,514	66.5	1,471.2	447.3	381.5	346.5
Jordan	1,640	4.0	3,518	66.6	1,477.8	450.4	382.7	346.4
Fiji	1,650	0.8	3,519	66.6	1,479.1	451.1	383.0	346.6
Dominica	1,680	0.1	3,519	66.6	1,479.2	451.3	383.0	346.7
Belize	1,720	0.2	3,519	66.6	1,479.5	451.6	383.1	346.7
Panama	1,760	2.4	3,522	66.7	1,483.8	452.8	383.2	347.2
Chile	1,770	13.2	3,535	66.9	1,507.1	467.5	387.9	352.8
Costa Rica	1,780	3.0	3,538	67.0	1,512.5	470.6	389.2	353.9
Poland	1,790	38.4	3,576	67.7	1,581.2	493.8	411.9	376.6
Saint Lucia	1,810	0.1	3,576	67.7	1,581.5	494.1	411.9	376.7
Grenada	1,900	0.1	3,576	67.7	1,581.7	494.2	412.0	376.7
Mauritius	1,990	1.1	3,578	67.7	1,583.9	496.5	412.6	377.2
Cuba	2,000	10.6	3,588	67.9	1,605.1	509.6	417.3	381.6
Mexico	2,010	88.6	3,677	69.6	1,783.1	554.7	447.5	413.7
Argentina	2,160	32.3	3,709	70.2	1,853.0	568.5	455.9	426.9
Malaysia	2,160	17.9	3,727	70.5	1,891.6	616.0	467.5	440.1
Algeria	2,230	25.0	3,752	71.0	1,947.3	633.0	484.8	457.3
Bulgaria	2,320	9.0	3,761	71.2	1,968.2	660.0	491.4	463.6
Venezuela	2,450	19.7	3,781	71.6	2,016.5	680.8	497.7	476.7
South Africa	2,470	35.3	3,816	72.2	2,103.7	711.2	516.0	499.3
Brazil	2,540	150.4	3,966	75.1	2,485.6	763.9	600.1	598.6
Romania	2,560	23.3	3,990	75.5	2,545.2	787.9	613.2	611.1
Hungary	2,590	10.6	4,000	75.7	2,572.5	806.3	620.3	619.3
Uruguay	2,620	3.1	4,003	75.8	2,580.6	809.1	621.0	620.5
Saint Kitts and Nevis	2,630	0.0	4,003	75.8	2,580.7	809.2	621.0	620.6
Yugoslavia	2,920	23.8	4,027	76.2	2,650.2	837.4	654.4	657.4
Gabon	2,960	1.2	4,028	76.2	2,653.7	839.5	655.3	658.6
Suriname	3,010	0.4	4,029	76.3	2,655.0	840.3	655.6	658.8
Iraq	3,020	18.9	4,048	76.6	2,712.1	862.7	668.1	670.8
Iran, Islamic Rep. of	3,200	54.6	4,102	77.6	2,886.9	885.2	720.6	719.8
Trinidad and Tobago	3,230	1.3	4,103	77.7	2,891.0	888.0	721.3	720.8
Czechoslovakia	3,450	15.7	4,119	78.0	2,945.1	916.8	736.5	737.0
Antigua and Barbuda	3,690	0.1	4,119	78.0	2,945.3	917.1	736.5	737.1
Seychelles	4,230	0.1	4,119	78.0	2,945.6	917.2	736.6	737.2
Portugal	4,250	10.3	4,130	78.2	2,989.3	949.1	749.7	746.3
Korea, Rep. of	4,400	42.8	4,172	79.0	3,177.6	1,072.7	815.6	816.0
USSR IV	4,550	51.9	4,224	80.0	3,414.0	1,111.9	853.4	851.5

TECHNICAL NOTE TABLE 2.1 (CONTINUED)
Global economic disparities, 1989

	GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)	Cumulative global wealth (US\$ billions)	Cumulative global trade (US\$ billions)	Cumulative global domestic investment (US\$ billions)	Cumulative global domestic savings (US\$ billions)
Richest 20%	15,411				16,321.9 (82.70%)	4,813.0 (81.23%)	3,537.7 (80.56%)	3,518.3 (80.51%)
USSR V	4,550	236.7	4,461	84.4	4,490.8	1,290.7	1,025.7	1,013.0
Oman	5,220	1.5	4,462	84.5	4,498.6	1,296.9	1,028.1	1,016.4
Libya	5,310	4.5	4,467	84.5	4,522.7	1,308.7	1,033.6	1,021.7
Greece	5,350	10.0	4,477	84.7	4,576.5	1,332.2	1,043.3	1,026.5
Malta	5,830	0.4	4,477	84.7	4,578.5	1,334.3	1,043.8	1,027.0
Saudi Arabia	6,020	14.1	4,492	85.0	4,663.6	1,382.0	1,061.6	1,044.8
Bahrain	6,340	0.5	4,492	85.0	4,666.9	1,386.9	1,062.4	1,045.5
Barbados	6,350	0.3	4,492	85.0	4,668.5	1,387.6	1,062.8	1,045.9
Cyprus	7,040	0.7	4,493	85.0	4,673.5	1,390.3	1,063.9	1,047.0
Ireland	8,710	3.7	4,497	85.1	4,705.9	1,428.4	1,070.7	1,056.4
Spain	9,330	39.2	4,536	85.9	5,071.5	1,544.2	1,162.1	1,136.8
Israel	9,790	4.6	4,541	85.9	5,116.5	1,568.0	1,169.3	1,142.2
Hong Kong	10,350	5.9	4,546	86.0	5,177.1	1,668.9	1,185.7	1,163.4
Singapore	10,450	2.7	4,549	86.1	5,205.5	1,763.1	1,195.6	1,175.6
Bahamas	11,320	0.2	4,549	86.1	5,208.3	1,765.5	1,196.3	1,176.3
New Zealand	12,070	3.4	4,553	86.2	5,249.2	1,782.9	1,209.4	1,187.7
Australia	14,360	16.9	4,570	86.5	5,491.5	1,855.9	1,272.4	1,243.4
United Kingdom	14,610	57.2	4,627	87.6	6,327.8	2,206.0	1,448.0	1,394.0
Italy	15,120	57.1	4,684	88.7	7,190.5	2,496.2	1,655.0	1,592.4
Brunei Darussalam	15,390	0.2	4,684	88.7	7,194.2	2,499.1	1,655.9	1,593.2
Qatar	15,500	0.4	4,684	88.7	7,199.9	2,502.3	1,657.2	1,594.5
Netherlands	15,920	15.0	4,699	88.9	7,437.9	2,714.3	1,702.4	1,649.2
Kuwait	16,150	2.0	4,701	89.0	7,470.9	2,732.1	1,708.7	1,659.4
Belgium	16,220	9.8	4,711	89.2	7,630.6	2,932.2	1,740.6	1,694.6
Austria	17,300	7.6	4,719	89.3	7,761.8	3,003.5	1,776.0	1,731.3
France	17,820	56.1	4,775	90.4	8,762.1	3,366.2	1,986.1	1,951.4
United Arab Emirates	18,430	1.6	4,777	90.4	8,791.4	3,390.8	1,993.4	1,963.1
Canada	19,030	26.5	4,803	90.9	9,296.1	3,618.1	2,109.5	2,079.2
Germany	20,440	77.6	4,881	92.4	10,881.7	4,227.3	2,458.3	2,507.3
Denmark	20,450	5.1	4,886	92.5	10,986.9	4,281.9	2,478.3	2,531.5
USA	20,910	249.2	5,135	97.2	16,198.1	5,120.4	3,260.0	3,208.9
Iceland	21,070	0.3	5,135	97.2	16,203.5	5,123.4	3,261.2	3,210.1
Sweden	21,570	8.4	5,144	97.4	16,385.6	5,223.8	3,301.3	3,250.2
Finland	22,120	5.0	5,149	97.5	16,495.7	5,271.7	3,334.3	3,281.0
Norway	22,290	4.2	5,153	97.5	16,589.5	5,322.3	3,359.7	3,311.0
Japan	23,810	123.5	5,276	99.9	19,529.1	5,804.7	4,329.7	4,310.5
Luxembourg	24,980	0.4	5,277	99.9	19,538.5	5,815.3	4,331.9	4,312.5
Switzerland	29,880	6.6	5,283	100.0	19,735.9	5,924.9	4,391.1	4,369.8

TECHNICAL NOTE TABLE 2.2

GNP per capita distribution, 1988: 41 countries with income distribution data

	GNP per capita (US\$)	Population global (millions)	Cumulative percentile (%)	Cumulative population (%)
Poorest 20%	301			
Bangladesh	170	115.6	116	4.6
India I	340	388.2	504	20.0
Second 20%	341			
India II	340	464.9	969	38.6
Pakistan II	350	36.8	1,005	40.0
Third 20%	684			
Pakistan III	350	85.8	1,091	43.4
Ghana	400	15.0	1,106	44.0
Sri Lanka	420	17.2	1,124	44.7
Indonesia	440	184.3	1,308	52.1
Philippines	630	62.4	1,370	54.5
Côte d'Ivoire	770	12.0	1,382	55.0
Morocco	830	25.1	1,407	56.0
Guatemala	900	9.2	1,417	56.4
Botswana	1,010	1.3	1,418	56.4
Jamaica	1,070	2.5	1,420	56.5
Colombia	1,180	33.0	1,453	57.8
Peru	1,300	21.6	1,475	58.7
Costa Rica	1,690	3.0	1,478	58.8
Poland	1,860	38.4	1,516	60.3
Fourth 20%	8,018			
Malaysia	1,940	17.9	1,534	61.1
Brazil	2,160	150.4	1,684	67.0
Hungary	2,460	10.6	1,695	67.5
Yugoslavia	2,520	23.8	1,719	68.4
Venezuela	3,250	19.7	1,739	69.2
Spain	7,740	39.2	1,778	70.8
Israel	8,650	4.6	1,782	70.9
Singapore	9,070	2.7	1,785	71.0
Hong Kong	9,220	5.9	1,791	71.3
New Zealand	10,000	3.4	1,794	71.4
Australia	12,340	16.9	1,811	72.1
United Kingdom	12,810	57.2	1,868	74.4
Italy	13,330	57.1	1,926	76.6
Belgium	14,490	9.8	1,935	77.0
Netherlands	14,520	15.0	1,950	77.6
France	16,090	56.1	2,006	79.9
Richest 20%	19,542	2,513		
Germany	16,570	77.6	2,084	82.9
Canada	16,960	26.5	2,111	84.0
Denmark	18,450	5.1	2,116	84.2
Finland	18,590	5.0	2,121	84.4
Sweden	19,300	8.4	2,129	84.7
United States	19,840	249.2	2,378	94.7
Norway	19,990	4.2	2,383	94.8
Japan	21,020	123.5	2,506	99.7
Switzerland	27,500	6.6	2,513	100.0

TECHNICAL NOTE TABLE 2.3

GNP per capita distribution, 1988: 41 countries by 20% income shares

	GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)		GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)
Poorest 20%	163				Côte d'Ivoire 4	820	2.4	1,449	57.7
Bangladesh 1	88	23.1	23	0.9	Guatemala 4	842	1.8	1,451	57.7
Sri Lanka 1	101	3.4	27	1.1	Morocco 4	888	5.0	1,456	57.9
Bangladesh 2	117	23.1	50	2.0	Peru 3	891	4.3	1,460	58.1
Botswana 1	126	0.3	50	2.0	Ghana 5	892	3.0	1,463	58.2
Ghana 1	130	3.0	53	2.1	Malaysia 2	898	3.6	1,467	58.4
Pakistan 1	136	24.5	77	3.1	Poland 1	902	7.7	1,474	58.7
India 1	138	170.6	248	9.9	Indonesia 5	909	36.9	1,511	60.1
Bangladesh 3	147	23.1	271	10.8	Fourth 20%	4,984			
Phillipines 1	173	12.5	284	11.3	Botswana 4	1,020	0.3	1,511	60.2
Sri Lanka 2	179	3.4	287	11.4	Costa Rica 3	1,115	0.6	1,512	60.2
Bangladesh 4	182	23.1	310	12.3	Jamaica 4	1,133	0.5	1,513	60.2
Côte d'Ivoire 1	191	2.4	313	12.4	Brazil 3	1,156	30.1	1,543	61.4
Indonesia 1	194	36.9	350	13.9	Sri Lanka 5	1,179	3.4	1,546	61.5
Pakistan 1	196	24.5	374	14.9	Colombia 4	1,227	6.6	1,553	61.8
India I-2	209	128.0	502	20.0	Poland 2	1,321	7.7	1,560	62.1
Second 20%	295				Hungary 1	1,338	2.1	1,562	62.2
India II-2	209	42.7	545	21.7	Malaysia 3	1,344	3.6	1,566	62.3
Ghana 2	218	3.0	548	21.8	Yugoslavia 2	1,377	4.8	1,571	62.5
Colombia 1	236	6.6	554	22.1	Peru 4	1,398	4.3	1,575	62.7
Guatemala 1	248	1.8	556	22.1	Venezuela 2	1,495	3.9	1,579	62.8
Sri Lanka 3	255	3.4	560	22.3	Philippines 5	1,512	12.5	1,592	63.3
Brazil 1	259	30.1	590	23.5	Morocco 5	1,635	5.0	1,597	63.5
Pakistan 3	269	24.5	614	24.4	Poland 3	1,674	7.7	1,604	63.8
Indonesia 2	273	36.9	651	25.9	Costa Rica 4	1,749	0.6	1,605	63.9
India 3	277	170.6	822	32.7	Hungary 2	1,879	2.1	1,607	64.0
Costa Rica 1	279	0.6	822	32.7	Brazil 4	2,009	30.1	1,637	65.2
Peru 1	286	4.3	827	32.9	Côte d'Ivoire 5	2,029	2.4	1,639	65.2
Jamaica 1	288	0.5	827	32.9	Malaysia 4	2,053	3.6	1,643	65.4
Philippines 2	306	12.5	840	33.4	Yugoslavia 3	2,078	4.8	1,648	65.6
Côte d'Ivoire 2	306	2.4	842	33.5	Poland 4	2,130	7.7	1,655	65.9
Ghana 3	314	3.0	845	33.6	Venezuela 3	2,275	3.9	1,659	66.0
Bangladesh 5	317	23.1	868	34.5	Hungary 3	2,298	2.1	1,662	66.1
Botswana 2	328	0.3	868	34.6	Singapore 1	2,322	0.5	1,662	66.1
Indonesia 3	352	36.9	905	36.0	Guatemala 5	2,475	1.8	1,664	66.2
Pakistan 4	360	24.5	930	37.0	Hong Kong 1	2,489	1.2	1,665	66.3
India II-4	374	75.1	1,005	40.0	New Zealand 1	2,550	0.7	1,666	66.3
Third 20%	628				Israel 1	2,595	0.9	1,667	66.3
India III-4	374	95.5	1,100	43.8	Jamaica 5	2,631	0.5	1,667	66.4
Sri Lanka 4	387	3.4	1,104	43.9	Spain 1	2,671	7.8	1,675	66.7
Guatemala 2	387	1.8	1,106	44.0	Australia 1	2,715	3.4	1,678	66.8
Morocco 1	407	5.0	1,111	44.2	Hungary 4	2,802	2.1	1,680	66.9
Malaysia 1	442	3.6	1,114	44.3	Botswana 5	2,980	0.3	1,681	66.9
Ghana 4	446	3.0	1,117	44.5	Yugoslavia 4	2,985	4.8	1,686	67.1
Philippines 3	466	12.5	1,130	45.0	Colombia 5	3,127	6.6	1,692	67.3
Indonesia 4	473	36.9	1,167	46.4	Poland 5	3,274	7.7	1,700	67.7
Côte d'Ivoire 3	504	2.4	1,169	46.5	Peru 5	3,374	4.3	1,704	67.8
Colombia 2	513	6.6	1,176	46.8	Venezuela 4	3,494	3.9	1,708	68.0
Jamaica 2	529	0.5	1,176	46.8	United Kingdom 1	3,715	11.4	1,719	68.4
Morocco 2	540	5.0	1,181	47.0	Hungary 5	3,983	2.1	1,722	68.5
Guatemala 3	549	1.8	1,183	47.1	Singapore 2	4,499	0.5	1,722	68.5
Peru 2	553	4.3	1,187	47.2	Italy 1	4,532	11.4	1,734	69.0
Botswana 3	596	0.3	1,187	47.3	Costa Rica 5	4,605	0.6	1,734	69.0
Brazil 1	616	30.1	1,217	48.5	USA 1	4,662	49.8	1,784	71.0
Morocco 3	681	5.0	1,223	48.7	Canada 1	4,834	5.3	1,789	71.2
Philippines 4	693	12.5	1,235	49.2	Spain 2	4,838	7.8	1,797	71.5
Costa Rica 2	701	0.6	1,236	49.2	Malaysia 5	4,963	3.6	1,801	71.7
India 5	704	170.6	1,406	56.0	Hong Kong 2	4,979	1.2	1,802	71.7
Venezuela 1	764	3.9	1,410	56.1	Denmark 1	4,982	1.0	1,803	71.8
Yugoslavia 1	768	4.8	1,415	56.3	Netherlands 1	5,009	3.0	1,806	71.9
Jamaica 3	769	0.5	1,415	56.3	France 1	5,084	11.2	1,817	72.3
Colombia 2	797	6.6	1,422	56.6	Israel 2	5,233	0.9	1,818	72.4
Pakistan 5	798	24.5	1,447	57.6	Yugoslavia 5	5,392	4.8	1,823	72.5
					New Zealand 2	5,400	0.7	1,823	72.6

	GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)		GNP per capita (US\$)	Population (millions)	Cumulative global population (millions)	Cumulative percentile (%)
Germany 1	5,617	15.5	1,839	73.2	Australia 4	15,302	3.4	2,136	85.0
Belgium 1	5,724	2.0	1,841	73.3	Spain 5	15,517	7.8	2,144	85.3
Finland 1	5,874	1.0	1,842	73.3	Italy 4	15,663	11.4	2,155	85.8
Norway 1	6,217	0.8	1,843	73.3	United Kingdom 4	16,013	11.4	2,166	86.2
Singapore 3	6,630	0.5	1,843	73.4	Switzerland 2	16,087	1.3	2,168	86.3
Spain 3	6,695	7.8	1,851	73.7	Sweden 3	16,791	1.7	2,169	86.3
Brazil 5	6,761	30.1	1,881	74.9	Denmark 3	16,974	1.0	2,171	86.4
Australia 2	6,849	3.4	1,885	75.0	Finland 3	17,121	1.0	2,172	86.4
Hong Kong 3	7,007	1.2	1,886	75.1	Israel 5	17,127	0.9	2,172	86.5
Switzerland 1	7,150	1.3	1,887	75.1	Netherlands 4	17,206	3.0	2,175	86.6
United Kingdom 2	7,366	11.4	1,899	75.6	Belgium 4	17,243	2.0	2,177	86.7
Israel 3	7,699	0.9	1,900	75.6	USA 3	17,261	49.8	2,227	88.6
Sweden 1	7,720	1.7	1,901	75.7	Japan 3	18,393	24.7	2,252	89.6
Italy 2	7,998	11.4	1,913	76.1	Norway 3	18,911	0.8	2,253	89.7
New Zealand 3	8,100	0.7	1,913	76.1	France 4	18,922	11.2	2,264	90.1
Venezuela 5	8,223	3.9	1,917	76.3	Germany 4	19,950	15.5	2,280	90.7
Spain 4	8,979	7.8	1,925	76.6	Canada 4	20,861	5.3	2,285	90.9
Japan 1	9,144	24.7	1,950	77.6	Hong Kong 5	21,667	1.2	2,286	91.0
Netherlands 2	9,583	3.0	1,953	77.7	Singapore 5	22,185	0.5	2,287	91.0
Singapore 2	9,714	0.5	1,953	77.7	New Zealand 5	22,350	0.7	2,287	91.0
France 2	9,751	11.2	1,965	78.2	Switzerland 3	22,550	1.3	2,289	91.1
Belgium 2	9,926	2.0	1,966	78.3	Denmark 4	23,616	1.0	2,290	91.1
Hong Kong 4	9,958	1.2	1,968	78.3	Sweden 4	23,643	1.7	2,291	91.2
Canada 2	10,006	5.3	1,973	78.5	Finland 4	23,721	1.0	2,292	91.2
Germany 2	10,505	15.5	1,988	79.1	Japan 4	24,278	24.7	2,317	92.2
Israel 4	10,596	0.9	1,989	79.2	USA 4	24,800	49.8	2,367	94.2
Australia 3	10,798	3.4	1,993	79.3	United Kingdom 5	25,300	11.4	2,378	94.7
USA IV-2	10,912	17.4	2,010	80.0	Norway 4	25,307	0.8	2,379	94.7
Richest 20%	22,808	2,513			Australia 5	26,037	3.4	2,382	94.8
USA V-2	10,912	32.4	2,043	81.3	Belgium 5	26,082	2.0	2,384	94.9
Denmark 2	11,070	1.0	2,044	81.3	Italy 5	27,327	11.4	2,396	95.4
Italy 3	11,131	11.4	2,055	81.8	Netherlands 5	27,806	3.0	2,399	95.5
Finland 2	11,266	1.0	2,056	81.8	Switzerland 4	30,388	1.3	2,400	95.5
New Zealand 4	11,600	0.7	2,057	81.9	Germany 5	32,046	15.5	2,416	96.1
United Kingdom 3	11,657	11.4	2,068	82.3	France 5	32,840	11.2	2,427	96.6
Sweden 2	12,738	1.7	2,070	82.4	Canada 5	34,090	5.3	2,432	96.8
Norway 2	12,814	0.8	2,071	82.4	Finland 5	34,968	1.0	2,433	96.8
Netherlands 3	12,995	3.0	2,074	82.5	Denmark 5	35,609	1.0	2,434	96.9
Belgium 3	13,476	2.0	2,076	82.6	Sweden 5	35,609	1.7	2,436	96.9
France 3	13,853	11.2	2,087	83.1	Norway 5	36,702	0.8	2,437	97.0
Japan 2	13,873	24.7	2,112	84.0	Japan 5	39,413	24.7	2,461	98.0
Germany 3	14,731	15.5	2,127	84.7	USA 5	41,565	49.8	2,511	99.9
Canada 3	15,010	5.3	2,132	84.9	Switzerland 5	61,325	1.3	2,513	100.0

3. Sources of data on political freedom

The attempt at measuring political freedom presented in chapter 2 of this Report draws on a wide range of empirical data sources. The most important ones are listed in the annex to this note.

There is no doubt that future work in the area of human development and political freedom will have to be based on a much broader selection of data sources in order to ensure a full, comprehensive picture of the current trends and the differences in perspective that may exist in various regions, cultures and societies.

In particular, it would be necessary in future years to identify more regional data sources and to take also into account relevant government reports. The latter may become an increasingly important source of information given the fact that, as stated in chapter 2, a growing number of countries have been setting up national bodies to deal with human rights issues.

It would also be important in the future to include the data sources that not only document human rights violations but also analyse positive achievements of governments in the area of human rights and political freedom conditions.

There is no doubt that the study of the methodologies of measuring political freedom is only in its initial phase. Further research is needed, as well as more extensive and objective sources of data.

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References for the boxes are as follows: box 1.1, UNDP 1990 and 1991b.

Chapter 2 draws on the following: Adelman and Morris 1967 and 1973; An-Naim and Deng 1990; Anyang' Nyong'o 1987; Ardito-Barletta 1990; Barsh 1991; Berg-Schlosser and Siegler 1990; Bollen 1980 and 1990; Cingranelli and Hofferbert 1988; Claude and Jabine 1990; Conaghan and Espinal 1990; Council for Europe 1950, 1952 and 1963; Dahrendorf 1990; Dasgupta 1990; de Baecque 1991; de Schweinitz 1964; Diamond, Linz and Lipset 1989; Garcia 1990; Gerschenkron 1968; Henderson 1991; Holt and Turner 1966; *Human Rights Quarterly* 1986; International Institute of Higher Studies in Criminal Science 1986; Lindenberg 1990; Lindenberg and Devarajan 1991; Marsh 1979; Mitchell and McCormick 1988; Morris and Adelman 1988; Nafziger 1983; Nuscheler 1991; O'Donnell, Schmitter and Whitehead 1986; OAS 1987; Pourgerami 1988; Pye and Pye 1985; Rostow 1971; Ruttan 1991; Schmitter and Karl 1991; Scully 1988; Sen 1991; Shepherd and Nanda 1985; United Nations 1988b; United Nations Centre for Human Rights 1990; and Vanhanen 1990.

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References for the tables are as follows: table 2.1; see technical note 3.

Chapter 3 draws on the following: Avramovic 1989, 1991a and 1991b; Bhagwati 1991; Borensztein 1991; Browne 1990 and 1991; Buhmann and others 1988; Carlson and Wardlaw 1990; Cline 1987; Denham 1990; Eberstadt 1990; Faber 1990; Genberg 1991; Griffin 1991; Griffin and Khan 1991; Griffith-Jones 1990a and 1990b; Islam 1990; Lipton and Toye 1990; Maizels 1987 and forthcoming; Mistry 1991; Morss and Morss 1986; Mosley 1987; Mosley, Harrigan and Toye 1991; Poe 1990; Portes 1990; Raffer 1990; Ranis 1985 and 1989; Riddel 1987; Sachs and Kneer 1990; South Commission 1990; Stokke 1989; UNDP 1990 and 1991b; United Nations 1988a, 1990b, 1990c and 1990f; United Nations Economic Commission for Latin America and the Caribbean 1990a and 1990b; Woods 1989; World Bank 1989a, 1989d, 1990b, 1991a, and World Bank *Annual Report* 1991; and World Institute for Development Economics Research 1989a.

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References for the tables are as follows: table 4.1, World Bank *Annual Report* various years; table 4.2, Avramovic 1988; table 4.3, World Bank 1990b; table 4.4, Avramovic 1991b, based on IMF *Annual Report* various years; table 4.5, World Bank *Annual Report* various years; table 4.6, United Nations Centre on Transnational Corporations 1991b; table 4.7, Organisation of Economic Co-operation and Development 1990b; table 4.9, UNCTAD 1987; table 4.10, World Bank 1991b; table 4.11, UNCTAD 1990a.

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Selected definitions

Aid human expenditure ratio The percentage of a donor's GNP going to human priority areas in recipient countries or the amount of official development assistance received for human priority areas expressed as a percentage of the recipient country's GNP.

Aid social allocation ratio The percentage of official development assistance that goes to the social sector.

Aid social priority ratio The percentage of social sector official development assistance that goes to human priority areas.

Apparent intake rate, first level Number of new entrants into first grade, regardless of age, expressed as a percentage of the population of official admission age to the first level of education.

Birth rate (crude) The annual number of births per 1,000 population.

Births attended The percentage of births attended by physicians, nurses, midwives, trained primary health care workers or trained traditional birth attendants.

Budget surplus/deficit Current and capital revenue and grants received, less total expenditure and lending, minus repayments.

Calorie supply See *Daily calorie supply*.

Child malnutrition See *Underweight, Wasting and Stunting*.

Child mortality See *Under-five mortality*.

Contraceptive prevalence rate The percentage of married women of childbearing age who are using, or whose husbands are using, any form of contraception: that is, modern or traditional methods.

Current account balance The difference between (a) exports of goods and services (factor and non-factor) as well as inflows of unrequited private transfers but before official transfers and (b) imports of goods and services as well as all unrequited transfers to the rest of the world.

Daily calorie requirement per capita The average number of calories needed to sustain a person at normal levels of activity and health, taking into account the distribution

by age, sex, body weight and environmental temperature.

Daily calorie supply per capita The calorie equivalent of the net food supplies in a country, divided by the population, per day.

Death rate (crude) The annual number of deaths per 1,000 population.

Debt service The sum of repayments of principal (amortization) and payments of interest made in foreign currencies, goods or services on external public, publicly guaranteed and private non-guaranteed debt.

Dependency ratio The ratio of the population defined as dependent, under 15 and over 64 years, to the working-age population, aged 15 to 64.

Direct tax Taxes levied on the actual or presumptive net income of individuals, on the profits of enterprises and on capital gains, whether realized on land sales, securities or other assets.

Disability days Average number of days in a year in which usual activities had to be restricted by illness or injury.

Domestic investment (gross) Outlays in addition to the fixed assets of the economy plus net changes in the level of inventories.

Domestic savings (gross) The gross domestic product less government and private consumption.

Earnings per employee Earnings in constant prices derived by deflating nominal earnings per employee by the country's consumer price index.

Education expenditures Expenditures on the provision, management, inspection and support of pre-primary, primary and secondary schools; universities and colleges; vocational, technical and other training institutions; and general administration and subsidiary services.

Employees Regular employees, working proprietors, active business partners and unpaid family workers, but excluding homeworkers.

Enrolment ratio (gross and net) The gross enrolment ratio is the number enrolled in a level of education, whether or not

they belong in the relevant age group for that level, expressed as a percentage of the population in the relevant age group for that level. The net enrolment ratio is the number enrolled in a level of education who belong in the relevant age group, expressed as a percentage of the population in that age group.

Expenditures See *Government expenditures*.

Exports of goods and services The value of all goods and non-factor services provided to the rest of the world, including merchandise, freight, insurance, travel and other non-factor services.

Female-male gap A set of national, regional and other estimates in which all the figures for females are expressed in relation to the corresponding figures for males, which are indexed to equal 100.

Fertility rate (total) The average number of children that would be born alive to a woman during her lifetime, if she were to bear children at each age in accord with prevailing age-specific fertility rates.

Food aid in cereals Cereals provided by donor countries and international organizations, including the World Food Programme and the International Wheat Council, as reported for that particular crop year. Cereals include wheat, flour, bulgur, rice, coarse grain and the cereal components of blended foods.

Food import dependency ratio The ratio of food imports to the food available for internal distribution: that is, the sum of food production, plus food imports, minus food exports.

Food production per capita index The average annual quantity of food produced per capita in relation to that produced in the indexed year. Food is defined as comprising nuts, pulses, fruit, cereals, vegetables, sugar-cane, sugar beets, starchy roots, edible oils, livestock and livestock products.

Future labour force replacement ratio Population under 15 divided by one-third of the population aged 15 to 59.

Gini coefficient A measure that shows how close a given distribution of income is to absolute equality or inequality. Named for Corrado Gini, the Gini coefficient is a ratio of the area between the 45° line and the

Lorenz curve and the area of the entire triangle. As the coefficient approaches zero, the distribution of income approaches absolute equality. Conversely, as the coefficient approaches one, the distribution of income approaches absolute inequality.

Government expenditures Expenditures by all central government offices, departments, establishments and other bodies that are agencies or instruments of the central authority of a country. It includes both current and capital or developmental expenditures but excludes provincial, local and private expenditures.

Greenhouse index Net emissions of three major greenhouse gases (carbon dioxide, methane and chlorofluorocarbons), weighting each gas according to its heat-trapping quality, in carbon dioxide equivalents and expressed in metric tons of carbon per capita.

Gross domestic product (GDP) The total for final use of output of goods and services produced by an economy, by both residents and non-residents, regardless of the allocation to domestic and foreign claims.

Gross enrolment ratio See *Enrolment ratio*.

Gross national product (GNP) The total domestic and foreign value added claimed by residents, calculated without making deductions for depreciation. It comprises GDP plus net factor income from abroad, which is the income residents receive from abroad for factor services (labour and capital), less similar payments made to non-residents who contribute to the domestic economy.

GNP per capita and growth rates The gross national product divided by the population. Annual GNPs per capita are expressed in current US dollars. GNP per capita growth rates are annual average growth rates that have been computed by fitting trend lines to the logarithmic values of GNP per capita at constant market prices for each year of the time period.

Habitable room See *Persons per habitable room*.

Health expenditures Expenditures on hospitals, health centres and clinics, health insurance schemes and family planning.

Health services access The percentage

of the population that can reach appropriate local health services on foot or by the local means of transport in no more than one hour.

Immunized The average of the vaccination coverages of children under one year of age for the four antigens used in the Universal Child Immunization Programme (UCI).

Income share The income in both cash and kind accruing to percentile groups of households ranked by total household income.

Infant mortality rate The annual number of deaths of infants under one year of age per 1,000 live births. More specifically, the probability of dying between birth and exactly one year of age.

Inflation rate The average annual rate of inflation measured by the growth of the GDP implicit deflator for each of the periods shown.

Internal renewable water resources See *Water sources*.

International reserves (gross) Holdings of monetary gold, special drawing rights (SDRs), the reserve positions of members in the IMF, and holdings of foreign exchange under the control of monetary authorities expressed in terms of the number of months of imports of goods and services these could pay for at the current level of imports.

Labour force The economically active population, including the armed forces and the unemployed, but excluding homemakers and other unpaid caregivers.

Least developed countries A group of developing countries established by the United Nations General Assembly. Most of these countries suffer from one or more of the following constraints: a GNP per capita of around \$300 or less, land-locked, remote insularity, desertification and exposure to natural disasters.

Life expectancy at birth The number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

Literacy rate (adult) The percentage of persons age 15 and over who can, with understanding, both read and write a short simple statement on their everyday life.

Low birth-weight The percentage of babies born weighing less than 2,500 grammes.

Malnutrition See *Underweight, Wasting and Stunting*.

Maternal mortality rate The annual number of deaths of women from pregnancy-related causes per 100,000 live births.

Mean years of schooling Average number of years of schooling received per person age 25 and over.

Military expenditures Expenditures, whether by defence or other departments, on the maintenance of military forces, including the purchase of military supplies and equipment, construction, recruiting, training and military aid programmes.

Net enrolment ratio See *Enrolment ratio*.

North See *South-North gap*.

Official development assistance (ODA) The net disbursements of loans and grants made on concessional financial terms by official agencies of the members of the Development Assistance Committee (DAC), the Organisation for Economic Co-operation and Development (OECD), the Organization of Petroleum Exporting Countries (OPEC) and so on, to promote economic development and welfare, including technical cooperation and assistance.

ODA for social investment Official development assistance for the combined areas of health, education, social services, rural and urban development and water and sanitation.

ORT Oral rehydration therapy.

Persons per habitable room The number of persons in housing units divided by the number of habitable rooms in those housing units. A habitable room is a space in a housing unit, or other living quarters enclosed by walls reaching from the floor to the ceiling or roof covering, at least to a height of two metres, of a size large enough to hold a bed for an adult.

Population density The total number of inhabitants divided by the surface area.

Population growth rate The annual growth rate of the population calculated from mid-year.

Poverty line That income level below which a minimum nutritionally adequate

diet plus essential non-food requirements are not affordable.

Primary education Education at the first level (International Standard Classification of Education [ISCED] level 1), the main function of which is to provide the basic elements of education, such as elementary schools and primary schools.

Primary school completion rate The proportion of the children entering the first grade of primary school who successfully complete that level in due course.

Purchasing power parities (PPP) See *Real GDP per capita*.

Real GDP per capita (purchasing power parities [PPP]) The use of official exchange rates to convert the national currency figures to US dollars does not attempt to measure the relative domestic purchasing powers of currencies. The United Nations International Comparison Project (ICP) has developed measures of real GDP on an internationally comparable scale using purchasing power parities (PPP) instead of exchange rates as conversion factors, and expressed in international dollars.

Real per capita expenditures The expenditures for each item in each country expressed in relation to those in the United States, based on the national currency total for each item converted to international dollars by the purchasing power for that item. This comparison of quantities for each item is based on the common set of international prices applied across all the countries that is used in the International Price Comparison Project. (See *Real GDP per capita*.) These expenditures are then expressed in relation to the corresponding average expenditures of the industrial countries, which are indexed to equal 100.

Rural population The percentage of the population living in rural areas as defined according to the national definition used in the most recent population census.

Rural-urban disparity A set of national, regional and other estimates in which all the rural figures are expressed in relation to the corresponding urban figures, which are indexed to equal 100.

Safe water access The percentage of the population with reasonable access to safe water supply, including treated surface

waters, or untreated but uncontaminated water such as that from springs, sanitary wells and protected boreholes.

Sanitation access The percentage of the population with access to sanitary means of excreta and waste disposal, including outdoor latrines and composting.

Science graduates Tertiary education graduates in the natural and applied sciences.

Scientists Persons with scientific or technological training—usually completion of third-level education in any field of science—who are engaged in professional work on research and development activities, including administrators and directors of such activities.

Secondary education Education at the second level (ISCED levels 2 and 3), based on at least four years' previous instruction at the first level, and providing general or specialized instruction or both, such as middle schools, secondary schools, high schools, teacher-training schools at this level and schools of a vocational or technical nature.

Secondary technical education Education provided in those second-level schools that aim at preparing the pupils directly for a trade or occupation other than teaching.

Social security benefits Compensation for loss of income for the sick and temporarily disabled; payments to the elderly, the permanently disabled and the unemployed; family, maternity and child allowances and the cost of welfare services.

South-North gap A set of national, regional and other estimates in which all the figures are expressed in relation to the corresponding average figures for all the industrial countries, which are indexed to equal 100.

Stunting The percentage of children, between 24 and 59 months, below minus two standard deviations from the median height-for-age of the reference population.

Technicians Persons engaged in scientific research and development activities who have received vocational or technical training for at least three years after the first stage of second-level education.

Terms of trade The ratio of a country's index of average export prices to its average import price index.

Tertiary education Education at the third level (ISCED levels 5, 6 and 7), such as universities, teachers' colleges and higher professional schools—requiring as a minimum condition of admission the successful completion of education at the second level or evidence of the attainment of an equivalent level of knowledge.

Trade dependency Exports plus imports as a percentage of GDP.

Transition from first to second level education Number of new entrants into secondary general education, expressed as a percentage of the total number of pupils in the last grade of primary education in the previous year.

Under-five mortality rate The annual number of deaths of children under five years of age per 1,000 live births. More specifically, the probability of dying between birth and exactly five years of age.

Underweight (moderate and severe child malnutrition) The percentage of children,

under the age of five, below minus two standard deviations from the median weight-for-age of the reference population.

Unemployment The unemployed comprise all persons, above a specified age, who are not in paid employment or self-employed, are available for paid employment or self-employment and have taken specific steps to seek paid employment or self-employment.

Urban population The percentage of the population living in urban areas as defined according to the national definition used in the most recent population census.

Wasting The percentage of children, between 12 and 23 months, below minus two standard deviations from the median weight-for-height of the reference population.

Water access See *Safe water*.

Water sources, internal renewable The average annual flow of rivers and aquifers generated from endogenous precipitation.

Classification of countries

Countries in the human development aggregates

<i>High human development (HDI 0.800 and above)</i>	<i>Medium human development (HDI 0.500 to 0.799)</i>	<i>Low human development (HDI below 0.500)</i>
Argentina	Albania	Afghanistan
Australia	Algeria	Angola
Austria	Antigua and Barbuda	Bangladesh
Bahamas	Bahrain	Benin
Barbados	Belize	Bhutan
Belgium	Botswana	Bolivia
Brunei Darussalam	Brazil	Burkina Faso
Bulgaria	China	Burundi
Canada	Colombia	Cambodia
Chile	Cuba	Cameroon
Costa Rica	Dominica	Cape Verde
Cyprus	Dominican Rep.	Central African Rep.
Czechoslovakia	Ecuador	Chad
Denmark	Fiji	Comoros
Finland	Gabon	Congo
France	Grenada	Côte d'Ivoire
Germany	Guyana	Djibouti
Greece	Iran, Islamic Rep. of	Egypt
Hong Kong	Iraq	El Salvador
Hungary	Jamaica	Equatorial Guinea
Iceland	Jordan	Ethiopia
Ireland	Korea, Dem. Rep. of	Gambia
Israel	Lebanon	Ghana
Italy	Libyan Arab Jamahiriya	Guatemala
Japan	Malaysia	Guinea
Korea, Rep. of	Mauritius	Guinea-Bissau
Kuwait	Mongolia	Haiti
Luxembourg	Oman	Honduras
Malta	Panama	India
Mexico	Paraguay	Indonesia
Netherlands	Peru	Kenya
New Zealand	Philippines	Lao People's Dem. Rep.
Norway	Romania	Lesotho
Poland	Saint Kitts and Nevis	Liberia
Portugal	Saint Lucia	Madagascar
Qatar	Saint Vincent	Malawi
Singapore	Samoa	Maldives
Spain	Saudi Arabia	Mali
Sweden	Seychelles	Mauritania
Switzerland	South Africa	Morocco
Trinidad and Tobago	Sri Lanka	Mozambique
United Kingdom	Suriname	Myanmar
Uruguay	Syrian Arab Rep.	Namibia
USA	Thailand	Nepal
USSR	Tunisia	Nicaragua
Venezuela	Turkey	Niger
Yugoslavia	United Arab Emirates	Nigeria
	Vanuatu	Pakistan
		Papua New Guinea
		Rwanda

Countries in the income aggregates

Countries in the major world aggregates

<i>Least developed countries</i>	<i>All developing countries</i>		<i>Industrial countries</i>
Afghanistan	Afghanistan	Guatemala	Albania
Bangladesh	Algeria	Guinea	Australia
Benin	Angola	Guinea-Bissau	Austria
Bhutan	Antigua and Barbuda	Guyana	Belgium
Botswana	Argentina	Haiti	Bulgaria
Burkina Faso	Bahamas	Honduras	Canada
Burundi	Bahrain	Hong Kong	Czechoslovakia
Cambodia	Bangladesh	India	Denmark
Cape Verde	Barbados	Indonesia	Finland
Central African Rep.	Belize	Iran, Islamic Rep. of	France
Chad	Benin	Iraq	Germany
Comoros	Bhutan	Jamaica	Greece
Djibouti	Bolivia	Jordan	Hungary
Equatorial Guinea	Botswana	Kenya	Iceland
Ethiopia	Brazil	Korea, Dem. Rep. of	Ireland
Gambia	Brunei Darussalam	Korea, Rep. of	Israel
Guinea	Burkina Faso	Kuwait	Italy
Guinea-Bissau	Burundi	Lao People's	Japan
Haiti	Cambodia	Dem. Rep.	Luxembourg
Lao People's Dem. Rep.	Cameroon	Lebanon	Malta
Lesotho	Cape Verde	Lesotho	Netherlands
Liberia	Central African Rep.	Liberia	New Zealand
Malawi	Chad	Libyan Arab	Norway
Maldives	Chile	Jamahiriya	Poland
Mali	China	Madagascar	Portugal
Mauritania	Colombia	Malawi	Romania
Mozambique	Comoros	Malaysia	Spain
Myanmar	Congo	Maldives	Sweden
Nepal	Costa Rica	Mali	Switzerland
Niger	Côte d'Ivoire	Mauritania	United Kingdom
Rwanda	Cuba	Mauritius	USA
Samoa	Cyprus	Mexico	USSR
Sao Tome and Principe	Djibouti	Mongolia	Yugoslavia
Sierra Leone	Dominica	Morocco	Uganda
Solomon Islands	Dominican Rep.	Mozambique	United Arab Emirates
Somalia	Ecuador	Myanmar	Uruguay
Sudan	Egypt	Namibia	Vanuatu
Tanzania	El Salvador	Nepal	Venezuela
Togo	Equatorial Guinea	Nicaragua	Viet Nam
Uganda	Ethiopia	Niger	Yemen
Vanuatu	Fiji	Nigeria	Zaire
Yemen	Gabon	Oman	Zambia
Zaire	Gambia	Pakistan	Zimbabwe
Zambia	Ghana	Panama	
	Grenada	Papua New Guinea	

Countries in the developing aggregates

<i>Africa South of the Sahara</i>	<i>Arab States</i>	<i>East Asia</i>
Angola	Algeria	China
Benin	Bahrain	Hong Kong
Botswana	Egypt	Korea, Dem. Rep. of
Burkina Faso	Iraq	Korea, Rep. of
Burundi	Jordan	Mongolia
Cameroon	Kuwait	
Cape Verde	Lebanon	
Central African Rep.	Libyan Arab Jamahiriya	<i>South-East Asia and Oceania</i>
Chad	Morocco	
Comoros	Oman	Brunei Darussalam
Congo	Qatar	Cambodia
Côte d'Ivoire	Saudi Arabia	Fiji
Djibouti	Sudan	Indonesia
Equatorial Guinea	Syrian Arab Rep.	Lao People's Dem. Rep.
Ethiopia	Tunisia	Malaysia
Gabon	United Arab Emirates	Myanmar
Gambia	Yemen	Papua New Guinea
Ghana		Philippines
Guinea		Samoa
Guinea-Bissau		Singapore
Kenya		Solomon Islands
Lesotho	Antigua and Barbuda	Thailand
Liberia	Argentina	Vanuatu
Madagascar	Bahamas	Viet Nam
Malawi	Barbados	
Mali	Belize	<i>South Asia</i>
Mauritania	Bolivia	Afghanistan
Mauritius	Brazil	Bangladesh
Mozambique	Chile	Bhutan
Namibia	Colombia	India
Niger	Costa Rica	Iran, Islamic Rep. of
Nigeria	Cuba	Maldives
Rwanda	Dominica	Nepal
Sao Tome and Principe	Dominican Rep.	Pakistan
Senegal	Ecuador	Sri Lanka
Seychelles	El Salvador	
Sierra Leone	Grenada	
Somalia	Guatemala	
South Africa	Guyana	
Swaziland	Haiti	
Tanzania, U. Rep. of	Honduras	
Togo	Jamaica	
Uganda	Mexico	
Zaire	Nicaragua	
Zambia	Panama	
Zimbabwe	Paraguay	
	Peru	
	Saint Kitts and Nevis	
	Saint Lucia	
	Saint Vincent	
	Suriname	
	Trinidad and Tobago	
	Uruguay	
	Venezuela	

Countries in the industrial aggregates

OECD

Australia
Austria
Belgium
Canada
Denmark
Finland
France
Germany
Greece
Iceland
Ireland
Italy
Japan
Luxembourg
Netherlands
New Zealand
Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom
USA

Southern Europe

Albania
Greece
Italy
Malta
Portugal
Spain
Yugoslavia

European Community

Belgium
Denmark
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
New Zealand
Portugal
Spain
United Kingdom

Eastern Europe and USSR

Albania
Bulgaria
Czechoslovakia
Hungary
Poland
Romania
USSR
Yugoslavia

Non-European Countries

Australia
Canada
Israel
Japan
New Zealand
USA

North America

Canada
USA

Nordic Countries

Denmark
Finland
Iceland
Norway
Sweden

Primary sources of data

Data for the topics in *italics* have been taken from more than one major source.

Food and Agriculture Organization of the United Nations (FAO)

Agricultural production. Arable land. Calorie supply. Cereal imports. *Deforestation*. Food imports. Food production. Fuel wood. Land area.

Habitat

Persons per habitable room.

Institute for Resource Development

Breast-feeding. Child malnutrition.

International Centre for Urban Studies

City population density.

International Labour Organisation (ILO)

Employment. Labour force. Unemployment. Wages.

International Monetary Fund (IMF)

Budget surplus/deficit. Current account balance. Inflation. International reserves. Taxes. Workers' remittances.

Interparliamentary Union

Women in parliament.

Luxembourg Income Study Database (LIS)

Real GDP per capita poverty line.

Organisation for Economic Co-operation and Development (OECD)

Debt service. ODA, given and received. ODA by subject, and a broad range of indicators for OECD countries.

Stockholm International Peace Research Institute (SIPRI)

Military expenditures. Arms exports and imports.

Statistical Office of the European Communities (EUROSTAT)

A broad range of indicators for EC countries.

United Nations Centre for Social Development and Humanitarian Affairs

Divorces. Drug crimes. Homicides. Prisoners.

United Nations Children's Fund (UNICEF)

Breast-feeding. Child malnutrition. Immunization. ORT use. Under-five mortality.

United Nations Development Programme (UNDP)

Human development index (HDI). Mean years of schooling. Selected literacy estimates. Selected real GDP per capita estimates.

United Nations Economic Commission for Europe (ECE)

Deforestation and a broad range of indicators for countries in the EC.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Book titles. Cinemas. Compulsory education. *Education expenditure*. Graduates. Library books. Literacy. Museums. Newspapers. Radios. Repeaters, school, college and university enrolment. Scientists and technicians. Teachers. Televisions.

United Nations Industrial Development Organization (UNIDO)

Earnings.

United Nations Population Division

Birth rates. Death rates. Dependency ratio. Fertility. *Infant and under-five mortality*. Life expectancy. Population: total, urban and rural. Population density.

United Nations Population Fund (UNFPA)

Contraceptive prevalence.

United Nations Statistical Office

Energy. Exports and imports. *GDP*. Commercial energy. Housing. *Infant mortality*. Passenger cars. *Persons per habitable room*. Terms of trade. Trade dependency. *Total population*.

University of Pennsylvania

Real GDP per capita.

World Bank

Debt service and interest payments. Domestic investment. Domestic savings. *GDP*, GNP and GNP per capita. Household income. *Health and education expenditures*. Population below poverty line. Social security benefits.

World Fertility Survey

Breast-feeding.

World Food Programme (WFP)

Food aid.

World Health Organization (WHO)

Child malnutrition. Access to health services, safe water and sanitation. Alcohol. Doctors and nurses. Health attendance at birth. *Immunization*. Low birth-weight. Maternal mortality. *ORT use*. Smoking.

World Priorities, Inc.

Armed forces. *Military, health and education expenditures*.

World Resources Institute

Greenhouse index. Internal renewable water resources.