United Nations University
World Institute for Development Economics Research
(UNU-WIDER)

WIDER Annual Lecture 12

Developing Countries in the World Economy: The Future in the Past?

Deepak Nayyar

UNU-WIDER gratefully acknowledges the financial contributions to the research programme by the governments of Denmark (Royal Ministry of Foreign Affairs), Finland (Ministry for Foreign Affairs), Sweden (Swedish International Development Cooperation Agency—Sida) and the UK (Department for International Development).

UNU World Institute for Development Economics Research (UNU-WIDER)
A research and training centre of the United Nations University

The Board of UNU-WIDER
Ernest Aryeetey
Anne Case
Roberto Frenkel
Martti Hetemäki
Ravi Kanbur
Vladimir Popov
Elisabeth Sadoulet

Ex officio
Konrad Osterwalder, Rector of UNU
Finn Tarp, Director of UNU-WIDER

UNU World Institute for Development Economics Research (UNU-WIDER) was established by United Nations University as its first research and training centre and started work in Helsinki, Finland in 1985. The purpose of UNU-WIDER is to undertake applied research and policy analysis on structural changes affecting the developing and transitional economies, to provide a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and to promote capacity strengthening and training in the field of economic and social policy making. Its work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

UNU World Institute for Development Economics Research (UNU-WIDER)
Katajanokanlaituri 6 B
00160 Helsinki, Finland

Copyright © UNU-WIDER 2009

Camera-ready typescript prepared by Lorraine Telfer-Taivainen at UNU-WIDER
Cover design by Lisa Winkler at UNU-WIDER.
Printed at Multiprint Oy, Finland

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the UN University of any of the views expressed.

ISSN 1455-3082
ISBN 978-92-9230-217-7 printed version
ISBN 978-92-9230-218-4 internet version

CONTENTS

List of Tables and Figures iv

Foreword v

Author's acknowledgements vi

About the author vii

1 INTRODUCTION 1

2 HISTORICAL PERSPECTIVE 2

2.1 1000 to 1700 2
2.2 1820 to 1950 4

3 SIGNIFICANCE OF DEVELOPING COUNTRIES SINCE 1950 10

4 ENGAGEMENT WITH THE WORLD ECONOMY 14

4.1 International trade 14
4.2 International investment 15
4.3 International migration 16

5 CATCH-UP IN INDUSTRIALIZATION 20

5.1 Industrial production 20
5.2 Manufactured exports 23

6 UNEQUAL PARTICIPATION AND UNEVEN DEVELOPMENT 25

7 GROWTH PERFORMANCES OF DEVELOPING COUNTRIES 28

8 TRANSFORMING GROWTH INTO DEVELOPMENT 33

8.1 International inequality 33
8.2 Widening gap between countries 35
8.3 Exclusion of countries 37
8.4 Exclusion of people 38

9 FUTURE PROSPECTS: DETERMINANTS AND CONSTRAINTS 39

10 CONCLUSION 41

REFERENCES 43

LIST OF TABLES AND FIGURES

Table 1	Distribution of population and income in the world economy: 1000–1700	3
Table 2	The share of developing countries in world population and world GDP	5
Table 3	Comparing GDP per capita: divergence in GDP per capita between industrialized countries and developing countries	9
Table 4	Share of developing countries in world population: 1950–2005	12
Table 5	GDP and GDP per capita in developing countries and the world economy (at constant prices)	13
Table 6	Share of developing countries in world trade	14
Table 7	Foreign direct investment in the world economy: 1990–2005 stocks and flows (US$ billion)	16
Table 8	Share of developing countries in world manufacturing value added	21
Table 9	Share of developing countries in world manufactured exports	24
Table 10	The significance of 12 selected countries in the developing world (as percentages of the total for developing countries)	26
Table 11	Share of selected developing countries in manufacturing value added	28
Table 12	Growth rates in the world economy by region: 1820–1998 (per cent per annum)	29
Table 13	Growth rates in the world economy by region: 1951–2005 (per cent per annum)	31
Table 14	Theil decomposition of international inequality	36

Figure 1	Shares in world population and world GDP: 1820–2001	7
Figure 2	Share of developing countries in world manufacturing value added	22
Figure 3	Share of developing countries in world manufactured exports	25
Figure 4	World inequality in historical perspective: 1820–2000	34

FOREWORD

The WIDER Annual Lecture is a major event in the UNU-WIDER calendar, providing an opportunity for a distinguished speaker to present new insights and analysis on a core topic related to UNU-WIDER's research programme on global development. Lecture 12 in the series was given at the Marina Congress Centre in Helsinki on 23 February 2009 by Deepak Nayyar, Professor of Economics at Jawaharlal Nehru University, New Delhi.

Deepak Nayyar is well-known to UNU-WIDER and its international network of scholars and policymakers. He served as a very effective chairperson of our board from 2001 to 2008, and we are indebted for his committed service in guiding our institution. Deepak is also a dedicated teacher to his students and a leading scholar within the international development community, focussing intently on globalization, trade liberalization, and international migration. His writings range across the global tapestry widely weaving in regional histories and geopolitics. His breadth of scope is remarkable.

Today, we are in the midst of global economic turmoil and the countries and the lives of their citizens are caught up in the turbulent global interface of finance, trade, and geopolitics. This may be new to us as individuals but it is not new when we look back in time at the historical jostling of countries for position and power.

The premise of Deepak's lecture is the evolution of the world economy, from the earliest trading days to the present day, and the fluctuating position of developing countries. The lecture focuses on the differences between developed and developing countries and the, sometimes painful, birth of historical and political processes that give further thrust to these differences. The lecture identifies a number of competing issues and interpretations for the reader to seriously consider, then goes on to address the question of whether the future of the developing world may actually lie in lessons learned, or to be learned, from what has already gone before.

UNU-WIDER would like to express its gratitude to Deepak Nayyar for contributing this thought provoking piece to our lecture series.

Finn Tarp
Director, UNU-WIDER

AUTHOR’S ACKNOWLEDGEMENTS

This is a revised version of WIDER Annual Lecture 12, which was delivered in Helsinki on 23 February 2009. I would like to thank Alice Amsden, Amit Bhaduri, Ha-Joon Chang, Angus Maddison, Anthony Shorrocks and Romila Thapar for helpful comments on a preliminary draft. I am particularly grateful to José Antonio Ocampo and Lance Taylor for their constructive criticisms and valuable suggestions. I would also like to thank Jonas Shaende who provided meticulous research assistance and Ananya Ghosh-Dastidar who helped in my search for information.

At UNU-WIDER in Helsinki, Lorraine Telfer-Taivainen and Barbara Fagerman, efficient as always, lent wonderful support.

ABOUT THE AUTHOR

Deepak Nayyar is Professor of Economics at Jawaharlal Nehru University, New Delhi. He has taught at the University of Oxford, the University of Sussex, the Indian Institute of Management, Calcutta, and the New School for Social Research, New York. He was Vice Chancellor of the University of Delhi for 2000–05. He served as Chief Economic Adviser to the Government of India and Secretary in the Ministry of Finance between 1989–91.

He was educated at St Stephen's College and the Delhi School of Economics. Thereafter, as a Rhodes Scholar, he went on to study at Balliol College, University of Oxford, where he obtained a B.Phil and a D.Phil in Economics. He is an Honorary Fellow of Balliol College, Oxford.

Professor Nayyar has published more than 50 papers in academic journals. He is the author, co-author or editor of 12 books, the most recent being *Governing Globalization: Issues and Institutions* (2002), *Stability with Growth: Macroeconomics, Liberalization and Development* (2006), *Trade and Globalization* (2008) and *Liberalization and Development* (2008), which are published by Oxford University Press. His research interests are primarily in the areas of international economics, macroeconomics and development economics. He has worked on a wide range of subjects, including trade policies, industrialization strategies, macroeconomic stabilization, structural adjustment, economic liberalization, trade theory, macro policies, international migration and the multilateral trading system. In addition, he has written extensively on economic development in India. Globalization and development is an area of focus in his present research.

1 INTRODUCTION

The object of this study is to analyse the evolution of developing countries in the world economy situated in its wider historical context, from the onset of the second millennium, but with a focus on the second half of the twentieth century. In doing so, it poses, and endeavours to answer, some unexplored questions. Does the distinction between developing countries and industrialized countries go back a long time? If not, when did the countries and continents, now described as the developing world, end their long period of domination to begin their decline and fall? How far does the economic recovery of developing countries in the world economy, since 1950, represent a catch-up in terms of industrialization and development? What is the extent of the catch-up in comparison with the past? And how is it distributed across countries and among people in the developing world? Is there something to learn from the past about the future?

The structure of the discussion is as follows. First, I shall examine the changes in the economic importance of Africa, Asia and Latin America (now described as the developing world), as compared with Western Europe, Eastern Europe, North America and Japan (now described as the industrialized world), in a long-term historical perspective. Second, I shall examine the changes in the significance of developing countries in the world economy, in terms of population and income, during the second half of the twentieth century. Third, I shall consider the engagement of developing countries with the world economy, since 1950, with a focus on international trade, international investment and international migration, drawing some comparisons with the past. Fourth, I shall outline the contours of their catch-up in industrialization, discernible in the past three decades, to discuss the underlying factors. Fifth, I shall show that this process is characterized by unequal participation and uneven development, as much of the catch-up in total output, international trade and industrial production is attributable to about a dozen countries. Sixth, I shall suggest that the growth performance of developing countries is critical, whether we seek to explain the past, understand the present or extrapolate the future. Seventh, I shall argue that the observed growth has often not been transformed into meaningful development because there is an exclusion of countries and of people, which is reflected in a widening gap not only between developing countries and industrialized countries but also between countries in the developing world. Eighth, I shall explore the future prospects of developing countries, in terms of determinants and constraints, situated in the wider context of the world economy, to highlight what needs to be done to bring about a real transformation. At the end, I hope to draw together some conclusions that emerge.

2 HISTORICAL PERSPECTIVE

The division of the world into industrialized countries and developing countries is more recent than is widely believed. It does not go back far in time. The discussion in this section, which provides a long-term historical perspective, seeks to focus on the emergence of developing countries in the world economy. In doing so, it makes a distinction between the period before the nineteenth century, when geography divided the world, and the period since the nineteenth century, when the world came to be divided by economics.

2.1 1000 to 1700

The changes in the economic importance of countries now described as the developing world, as compared with countries now described as the industrialized world must be situated in historical perspective. This is easier said than done, because population censuses and national income accounts began life in most countries during the twentieth century. And systematic time series data are available beginning 1950. In most industrialized countries, such data are available beginning 1900 or even earlier. However, studies by Angus Maddison provide estimates of long-term changes in world population and world income for selected benchmark years.[1]

Table 1, based on estimates made by Maddison, presents evidence on the distribution of population and income in the world economy in the years 1000, 1500, 1600, and 1700. The world is divided in terms of geographical regions. The first group is made up of Asia, Africa, and Latin America, while the second group is made up of Western Europe, Eastern Europe, North America, Oceania and Japan. The estimates of population and income in these regions are based on estimates for 20 major countries with residual estimates for other countries in the region. Obviously, these estimates, which are put together from a wide range of sources, are indicative numbers rather than precise statistics. Even so, the figures do highlight the relative importance of different regions and outline the broad contours of change in the world economy.

The proportions are striking. Table 1 shows that, 1000 years ago, in year 1000, Asia, Africa and Latin America, taken together, accounted for 82 per cent of world population and 83 per cent of world income.[2] In fact, this overwhelming importance of Asia, Africa and Latin America continued in the second millennium for some time to come. Even 500 years ago, in 1500, they accounted for about 75 per cent of both world population and world income. Two centuries later, in 1700, their share in world population remained almost the same at three-fourths but their share in world income declined to two-thirds. In this context, it is worth noting that such dominance was attributable, in large part, to just two countries. During the period from 1000 to 1700, China and India, taken together, accounted for 50 per cent of world population and 50 per cent of world income.

---

[1] See Maddison (1995, 2001, and 2003).

[2] The dominance of these three continents was similar, somewhat greater earlier. And, 2000 years ago, in 1 AD, they accounted for 84 per cent of both world population and world income (Maddison 2003: 261). Of course, it needs to be said that estimates of population and GDP in 1 AD are no more than rough approximations based on limited indirect evidence for continents and regions. In fact, the only country estimates in this set of figures are for China and India, while the rest are for regions or continents.

TABLE 1
DISTRIBUTION OF POPULATION AND INCOME
IN THE WORLD ECONOMY: 1000–1700
(IN PERCENTAGES)

World Population	1000	1500	1600	1700
Group I				
Asia	65.6	61.2	64.7	62.1
Africa	12.1	10.6	9.9	10.1
Latin America	4.3	4.0	1.7	2.0
Group total	82.0	75.8	76.3	74.2
Group II				
Western Europe	9.5	13.1	13.3	13.5
Western offshoots	0.7	0.6	0.4	0.3
Eastern Europe	2.4	3.1	3.0	3.1
Former USSR	2.6	3.9	3.7	4.4
Japan	2.8	3.5	3.3	4.5
Group total	18.0	24.2	23.7	25.8
TOTAL	100.0	100.0	100.0	100.0

World GDP	1000	1500	1600	1700
Group I				
Asia	67.6	61.9	62.5	57.7
Africa	11.7	7.8	7.1	6.9
Latin America	3.9	2.9	1.1	1.7
Group Total	83.3	72.5	70.7	66.3
Group II				
Western Europe	8.7	17.8	19.8	21.9
Western offshoots	0.7	0.5	0.3	0.2
Eastern Europe	2.2	2.7	2.8	3.1
Former USSR	2.4	3.4	3.5	4.4
Japan	2.7	3.1	2.9	4.1
Group Total	16.7	27.5	29.3	33.7
TOTAL	100.0	100.0	100.0	100.0

Source: Maddison (2003).

Note: Asia includes China and India, with a regional estimate for other countries in Asia. Western Europe includes Austria, Belgium, Denmark, Finland, Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK with a residual estimate for others in the region. Western offshoots include the USA with a residual estimate for others. Latin America includes Mexico with a separate residual estimate for others in the region. Africa includes estimates for selected countries in North Africa, West Africa, East Africa and Southern Africa with residual estimates of others in the sub-region.

It is just as clear from Table 1 that Western Europe, Eastern Europe, North America, Oceania and Japan, even taken together, were far less important in world economy. Their share in world population increased from less than one-fifth in 1000 to about one-fourth in years 1500 and 1700. Over the same period, their share in world income rose from one-sixth in 1000 to one-fourth in 1500 and one-third in 1700. It would seem that the second half of the second millennium witnessed the beginnings of change. This was, in part,

attributable to the first phase of European colonial expansion in the late fifteenth century, in the Caribbean and the Americas. It began with Spain and Portugal, followed by Britain and France.[3] The slave trade from Africa, the search for gold and silver in the new world, the colonization of the Americas, and the rise of the Asian entrepôt trade, were a part of this process which unleashed a somewhat different phase in the formation of the world economy from the early sixteenth century to the late eighteenth century.[4] It was the age of mercantilism in Europe. The share of Western Europe in world income registered a discernible increase. This period also witnessed the beginnings of a division of labour between primary producers and manufacturers but the organization of production was essentially pre-capitalist. It was the onset of the industrial revolution, at the end of this era, which introduced the possibilities of a structural transformation in the world economy.

Until the end of the eighteenth century, the world and its parts were shaped far more by geography than by economics. Thus, distinctions between, or groupings of, countries were geographical rather than economic or even political. The division of the world into industrialized countries and developing countries came later.

2.2 1820 to 1950

The nineteenth century witnessed the evolution of an international economic order which led to a profound change in the balance of economic and political power in the world. The division of the world into industrial countries which specialized in manufacturing, and agricultural countries which specialized in primary commodities, was an outcome of this process. It was attributable to three developments. The first was the industrial revolution in Britain during the late eighteenth century which spread to Western Europe during the first half of the nineteenth century. The second was the emergence of a newer, somewhat different, form of colonialism in the early nineteenth century which culminated in the advent of imperialism that gathered momentum through that century. The third was the revolution in transport and communication in the mid nineteenth century, manifest in the railway, the telegraph and the steamship.

These three developments, which overlapped and partly coincided in time, transformed the world economy by creating patterns of specialization in production associated with a division of labour through trade reinforced by the politics of imperialism. There are competing explanations for this outcome. Some emphasize economic factors to argue that an industrial revolution was dependent on a prior or simultaneous agricultural revolution.[5] Others emphasize political factors to argue that imperial powers did not allow industrialization in their colonies.[6] Yet others emphasize a mix of economic and political factors to argue that the economics of colonialism and the politics of imperialism together created this international economic order.[7] It would mean too much of a digression to enter

---

3 For a succinct analysis of the rise of these countries during that era, see Kindleberger (1996). See also, Reinert (2007).

4 For a lucid discussion on the evolution of the world economy during this period, see Findlay and O'Rourke (2007).

5 This hypothesis is developed by Lewis (1978).

6 See, for example, Baran (1957).

7 This is the essential theme in the structuralist literature on underdevelopment in Latin America. See, for instance, Furtado (1970) and Griffin (1969). See also, Frank (1971).

into a discussion of these competing explanations. Suffice it to say that the outcome was unambiguous. The world economy was divided into countries (mostly with temperate climates) that industrialized and exported manufactured goods and countries (mostly with tropical climates) that did not industrialize and exported primary commodities. Slowly but surely, countries in Asia, Africa and Latin America became dependent on the industrializing countries in Western Europe not simply for markets and finance but also as their engine for growth. This led to the deindustrialization and underdevelopment in what became the developing world, just as it led to industrialization and development in what became the industrialized world. Both outcomes were an integral part of the process of the development of capitalism in the world economy.

TABLE 2
THE SHARE OF DEVELOPING COUNTRIES
IN WORLD POPULATION AND WORLD GDP
(IN PERCENTAGES)

World population	1820	1870	1913	1950	1973	2001
Africa	7.1	7.1	7.0	9.0	10.0	13.4
Asia	65.2	57.5	51.7	51.4	54.6	57.4
Latin America	2.1	3.2	4.5	6.6	7.9	8.6
Developing countries	74.4	67.8	63.2	67.0	72.5	79.4
Industrialized countries	25.6	32.2	36.8	33.0	27.5	20.6
World GDP	1820	1870	1913	1950	1973	2001
Africa	4.5	4.1	2.9	3.8	3.4	3.3
Asia	56.4	36.1	22.3	15.4	16.4	30.9
Latin America	2.2	2.5	4.4	7.8	8.7	8.3
Developing countries	63.1	42.7	29.6	27.0	28.5	42.5
Industrialized countries	36.9	57.3	70.4	73.0	71.5	57.5

Source: Maddison (2003).

Note: The group of developing countries is made up of Africa, Asia and Latin America. The group of industrialized countries is made up of Western Europe (Andorra, Austria, Belgium, Channel Islands, Denmark, Faeroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Iceland, Ireland, Isle of Man, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland and UK), Western offshoots (Australia Canada, New Zealand, and the USA), Eastern Europe (Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia), former USSR, and Japan.

It is somewhat difficult to find a turning point in time for this division of the world economy. The process began about 1820—its outcome discernible by 1870—and continued until 1950. Table 2 presents evidence on the share of developing countries and industrialized countries in world population and world gross domestic product (GDP) for selected benchmark years from 1820 to 2001. However, the discussion that follows focuses on the period from 1820 to 1950. The percentages in this table have been calculated from estimates of population and GDP made by Maddison for selected benchmark years: 1820, 1870, 1913, and 1950. The data on GDP are in 1990 international Geary-Khamis dollars—purchasing power parities (PPP) used to evaluate output calculated based on a specific method devised to define international prices. This measure facilitates inter-country comparisons over time. It needs to be said that these estimates are far more robust, in terms of their statistical foundations, than the corresponding estimates for the earlier selected benchmark years: 1000, 1500, 1600 and 1700. For the period since 1950, Maddison does

provide a time series until 2001 but Table 2 presents evidence on just two selected benchmark years, 1973 and 2001, so as to provide an overview of long-term changes. Of course, for the period since 1950, time series data on population and GDP compiled by the UN from national statistical sources are also available. In any case, changes in the distribution of population and income in the world economy during the second half of the twentieth century are considered in the next section.

Between 1820 and 1950, the share of developing countries in world population declined from three-fourths to two-thirds, but their share in world income witnessed a much more pronounced decline from 63 to 27 per cent. Between 1820–1950, the share of industrialized countries in world population rose from one-fourth to one-third, while their share in world income almost doubled from 37 to 73 per cent. This transformation of the world economy may have spanned 130 years. But a new international economic order was clearly discernible at the end of 50 years. By 1870, the share of developing countries in world population had already decreased to two-thirds while that of industrialized countries had already increased to one-third. And, by 1870, the share of developing countries in world income had fallen to 43 per cent while that of industrialized countries had risen to 57 per cent.

For the world economy, the significance of 1870 is clear. The balance of power had shifted. The division of labour had changed. The beginning of a divide between industrialized countries and developing countries in the world economy was visible. It is no surprise that, between 1820–1950, there was a sharp increase in the asymmetries between the shares of the two sets of countries in world population and world income. These asymmetries are clearly illustrated in Figures 1a–c.

It may be misleading to consider developing countries as an aggregate. Some disaggregation is necessary because there were significant differences between different regions of the developing world. The increase in the asymmetry was particularly pronounced in Asia. Between 1820–1950, its share in world population diminished from 65 to 51 per cent but its share in world income dropped from 56 to 15 per cent. This reflected and shaped the asymmetry between shares of world population and world income for developing countries as a group. For Africa, the shares in world population and income were relatively stable, although the latter was consistently lower. For Latin America, the shares in world population and income were symmetrical throughout the period from 1820 to 1950. What is more, both figures rose over the period under consideration. And, in 1950, Latin America's share in world income was higher than in world population. These trends for Asia, Africa and Latin America emerge even more clearly from Figures 1d–f respectively.

FIGURE 1
SHARES IN WORLD POPULATION AND WORLD GDP: 1820 TO 2001

Figure 1a: Industrialized countries and developing countries

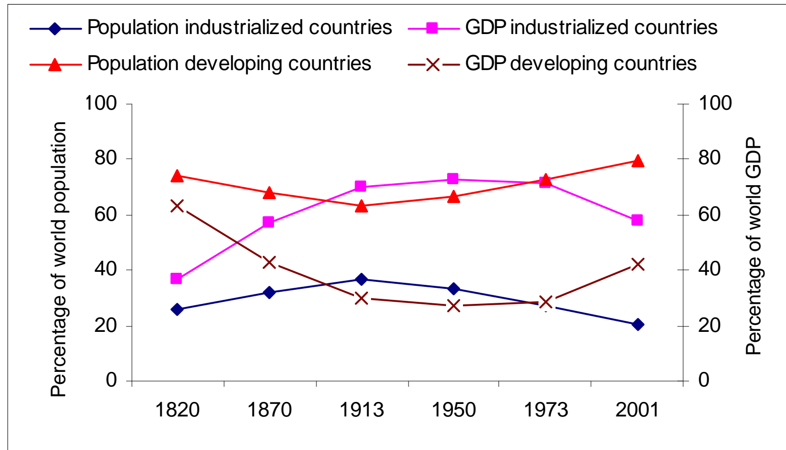


Figure 1b: Industrialized countries

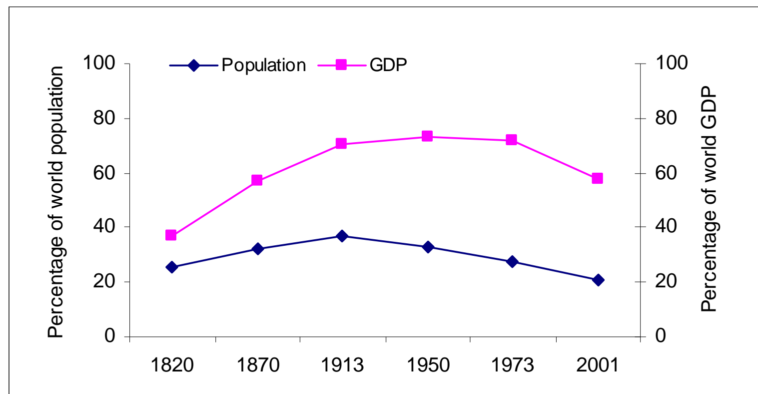


Figure 1c: Developing countries

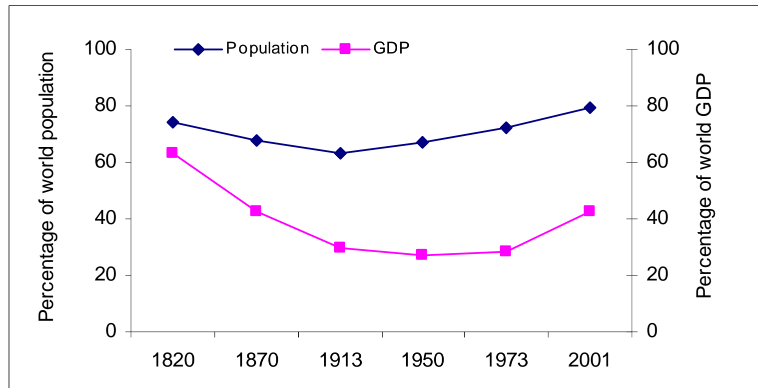


Figure 1d: Asia

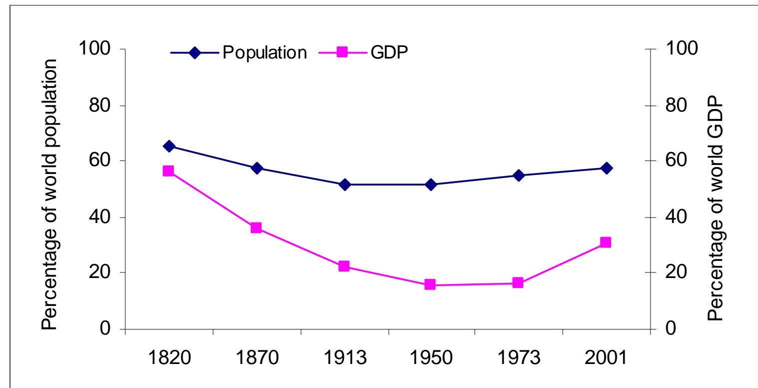


Figure 1e: Africa

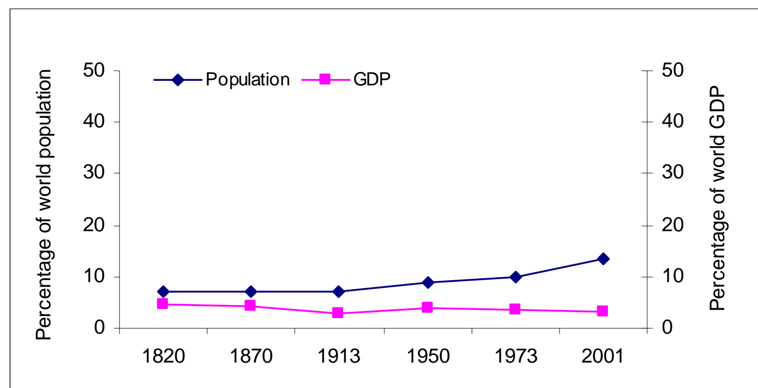
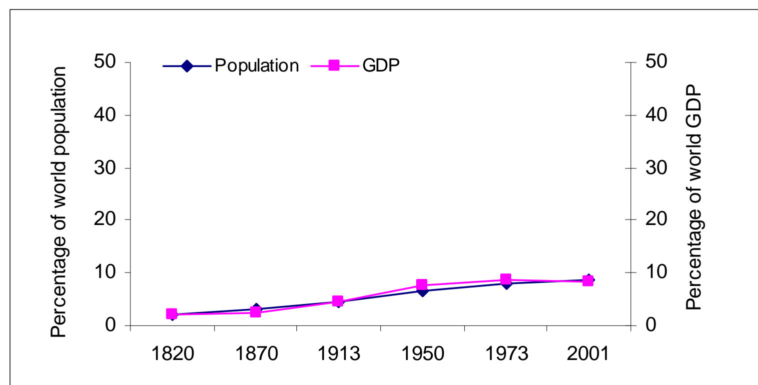


Figure 1f: Latin America



Source: Table 2.

It is clear that Latin America was the exception in the developing world. The explanation may not be obvious. But it is worth noting that during the nineteenth century, when countries in Asia and Africa were being colonized, countries in Latin America were beginning to attain independence. This process of independence from colonial rule in Latin America started in 1810 but was consolidated only in the 1820s. For this reason, perhaps, there was a slight increase, rather than a decline, in Latin America's share of world GDP

during 1820–70. The period thereafter witnessed the rise of Latin America as its share in world GDP more than trebled from 2.5 per cent in 1870 to 7.8 per cent in 1950. Indeed, it would seem that Latin America was the success story of the developing world during the period 1870–1950. In sharp contrast, Asia was the disaster. The economic decline of Asia, which began in 1820, continued apace thereafter as its share in world GDP dropped by more than half from 36.1 per cent in 1870, to 15.4 per cent in 1950.

Given the changes in shares in world population and world income, it is not surprising that the divergence in income per capita, between developing countries and industrialized countries, increased rapidly. This is confirmed by the evidence in Table 3. Between 1820–1950, as a percentage of GDP per capita in Western Europe, North America and Oceania, taken together, GDP per capita in Latin America, dropped from three-fifths to two-fifths, in Africa from one-third to one-seventh and in Asia from one-half to one-tenth. Clearly, gap in per capita incomes between the developing world and the industrialized world widened. This divergence was modest in Latin America, massive in Asia and somewhere in the middle in Africa. It is worth noting that this great divergence was not confined to developing countries alone. Over the same period, from 1820 to 1950, the corresponding proportion dropped from 58 to 34 per cent in Eastern Europe and from 56 to 31 per cent in Japan. It would seem that, over these 130 years, Western Europe and North America pulled away from the rest of the world. This was attributable, in large part, to sustained productivity growth in Western Europe which started somewhat later in USA. It would mean too much of a digression to enter into a discussion of the underlying causes.[8] However, the issue is considered briefly later in the paper.

TABLE 3
COMPARING GDP PER CAPITA: DIVERGENCE IN GDP PER CAPITA BETWEEN INDUSTRIALIZED COUNTRIES AND DEVELOPING COUNTRIES

Per capita GDP ratios	1820	1870	1913	1950	1973	2001
Western Europe Western offshoots	100	100	100	100	100	100
Eastern Europe	57.6	45.7	42.5	33.5	37.3	26.4
Latin America	57.5	33.2	37.1	39.8	33.7	25.5
Africa	34.9	24.4	16.0	14.2	10.5	6.5
Asia	48.0	26.8	16.5	10.1	9.2	14.3
Japan	55.6	36.0	34.8	30.5	85.5	90.6
China	49.9	25.8	13.8	7.0	6.3	15.7
India	44.3	26.0	16.9	9.8	6.4	8.6

Source: Maddison (2003).

Note: Western Europe includes Andorra, Austria, Belgium, Channel Islands, Denmark, Faeroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Iceland, Ireland, Isle of Man, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, UK. Western offshoots include Australia Canada, New Zealand, and the USA. Japan's figures are excluded from Asia's figures, but China's and India's figures are included. Eastern Europe excludes former USSR, but includes Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia.

---

8 The rise of Western Europe and the decline of Asia is an important theme in the literature on the subject. For an extensive discussion, on this particular aspect, see Frank (1998) and Pomeranz (2000). For an analysis in the wider context of the world economy, see also, Kindleberger (1996) and Findlay and O'Rourke (2007).

In sum, the evolution of the world economy during this era was shaped by two sets of factors. The first set, which exercised a strong influence over the period 1820–70, was made up of the industrial revolution in Britain which spread to Europe, the emergence of the next phase of colonialism which spread to Asia and Africa, and the revolution in transport and communication which shrank the world.[9] The second set, which exercised a strong influence over the period 1870–1914, was made up of the politics of imperialism and the economics of globalization, which created winners and losers.[10] The influence of these factors possibly waned from 1914 to 1950, interspersed as it was by the two world wars and the Great Depression, but the inherent logic and essential characteristics of industrial capitalism meant that uneven development for unequal partners persisted in the world economy.[11]

3 SIGNIFICANCE OF DEVELOPING COUNTRIES SINCE 1950

For developing countries in the world economy, 1950 was perhaps the next turning point. It was the beginning of the post-colonial era as the newly independent countries in Asia and Africa sought to catch up in terms of industrialization and development. This is discernible from the evidence presented in Table 2 and Figure 1 on the share of developing countries in world population and world income, which suggests that, during the second half of the twentieth century, two phases are distinguishable: 1950–73 and 1973–2001.

Between 1950–73, the share of developing countries in world population rose from 67 to 72.5 per cent while their share in world income stopped its decline and rose modestly from 27 to 28.5 per cent. There was a corresponding decline in the share of industrialized countries in world population and world income. It is worth noting that this was the golden age of capitalism, associated with rapid economic growth in the industrialized countries.[12] But economic growth was somewhat faster in the developing countries. The changes in Asia's share of world population and world income mirrored the changes in the shares of developing countries in the aggregate. The share of Africa in world population rose a little while its share in world income fell a little. The share of Latin America in world population and in world income registered a discernible increase and these shares were roughly symmetrical. However, given the rapid growth in population in the developing world, divergence in income per capita increased everywhere, significantly in Africa and Latin America but only a little in Asia. Between 1950–73, as a percentage of GDP per capita in Western Europe, North America and Oceania, taken together, GDP per capita in Latin America dropped from 39.8 to 33.7 per cent, in Africa from 14.2 to 10.5 per cent and in Asia from 10.1 to 9.2 per cent.

---

[9] See Lewis (1978), Bairoch (1993), and Findlay and O'Rourke (2007).

[10] See Hobsbawm (1987), Rodrik (1997), Williamson (2002), and Nayyar (2006).

[11] For a discussion on developing countries during this period, see Bairoch (1975).

[12] See Marglin and Schor (1990).

In the period 1973–2001, the share of industrialized countries in world population dropped from 27.5 to 20.6 per cent while their share in world income dropped from 71.5 to 57.5 per cent. There was a corresponding increase in the share of developing countries in world population and world income. Asia's share in world population increased from 54.6 to 57.4 while its share in world income increased from 16.4 to 30.9 per cent. Africa's share in world population rose from 10 to 13.4 per cent while its share in world income decreased from 3.4 to 3.3 per cent. Latin America's share in world population rose from 7.9 to 8.6 per cent while its share in world income fell from 8.7 to 8.3 per cent but these shares remained close to each other. For Africa and Latin America, the divergence in per capita income from that in industrialized countries continued to increase but for Asia this divergence, though still large, diminished. Between 1973–2001, as a percentage of GDP per capita in Western Europe, North America and Oceania, taken together, GDP per capita in Latin America dropped from 33.7 to 25.5 per cent, in Africa from 10.5 to 6.5 per cent, but in Asia it rose from 9.2 to 14.3 per cent.

From the evidence presented in Table 2 and Figure 1, it would seem that Latin America was the exception in the developing world during the period 1870–1950 and it continued to be an exception until 1973. It fell behind the industrialized world but at slower rate than Asia and Africa. However, Asia was the exception after 1950. It would seem that its economic decline stopped during the period 1950–73. And its catch-up with the industrialized world accelerated in pace during the period 1973–2001. It needs to be said, however, that evidence on a few selected benchmark years, which is useful for highlighting the broad contours of long-term changes, is not sufficient to establish turning points in economic performance. Evidence presented later in the paper clearly shows that 1980 was the real turning point, for the worse in Latin America and for the better in Asia.

The preceding discussion on the significance of developing countries in the world economy since 1950, in terms of population, income and per capita income, is based on estimates made by Maddison. The estimates presented here relate to three selected benchmark years in a time span of five decades. What is more, the focus is on percentage shares in world population or world income and on proportional divergence or convergence in per capita income. The percentages and proportions, in turn, are derived from data on income in 1990 international Geary-Khamis dollars, which are PPPs, more sophisticated than the usual, that facilitate inter-country comparisons over time. This exercise is conducive to a study of long-term trends, particularly if the object is to compare the 50 years since 1950 with the preceding 130 years.

For an analysis of trends in GDP and GDP per capita since 1950, however, it is both necessary and appropriate to consider evidence at market prices. The reason is simple. Computation of GDP per capita in terms of PPP may be helpful for international comparisons of relative standards of living.[13] But it is not quite correct to add up GDP in terms of PPP across countries, to estimate shares in world GDP in terms of PPP, because these estimates are based on an artificial upward adjustment in the price of non-traded

[13] Even such comparisons are not without problems. Consider the example of a barber in Mumbai who works at the Taj Hotel and returns to live at home in Dharavi, as compared with a barber in New York who works at a salon on Fifth Avenue in Manhattan and returns to live at home in Queens. Their incomes might be similar in PPP terms, but the living standards of the barber in Mumbai are likely to be lower than his or her counterpart in New York.

goods and services in developing countries.[14] This leads to an upward bias in the PPP-GDP estimates for developing countries, which are thus not comparable with other macroeconomic variables such foreign trade, international investment or industrial production valued at market prices.

A perspective on changes in population, particularly during the second half of the twentieth century, also requires some reference to absolute magnitudes. Table 4 presents evidence on the share of developing countries in world population, at quinquennial intervals, during the period 1950–2005. It shows that the size of the population in developing countries increased from 1.7 billion in 1950, to 3 billion in 1975, and 5 billion in 2000. This was attributable, in large part, to demographic factors, as death rates dropped but birth rates did not. It also shows that the share of developing countries in world population increased from two-thirds in 1950 to three-fourths in 1975 and four-fifths in 2000. This was attributable to the rapid population growth in developing countries and the stable population in industrialized countries. It would seem that the share of developing countries in world population in 1975 returned to its level during the period 1500–1820. And, by 2005, this share returned to its level in 1000.

TABLE 4
SHARE OF DEVELOPING COUNTRIES IN WORLD POPULATION: 1950–2005

	Population (billion)		
Year	World	DCs	DCs share (%)
1950	2.5	1.7	67.9
1955	2.8	1.9	68.8
1960	3.0	2.1	69.8
1965	3.3	2.4	71.1
1970	3.7	2.7	72.7
1975	4.1	3.0	74.3
1980	4.5	3.4	75.7
1985	4.9	3.7	77.0
1990	5.3	4.1	78.3
1995	5.7	4.5	79.4
2000	6.1	4.9	80.5
2005	6.5	5.3	81.3

Source: UN, Population Division, UNDATA.

It would serve little purpose to present evidence on trends in GDP and GDP per capita at current prices because observed trends are significantly influenced by differences in inflation rates and movements in exchange rates. Even so, it is worth noting that the share

[14] In principle, this could be a problem for the Maddison estimates used in the preceding discussion. In practice, it is not, for three reasons. First, the Geary-Khamis approach adopted by Maddison is a more sophisticated exercise in international comparisons based on PPP, because it assigns a weight to countries corresponding to the size of their GDP. Second, a 'multilateral' rather than 'binary' method of obtaining results makes comparisons transitive and imparts other desirable properties. Third, in any case, for the period before 1950, the possible distortions mentioned in the text should be minimal. For a more detailed discussion, see Maddison (2003: 227-30).

of developing countries in world GDP at current prices increased from 17.5 per cent in 1970 to 22.1 per cent in 2005.[15] The trends in GDP per capita at current prices are difficult to discern. If anything, these reveal a continued divergence between industrialized countries and developing countries.

Table 5 presents available evidence on GDP and GDP per capita in developing countries, as compared with the industrialized countries and the world economy, at constant prices, over the period 1960 to 2005. This makes for a much more meaningful comparison. It shows that GDP in developing countries as a proportion of world GDP increased from 15.4 per cent in 1970 to 21.5 per cent in 2005 at constant prices. It would seem that the share of developing countries in world GDP registered a substantial increase during the last quarter of the twentieth century. But the table tells a different story about per capita income. It shows that GDP per capita in developing countries as a proportion of that in industrialized countries remained almost unchanged from 4.7 per cent in 1970 to 4.9 per cent in 2005 at constant prices. It would seem that divergence in per capita income came to a stop during the last quarter of the twentieth century. But convergence did not quite begin for the developing world as a whole, although a few countries in Asia witnessed a significant catch-up in terms of per capita income.

TABLE 5
GDP AND GDP PER CAPITA IN DEVELOPING COUNTRIES
AND THE WORLD ECONOMY
(AT CONSTANT PRICES)

Year	Developing countries GDP	World GDP	GDP of developing countries as % of world GDP	Developing countries per capita GDP	Industrialized countries per capita GDP	Per capita GDP of DCs as % of per capita GDP of ICs
1960	1134	7279	15.6	484	9144	5.3
1965	1424	9420	15.1	550	11190	4.9
1970	1876	12190	15.4	644	13742	4.7
1975	2449	14604	16.8	752	15419	4.9
1980	3116	17648	17.7	867	17732	4.9
1985	3561	20060	17.8	901	19606	4.6
1990	4190	23997	17.5	963	22712	4.2
1995	4897	26962	18.2	1036	24256	4.3
2000	6058	31756	19.1	1191	27304	4.4
2005	7813	36352	21.5	1440	29251	4.9

Source: World Bank (2007).

Note: GDP figures are in billions of constant 2000 US dollars. GDP per capita figures are in constant 2000 US dollars.

15 These percentages are calculated from data on GDP at current market prices reported in World Bank (2007).

4 ENGAGEMENT WITH THE WORLD ECONOMY

The focus on population and income, while instructive, is not sufficient. It is also necessary to consider the engagement of developing countries with the world economy. The obvious channels of engagement are international trade, international investment and international migration.

4.1 International trade

International trade is, perhaps, the most important form of engagement with the world economy. Exports and imports of goods and services in developing countries as a proportion of GDP increased from 56 per cent in 2000 to 67 per cent in 2005.[16] These figures may over-estimate the significance of trade. And merchandise trade flows may be the more appropriate indicator. Table 6 presents evidence on the share of developing countries in world mechandize trade during the period 1965–2006. It shows that the share of developing countries in world exports increased from 14.4 per cent in 1965 to 33.8 per cent in 2005. The sharp increase in this share in 1975 and 1980 was attributable to the increase in oil prices and was not quite a part of the rising trend in this share over four decades. The share of developing countries in world imports also increased from 14.1 per cent in 1965 to 29.6 per cent in 2005. Once again, the jump in this share in 1975 and 1980 was attributable to the increase in oil prices rather than the trend. It is worth noting that the significance of developing countries in the world trade, as sources of imports and markets for exports more than doubled between 1970–2005. It is also interesting to note that in 1970 the share of developing countries in world exports and imports was roughly commensurate with their share of world GDP, but by 2005 their share in world exports and imports was much higher than their share of world GDP.

TABLE 6
SHARE OF DEVELOPING COUNTRIES IN WORLD TRADE

	Exports (in US$ billion)			Imports (in US$ billion)		
Year	World	DCs	DCs share (%)	World	DCs	DCs share (%)
1965	161.9	23.3	14.4	170.2	23.9	14.1
1970	281.0	42.8	15.2	292.0	43.7	15.0
1975	801.0	183.2	22.9	820.5	165.3	20.2
1980	1745.0	426.5	24.4	1812.9	355.0	19.6
1985	1686.6	360.9	21.4	1799.7	355.0	19.7
1990	3132.0	617.4	19.7	3251.0	613.3	18.9
1995	4705.6	1167.6	24.8	4763.4	1243.4	26.1
2000	6074.2	1803.3	29.7	6263.4	1663.0	26.6
2005	9864.2	3330.3	33.8	10171.6	3006.6	29.6
2006	11258.3	3840.7	34.1	11608.8	3418.5	29.4

Source: UN, UNCOMTRADE Statistical Database.

Note: The data on exports and imports are in current prices at current exchange rates.

[16] These figures, obtained from data reported in World Bank (2007), relate to exports *and* imports of goods *and* services as a proportion of GDP.

A comparison with the past is worthwhile. The share of developing countries in world merchandise exports at current prices rose from 14.4 per cent in 1870 to 19.6 per cent in 1913.[17] At constant prices, however, this share fell from 13.1 per cent in 1870 to 11.1 per cent in 1913, which was attributable to the deterioration in the terms of trade for developing countries.[18] It would seem that the significance of developing countries in world trade in 1965 was about the same as it was in 1870, but by 2005 it was much greater than it was in 1913.

4.2 International investment

The picture of international investment is somewhat different. Table 7 sets out evidence on foreign direct investment (inward and outward) in developing countries, industrialized countries and the world. The figures on stocks are for 1990, 1995, 2000, and 2005, while the figures on flows are annual averages for the periods 1991–95, 1996–2000, and 2001–05. Between 1990–2005, the share of developing countries in the inward stock of foreign direct investment in the world increased from less than one-fifth to more than one-fourth. Over the same period, the share of developing countries in inward flows of foreign direct investment in the world was in the range of one-fourth to one-third. Between 1990 and 2005, the share of developing countries in the outward stock of foreign direct investment in the world increased from less than one-tenth to about one-eighth. Over the same period, developing countries accounted for about one-eighth of the outward flows of foreign direct investment in the world.

Some comparisons with the past are interesting. In 1900, foreign investment in developing countries, direct and portfolio together, was the equivalent of about one-third of the GDP of developing countries.[19] And, in 2000, foreign direct investment in developing countries was about 30 per cent of the GDP of developing countries.[20] In 1914, foreign investment in developing countries, direct and portfolio, taken together, was US$179 billion at 1980 prices. And, in 1980, foreign direct investment in developing countries was US$96 billion at 1980 prices.[21] In real terms, it reached its 1914 level in the mid 1990s.

---

[17] These percentages have been calculated from data on the value of merchandise exports, in US$ million in current prices at current exchange rates, for a sample of 56 countries reported in Maddison (1995: 234-5). This sample includes 28 developing countries (7 in Latin America, 11 in Asia, 10 in Africa) and 28 industrialized countries (17 in Western Europe, 2 in North America, 7 in Eastern Europe, and 2 in Oceania). Based on data in this sample, the share of developing countries in world merchandise exports at current prices was almost unchanged at 20.4 per cent in 1950.

[18] These percentages have been calculated from data on the value of merchandise exports, in million 1990 dollars, for a sample of 34 countries reported in Maddison (1995: 236-7). This sample includes 17 developing countries and 17 industrialized countries. Based on data in this sample, the share of developing countries in world merchandise exports at constant prices was exactly the same at 11.1 per cent in 1950.

[19] It has been estimated by Maddison (1989) that, at 1980 prices, in 1900, the stock of foreign capital in developing countries was US$108.3 billion (1989: 30), while the GDP of 15 selected developing countries in Asia and Latin America was US$333.8 billion (1989: 113).

[20] UNCTAD, *World Investment Report* (2002: 329). It is worth noting that this proportion rose sharply in the late 1990s, as it was much less at 10.2 per cent in 1980 and 13 per cent in 1990.

[21] The estimate of the stock of foreign capital in developing countries in 1914, at 1980 prices, is obtained from Maddison (1989: 30) while the figure for the stock of foreign direct investment in developing countries in 1980 is obtained from UNCTAD, *World Investment Report* (1993: 248).

TABLE 7
FOREIGN DIRECT INVESTMENT IN THE WORLD ECONOMY: 1990 TO 2005: STOCKS AND FLOWS (IN US$ BILLION)

	Stocks							
	inward				outward			
	1990	1995	2000	2005	1990	1995	2000	2005
Developing countries	356	667	1697	2655	147	333	856	1268
Industrialized countries	1432	2091	4035	7219	1643	2612	5593	9278
World	1789	2766	5803	10130	1791	2949	6471	10672
Developing countries as a % of world total	19.9	24.1	29.2	26.2	8.2	11.3	13.2	11.9

	Flows (average per annum)					
	inward			outward		
	1991-1995	1996-2000	2001-2005	1991-1995	1996-2000	2001-2005
Developing countries	78	202	225	36	78	80
Industrialized countries	148	609	476	216	705	602
World	229	821	727	252	786	691
Developing countries as a % of world total	34.1	24.6	31.0	14.1	10.0	11.6

Source: UNCTAD Foreign Direct Investment Online Database (www://stats.unctad.org/fdi).

It would seem that, for developing countries, the significance of foreign investment at the end of the twentieth century was about the same as it was at the end of the nineteenth century.[22] There is, however, one important difference. In the early 2000s, developing countries are a significant source of foreign direct investment in the world economy and this is an altogether new phenomenon.[23]

4.3 International migration

International migration is, possibly, the most significant form of engagement with the world economy, particularly in the past but also in the present, although its importance differs across countries and has changed over time.[24] Developing countries have always been, and continue to be, important countries-of-origin for international migration.

[22] For evidence and analysis in support of this proposition, see Nayyar (2006).

[23] For a detailed discussion, see UNCTAD (2006). See also Nayyar (2008).

[24] International migration, in the wider context of the world economy and economic development, is discussed at some length elsewhere by the author. See Nayyar (2002, 2008a).

In the period since 1950, it is possible to discern two phases of such international migration: from the late 1940s to the early 1970s and from the early 1970s to the early 2000s. During the first phase, people moved from the developing world in Asia, North Africa and the Caribbean to Western Europe where economic growth combined with full employment created labour shortages and led to labour imports.[25] There was also a movement of people, mostly persons with professional qualifications or technical skills, from the developing world to the USA, and, on a smaller scale, to Canada and Australia. It needs to be said that, in this period, people from Europe in search of economic opportunities also migrated to the USA, Canada and Australia. During the second phase, migration from the developing world to the USA registered a significant increase,[26] once again people with professional or technical qualifications, while migration to Western Europe diminished. In this period, too, migration from Europe to the USA and Canada continued. Migration into Europe also revived but the sources were different, as a significant proportion of the migrants came from Eastern Europe and latecomers to the European Union. But, this phase also witnessed a steady increase in the temporary migration of people from labour-surplus developing countries, mostly unskilled workers and semi-skilled or skilled workers in manual or clerical occupations. There were three sets of destinations for such movement of people. Some went to the industrialized countries. Some went to the high-income labour-scarce, or oil-exporting, countries. Some went to the middle-income newly industrializing countries which attained near full employment.[27] The guest workers in Western Europe, the seasonal import of Mexican labour in the USA, the export of workers from South Asia, Southeast Asia and North Africa to oil-exporting countries of the Middle East, and the more recent import of temporary workers by labour-scarce countries in East Asia, are all components of these temporary cross-border labour movements.

The database on international migration is slender. Even so, it is worth citing some available evidence.[28] The number of international migrants in the world, excluding the former USSR, rose from 73 million in 1960 to 145 million in 2000. Over this period, the share of developing countries in the stock of migrant population decreased from 60 to 45 per cent while that of industrialized countries increased from 40 to 55 per cent. In the span of four decades, the proportion of international migrants in the total population fell from 2.1 to 1.3 per cent in developing countries and rose from 4 to 8.3 per cent in industrialized countries. For the world as a whole, this proportion remained almost unchanged at 2.5 per cent.

During the last quarter of the twentieth century, globalization has led to an expansion and diversification in such cross-border movements of people. It has introduced new forms of international labour mobility. In the contemporary world, it is possible to distinguish

---

[25] To begin with, this demand was met from the labour surplus countries in southern Europe and Italy was perhaps the most important source of such labour. But such sources were not sufficient for long.

[26] This was made possible, in part, by a change in immigration laws in the USA, which meant that entry was related to skill-levels rather than country-of-origin, thereby providing more access to people from developing countries. For a more detailed discussion, see Nayyar (2002).

[27] Malaysia has for a long time relied on workers from Indonesia for its agriculture and plantations. During the 1990s, Hong Kong, Republic of Korea, Singapore, Taiwan, and Thailand also emerged as destinations for migrant workers.

[28] The statistics cited in this paragraph are drawn from Nayyar (2008a).

between four categories of cross-border movements of people. The traditional category is emigrants who move to a country and settle there permanently. The new categories are guest workers, illegal immigrants and professionals. Guest workers are people who move to a country on a temporary basis for a specified purpose and a limited duration.[29] Illegal immigrants are people who enter a country without a visa, take up employment on a tourist visa or simply stay after their visa has expired.[30] Professionals are people with high levels of education, experience and qualification, whose skills are in demand everywhere and who can move from country to country, temporarily or permanently, as immigration laws or consular practices are not restrictive for them. Developing countries are the primary source of guest workers and illegal migrants in the industrialized world. The emerging economies in the developing world are also a significant source of professionals who move across borders.

From the perspective of developing countries, the most obvious positive consequence of international migration for economic development, in the medium term, is the remittances from migrants. And remittance inflows are now an important source of external finance for developing countries. Remittances to developing countries increased rapidly from US$24 billion in 1980 to US$66 billion in 2000 and constituted about three-fifths of remittances in the world economy. For developing countries, taken together, remittances have become the second largest source of external finance, less than the foreign direct investment but more than official development assistance. What is more, remittances are a more stable source of external finance and are more evenly distributed among countries. On an average, remittances are the equivalent of a little more than one per cent of GDP for developing countries. Of course, their significance differs across countries.[31]

In contrast, for developing countries, the most obvious negative consequence of international migration for economic growth, in the long term, is the brain drain. It leads to a qualitative and quantitative depletion of human capital that constrains growth due to a loss of scarce skills that are not easy to replenish while training replacement workers imposes costs in terms of both resources and time. The brain drain may also be associated with negative externalities if it restrains the productivity of those left behind and that can only impede economic growth. There is, however, a silver lining to this cloud that appeared not so long ago. The spread and momentum of globalization provides a stimulus for return migration that could reverse the brain drain. If so, it may create new opportunities for developing countries as it could, almost overnight, provide them with access to a work force that is well educated and highly trained in the industrialized world.

Some reference to, and comparison with the past is essential, for international migration goes back a long time. It began with slavery in the mid sixteenth century. Over two centuries, more than 15 million people were taken from Africa to Europe, North America and the Caribbean to work in households and on plantations. The abolition of slavery in the

---

[29] The largest number is in the Middle East. And there are now some in Malaysia and Singapore. But they are also to be found in Western Europe. This category also includes seasonal workers employed in agriculture or tourism, particularly in the USA.

[30] The largest numbers of such persons are in the USA (about 7 million), Western Europe (at least 3 million) and Japan (perhaps 1 million); for sources of evidence see Nayyar (2008a).

[31] The evidence cited in this paragraph is from Nayyar (2008a) which provides a detailed discussion on the significance and consequences of remittances for economic development.

British Empire in 1833 was followed by the movement of indentured labour which was another form of servitude. Starting around the mid 1830s for a period of 50 years, about 50 million people left India and China to work as indentured labour on mines, plantations and construction in the Americas, the Caribbean, southern Africa, Southeast Asia and distant lands.[32] This was probably close to 10 per cent of the total population of India and China in 1880. The destinations were mostly British, Dutch, French and German colonies. But USA was another important destination where indentured labour also came from Japan. Somewhat later, between 1870 and 1914, more than 50 million people left Europe, of whom two-thirds went to USA while the remaining one-third went to Canada, Australia, New Zealand, South Africa, Argentina and Brazil. This emigration from Europe amounted to one-eighth its total population in 1900.[33] Both these enormous waves of international migration, which were, directly or indirectly, an important source of economic growth in the industrialized countries, exercised a profound influence on development in the world economy.

It would seem that international migration from developing countries was much greater in the past than it is at present. The explanation is simple enough. In the late nineteenth century, and until 1914, there were no restrictions on the movement of people across national boundaries. Passports were seldom needed, migrants were granted citizenship with ease and international labour migration was enormous. In sharp contrast, now, the cross-border movement of people is closely regulated and high restricted. Yet, since 1950, international labour movements have been significant in absolute terms, even if much less than in the nineteenth century and much smaller as a proportion of the total population.

The engagement of the developing countries in the world economy through international migration is attributable to the diaspora in the past and to globalization in the present. The diaspora has historical origins in indentured labour. There is a significant presence of the diaspora from India and China across the world not only in the industrialized countries but also in the developing countries. This is associated with entrepreneurial capitalism, Indian and Chinese, across the world. The advent of globalization has also made it easier to move people across borders, whether guest workers or illegal migrants, most of whom come from developing countries. On a smaller scale, there is a movement of professionals from developing countries who can migrate permanently, live abroad temporarily or stay at home and travel frequently for business. These people are almost as mobile as capital across borders. This phenomenon is associated with managerial capitalism.

---

[32] See Tinker (1974) and Lewis (1978). The movement of capital from European countries, together with migration of people from India and China as indentured labour for mines and plantations, sought to exploit natural resources or climatic conditions in Southeast Asia, southern Africa, and the Caribbean. This provided the primary commodities to support the process of industrialization and development in Europe and USA.

[33] For some countries such as the UK, Italy, Spain, and Portugal, such migration constituted as much as 20-40 per cent of their population. For evidence on the magnitudes of migration from Europe during this period, see Massey (1988). See also, Stalker (1994).

5 CATCH-UP IN INDUSTRIALIZATION

During the second half of the twentieth century, in sharp contrast with the period 1870–1950, developing countries experienced a discernible recovery in their share of world income even if it was not associated with any convergence in per capita income. This period also witnessed a steady increase in the engagement of developing countries with the world economy through international trade, international investment and international migration. In this context, it is worth exploring whether or not developing countries met with success in their quest for a catch-up in industrialization. The discussion that follows seeks to address this question by compiling and examining evidence on the share of developing countries in industrial production and manufactured exports in the world economy.

5.1 Industrial production

It is difficult to find time series evidence on industrial production in developing countries and in the world economy since 1950. And there are problems that arise from the comparability of data over time. Table 8 puts together evidence on the share of developing countries in manufacturing value added in the world economy over the period 1960–2007. It is made up of three time series. The series at 1975 constant prices provides data for the period 1960–80. The series at 1980 constant prices provides data for the period 1975–91. The series at 2000 constant prices provides data for the period 1990–2007. Obviously, figures from the three different series are not strictly comparable because of index number problems. But some overlap in time between the series at 1975 prices and 1980 prices, as also that between the series at 1980 prices and 2000 prices, makes it easier to interpret the trends. In this span of almost six decades, it is possible to discern three phases. During the period 1960–80, the share of developing countries in the world manufacturing value added, at 1975 constant prices, witnessed a modest increase from a little more than 8 to almost 11 per cent. During the period 1980–90, the share of developing countries in world manufacturing value added, at 1980 constant prices, experienced a slight increase from a little less than 14 to a little more than 15 per cent. During the period 1990–2007, the share of developing countries in world manufacturing value added, at 2000 prices, registered a sharp increase from 16 to more than 27 per cent, much of it beginning in the mid 1990s. These trends emerge with clarity from Figure 2 which outlines the share of developing countries in manufacturing value added in the world over the period 1960–2007. The overlap in time between the three series is also plotted in the figure. The trend is clear and striking.

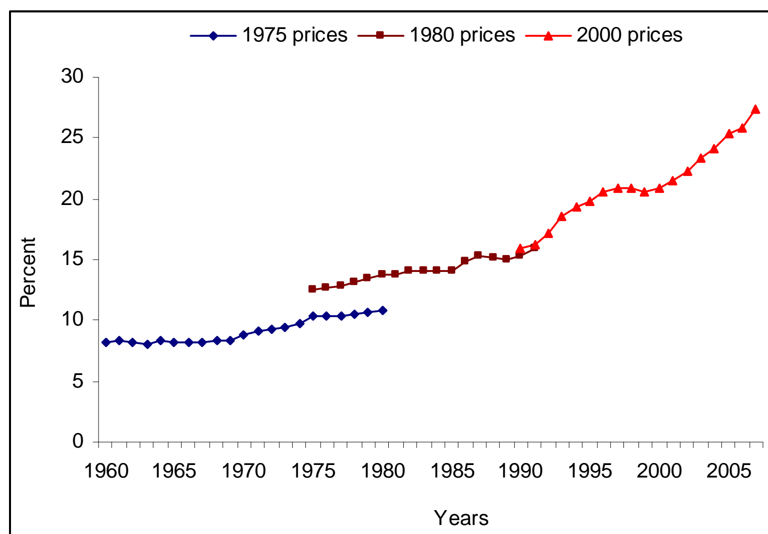
TABLE 8
SHARE OF DEVELOPING COUNTRIES IN WORLD MANUFACTURING VALUE ADDED

Year	Percentage share		Year	Percentage share	
	1975 prices	1980 prices		1980 prices	2000 prices
1960	8.2	…	1984	14.1	…
1961	8.4	…	1985	14.1	…
1962	8.2	…	1986	14.8	…
1963	8.1	…	1987	15.3	…
1964	8.3	…	1988	15.1	…
1965	8.2	…	1989	15.0	…
1966	8.2	…	1990	15.3	16.0
1967	8.2	…	1991	15.9	16.3
1968	8.3	…	1992	…	17.2
1969	8.4	…	1993	…	18.6
1970	8.8	…	1994	…	19.3
1971	9.1	…	1995	…	19.8
1972	9.3	…	1996	…	20.5
1973	9.4	…	1997	…	20.9
1974	9.8	…	1998	…	20.9
1975	10.3	12.6	1999	…	20.5
1976	10.3	12.7	2000	…	20.9
1977	10.4	12.9	2001	…	21.5
1978	10.5	13.1	2002	…	22.2
1979	10.7	13.4	2003	…	23.3
1980	10.9	13.7	2004	…	24.1
1981	…	13.7	2005	…	25.4
1982	…	14.0	2006	…	25.9
1983	…	14.1	2007	…	27.3

Source: UNIDO (a) 1975 constant prices, UNIDO (1981); (b) 1980 constant prices, UNIDO *International Yearbook of Industrial Statistics 1995, 1997*; (c) 2000 constant prices, UNIDO Secretariat.

Note: The percentage figures have been calculated from data on US dollar values at constant prices for each of the series.

FIGURE 2
SHARE OF DEVELOPING COUNTRIES IN WORLD MANUFACTURING VALUE ADDED



Source: Table 8.

Some comparison with the past is instructive. The share of developing countries in world industrial output was 73 per cent in 1750, 67.7 per cent in 1800 and 60.5 per cent in 1830.[34] At that time, the level of industrialization in the developing countries was comparable, even if not at par with that in industrialized countries. Industrial production per capita in developing countries, as a proportion of that in developed countries, was as much as seven-eighths in 1750, three-fourths in 1800 and one-half in 1830.[35] Of course, the dominant share of, as also the industrialization level in, developing countries was attributable to traditional production before the advent of the industrial revolution which led to a rapid expansion of manufacturing output from factory production. Industrialization in Western Europe, and somewhat later in the USA, led to a dramatic transformation in the situation. The share of developing countries in industrial production dropped sharply from 36.6 per cent in 1860 to 11 per cent in 1900 and 7.5 per cent in 1913.[36] Over the same period, industrial production per capita in developing countries, as a proportion of that in developed countries, dropped from one-fourth in 1860 to one-eighteenth in 1900 and a mere one-twenty-eighth in 1913.[37] It would seem that the developing world, particularly Asia, experienced a dramatic deindustrialization over the period 1830–1913. In fact, the share of developing countries in world industrial production stayed in the range of seven to eight per cent, its 1913 level, until around 1970.

It is clear that there has been a dramatic transformation in the situation since 1970, as the share of developing countries in world industrial production has trebled in a short span of thirty-five years. In terms of simple arithmetic, this was attributable, in part, to the slowdown in growth of industrial production in the industrialized countries and, in part, to

---

[34] These shares are estimated by, and reported in, Bairoch (1982: 275).

[35] For a discussion of, and evidence on, levels of industrialization, see Bairoch (1993: 88-92).

[36] See Bairoch (1982: 275).

[37] See Bairoch (1993: 91).

the acceleration in growth of industrial production in developing countries. The latter is important. It would mean too much of a digression to enter into a detailed discussion about underlying factors. Suffice it to say that the observed outcome is attributable, in important part, to development strategies and economic policies in the post-colonial era which created the initial conditions and laid the essential foundations in countries that were latecomers to industrialization. The much maligned import substitution led strategies of industrialization made a critical contribution in this process of catch-up.[38] Of course, a complete explanation would be far more complex. All the same, it is worth noting that the role of the state was critical in the process. Industrialization was not so much about getting-prices-right, as it was about getting state-intervention-right.[39] Indeed, even in the small East Asian countries, often cited as the success stories, the visible hand of the state was much more in evidence than the invisible hand of the market.[40] Apart from an extensive role for governments, the use of borrowed technologies, an intense process of learning, the creation of managerial capabilities in individuals and technological capabilities in firms, the nurturing of entrepreneurs and firms in different types of business enterprises, were the major factors underlying this catch-up in industrialization.[41] The creation of initial conditions was followed by a period of learning to industrialize so that outcomes in industrialization surface with a time-lag. Clearly, it was not the magic of markets that produced a sudden spurt in industrialization.[42]

5.2 Manufactured exports

This catch-up in industrialization was reflected in the emergence of developing countries as important sources of manufactured exports. Table 9 presents evidence on the share of developing countries in manufactured exports in the world economy during the period 1960–2006. In this span of almost five decades, it is possible to discern three phases. During the period 1960–75, the share of developing countries in world manufactured exports was stable in the range of 5 per cent through the 1960s and registered a modest increase thereafter to a level of about 7 per cent in the mid 1970s. During the period 1975–90, the share of developing countries in world manufactured exports multiplied by more than 2.5 from 6.8 per cent in 1975 to 17.8 per cent in 1990. During the period 1990–2006, the share of developing countries in world manufactured exports continued to increase rapidly and almost doubled from 17.8 per cent in 1990 to 34.2 per cent in 2006. These trends emerge even more clearly from Figure 3 which outlines the share of developing countries in world manufactured exports over the period 1960–2006.

---

[38] See, for example, Helleiner (1992), Rodrik (1992) and Nayyar (1997).

[39] There is and extensive literature on the subject. See, for instance, Stiglitz (1989); Shapiro and Taylor (1990); Bhaduri and Nayyar (1996); and Lall (1997).

[40] This proposition, developed at some length—by Amsden (1989); Wade (1991); Chang (1996)—is now widely accepted.

[41] For a complete and convincing exposition of this argument, see Amsden (2001). See also, Dahlman et al. (1987); Lall (1990); Chang (2002).

[42] In this context, it is important to note that much the same can be said about the now industrialized countries, where industrial protection and state intervention were just as important, at earlier stages of their development when they were latecomers to industrialization. This argument, supported by strong evidence, is set out with admirable clarity by Chang (2002). Reinert (2007) develops a similar hypothesis.

TABLE 9
SHARE OF DEVELOPING COUNTRIES IN WORLD MANUFACTURED EXPORTS

Year	Share (%)	Year	Share(%)
1960	5.1	1984	14.3
1961	5.0	1985	14.6
1962	4.9	1986	13.9
1963	5.2	1987	15.6
1964	5.2	1988	16.8
1965	4.8	1989	18.1
1966	5.3	1990	17.8
1967	5.3	1991	19.6
1968	5.2	1992	21.3
1969	5.5	1993	23.8
1970	6.1	1994	24.7
1971	5.8	1995	25.2
1972	6.2	1996	25.7
1973	7.4	1997	25.1
1974	7.4	1998	24.5
1975	6.8	1999	25.6
1976	8.1	2000	28.1
1977	8.3	2001	27.5
1978	8.8	2002	28.1
1979	9.5	2003	30.4
1980	10.6	2004	31.5
1981	11.4	2005	33.3
1982	11.8	2006	34.2
1983	13.0		

Source: UN, UNCOMTRADE database.

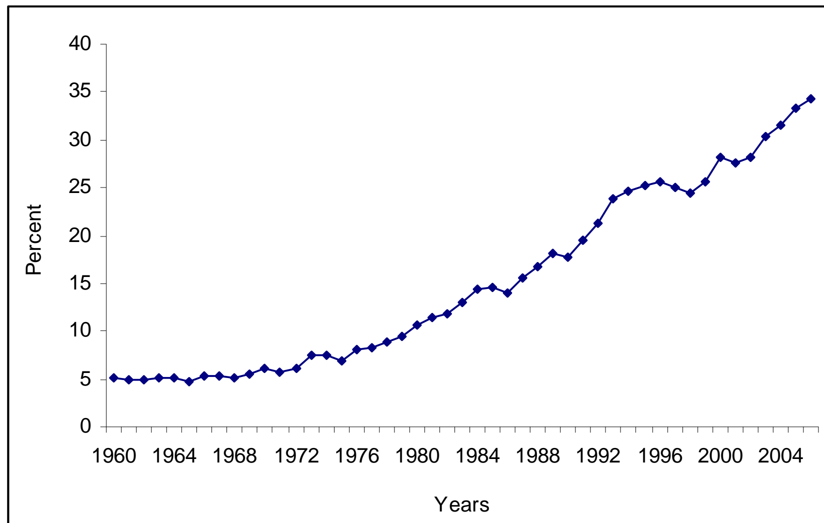
Note: Manufactured goods are defined as SITC 5 to 8 less 68. The percentage figures have been calculated from data on US dollar values at current exchange rates.

It is worth noting that the share of developing countries in world manufacturing value added was higher than their share in world manufactured exports until around 1980. These two shares were roughly similar through the 1980s. Beginning in the 1990s, however, the share of developing countries in world manufactured exports progressively exceeded their share in world manufacturing value added.

It is plausible to suggest that there were two sets of factors underlying these trends which were inter-connected but sequential in time. First, for developing countries, external markets became increasingly important in the process of industrialization. It began with Brazil and Mexico in Latin America in the mid 1960s, where rapid export growth did not continue beyond the late 1970s. But export expansion continued, indeed gathered momentum, with the East Asian success stories: Korea, Hong Kong, Taiwan and Singapore. The small Southeast Asian economies, Malaysia and Thailand, followed in their footsteps. And it was not long before China and India, the mega economies in Asia, also

sought access to external markets.[43] Second, as globalization gathered momentum in the late twentieth century, there was a progressive integration of developing countries into the world economy, particularly in the sphere of international trade. It began with transnational corporations from industrialized countries sourcing imports of labour-intensive manufactured goods from selected developing countries by relocating production or through sub-contracting.[44] In time, this provided opportunities for domestic firms in developing countries which had created the initial conditions for industrialization to manufacture for the world market in collaboration or competition with transnational corporations.

FIGURE 3
SHARE OF DEVELOPING COUNTRIES IN WORLD MANUFACTURED EXPORTS



Source: Table 9.

6 UNEQUAL PARTICIPATION AND UNEVEN DEVELOPMENT

It is important to recognize that aggregates for the developing world may be deceptive. The observed increase in the share of developing countries in world output, international trade and manufacturing production, during the second half of the twentieth century, may create the impression of widespread development. This is misleading as much of the catch-up is concentrated in a few developing countries: China, Hong Kong, India, Indonesia, Korea, Malaysia, Singapore and Thailand in Asia; Argentina, Brazil and Mexico in Latin America; and South Africa in Africa. This group of 12 countries is diverse in size and history. The process of catch-up is also not uniform across these countries in its start or

---

[43] It is worth noting that export performance in China beginning 1979, India beginning 1980 and in Brazil beginning 1964 but only until 1980, was roughly comparable with that in Japan beginning 1960 and Korea beginning 1965 (Nayyar 2010).

[44] For a detailed discussion on this issue, see Nayyar (1978).

speed. Yet, their overwhelming importance in the developing world is clear enough. And this grouping is not significantly different from the grouping of late-industrializing countries, which began an impressive catch-up with 'the West' during the second half of the twentieth century, described as 'the rest' by Alice Amsden.[45]

Table 10 presents evidence on the economic significance of these selected countries in the developing world from 1970 to 2006. It reveals their dominance with overwhelmingly large shares of population and income. Between 1970–2005, their share in GDP of the developing world rose from 62 to 68 per cent, although their share in the total population of the developing world decreased from 66 to 60 per cent. That is not all. These selected countries also dominated the engagement of developing countries with the world economy in international trade, international investment and international finance.

TABLE 10
THE SIGNIFICANCE OF 12 SELECTED COUNTRIES IN THE DEVELOPING WORLD
(AS PERCENTAGES OF THE TOTAL FOR DEVELOPING COUNTRIES)

	1970	1975	1980	1985	1990	1995	2000	2005	2006
GDP	61.6	56.7	51.6	55.3	63.2	69.4	68.2	68.4	72.7
Population	66.2	65.8	65.1	64.1	63.2	62.2	61.4	60.4	n.a.
Exports	32.9	26.5	34.9	60.3	69.3	78.5	72.4	72.9	75.0
Imports	41.3	38.1	47.4	59.0	69.9	76.4	74.2	74.1	76.3
Manufacturing value added	69.5	69.7	69.8	70.0	74.9	81.5	83.3	85.7	86.1
Manufactured exports	na	na	77.8	79.2	83.4	88.9	86.9	87.6	89.4
FDI inward stock	na	na	76.4	68.6	68.8	71.2	72.2	67.6	67.8
FDI outward stock	na	na	74.3	72.7	64.0	72.3	74.3	69.8	72.7
Foreign exchange reserves	40.8	17.9	28.9	48.1	63.2	72.3	71.9	76.4	75.9

Sources: For GDP at current prices: World Bank, *World Development Indicators*. For population: UN, Population Division, UNDATA. For exports and imports: UN, UNCOMTRADE Statistical Database (data on exports and imports are in current prices at current exchange rates). For manufacturing value added: 1970-1985, UN Statistics Division, National Accounts Main Aggregates Database (at current prices); 1990–2006, Table 11 (at constant 2000 prices). For manufactured exports: UN, UNCOMTRADE statistical database (data are in current prices at current exchange rates). For FDI: UNCTAD: FDI On-line. (http://stats.unctad.org/FDI/). For foreign exchange reserves: IMF, *International Financial Statistics*.

Notes: The 12 selected countries are: Argentina, Brazil, China, Hong Kong, India, Indonesia, Korea, Malaysia, Mexico, Singapore, South Africa and Thailand. The percentages have been calculated from the dollar values for the selected developing countries and the total for developing countries. The figures on the share of the 12 selected countries in manufacturing value added in the developing world for the period 1990–2006, which are based on data at constant prices, are not strictly comparable with the corresponding figures for the period 1970-1985, which are based on data at current prices.

[45] The group of 12 late-industrializing economies studied by Amsden (2001) is made up of Argentina, Brazil, Chile, Mexico, China, India, Indonesia, Malaysia, South Korea, Taiwan, Thailand and Turkey. The grouping in this paper, in comparison, includes Hong Kong, Singapore and South Africa but excludes Chile, Taiwan and Turkey. Taiwan is not included simply because UN statistics do not provide information on Taiwan which is reported as a Province of China. Hong Kong and Singapore are included because they were such an integral part of the East Asian miracle, while South Africa is included as the largest and most industrialized economy in Africa. Both groupings include two sets of countries: 'the integrationists' (Mexico, Hong Kong, and Singapore) characterized by a heavy reliance on foreign direct investment and minimal local R&D, and 'the independents' (China, India, Korea, and Brazil) which developed national firms and technological capabilities.

Between 1970 and 2005, their share in total exports from developing countries more than doubled from 33 to 73 per cent, while their share in total imports of developing countries rose from 41 to 74 per cent. Their share in the stock of foreign direct investment in the developing world, both inward and outward, was two-thirds to three-fourths during the period 1980–2005. Their share of foreign exchange reserves held by developing countries increased from 41 per cent in 1970 to 76 per cent in 2005. It is worth noting that the shares of these selected countries in exports, imports and foreign exchange reserves of the developing world were not so dominant in 1975 and 1980 essentially because high oil prices meant that the shares of oil-exporting countries were higher. The dominance of the selected countries is striking in the spheres of industrial production and manufactured exports. Between 1980 and 2005, their share in manufacturing value added in the developing world rose from 70 to 86 per cent while their share in manufactured exports from the developing world rose from 78 to 88 per cent. Their dominance in industrial production is illustrated even more clearly by Table 11 which outlines the trends in the share of these selected developing countries in manufacturing value added in developing countries and in the world economy during the period 1990–2007. It shows that, in 2007, these countries accounted for 87 per cent of the manufacturing value added in the developing world and 24 per cent of manufacturing value added in the world economy as a whole.[46] In effect, therefore, much of the catch-up in the developing world is concentrated in a dozen countries.

The obvious determinants of such concentration are size, growth and history. In terms of size, most of the selected countries, except Hong Kong, Singapore and Malaysia, are large in population, area and income as compared with most countries in the developing world. In the sphere of growth, all the Asian countries in this group have experienced high rates of economic growth, even if the step-up in growth rates started at somewhat different points of time, for Korea, Hong Kong and Singapore, or Malaysia and Thailand, or China and India, as compared with most countries in the developing world. In the realm of history, about half of these countries, in particular China and India but also Argentina, Brazil, Mexico and South Africa, have always been dominant in their respective regions of the developing world and have also been significant in the wider context of the world economy. Therefore, it is essential to recognize that such concentration is not new. It is another matter that Brazil and Mexico were success stories before 1980 while China and India were success stories after 1980. But it is worth noting that the Asian countries in the group, which had created the requisite initial conditions, did also capture the benefits from the process of globalization during the last quarter of the twentieth century, in much the same way as a few latecomers to industrialization, in particular the USA, captured the benefits from the process of globalization during the last quarter of the nineteenth century. In contrast, Argentina benefited from the process of globalization during the period 1870–1914, while Brazil and Mexico were the success stories of import-substitution-based and state-led industrialization during the period 1950–80. In either case, unlike Asia, Latin America, with the possible exception of Chile, did not quite benefit from the process of globalization during the period 1980–2005.

---

[46] The inclusion of Taiwan, for which comparable UN statistics on manufacturing value added are available, suggests an even greater concentration. The share of the twelve selected developing countries plus Taiwan in manufacturing value added was almost 93% in the developing world and more than 25% in the world economy.

TABLE 11
SHARE OF SELECTED DEVELOPING COUNTRIES
IN MANUFACTURING VALUE ADDED

	Manufacturing value added (US$ million)			Selected countries share in MVA (percentages)	
Year	Selected countries	DCs	World	DCs	World
1990	515.0	687.8	4299.1	74.9	12.0
1991	530.6	704.8	4332.2	75.3	12.2
1992	572.8	750.3	4365.4	76.3	13.1
1993	637.4	815.2	4391.0	78.2	14.5
1994	709.2	881.8	4575.2	80.4	15.5
1995	773.0	948.5	4786.5	81.5	16.2
1996	831.9	1015.4	4955.0	81.9	16.8
1997	885.8	1089.6	5201.2	81.3	17.0
1998	885.4	1106.0	5283.7	80.1	16.8
1999	911.0	1115.5	5432.7	81.7	16.8
2000	1006.6	1208.0	5775.7	83.3	17.4
2001	1019.4	1219.7	5664.0	83.6	18.0
2002	1071.5	1274.8	5748.0	84.1	18.6
2003	1180.1	1392.6	5969.2	84.7	19.8
2004	1299.1	1524.7	6328.9	85.2	20.5
2005	1435.2	1674.5	6602.9	85.7	21.7
2006	1552.1	1802.1	6949.3	86.1	22.3
2007	1674.1	1932.1	7065.5	86.6	23.7

Source: UNIDO Secretariat.

Note: The selected 12 countries are: Argentina, Brazil, China, Hong Kong, India, Indonesia, Korea, Malaysia, Mexico, Singapore, South Africa, and Thailand. The values for manufacturing value added are in US dollars at constant 2000 prices. The percentages have been calculated.

7 GROWTH PERFORMANCES OF DEVELOPING COUNTRIES

The changes in the significance of any subset of countries in the world economy over time depend upon their performance, in terms of economic growth, as compared with the rest of the world. In this context, growth performance matters in explaining the past, understanding the present and extrapolating the future.

Consider, first, explaining the past. Table 12 presents evidence on growth rates in GDP and GDP per capita, in the world economy, by regions, in a long-term historical perspective for the periods 1820–70, 1870–13, 1913–50, 1950–73, and 1973–98. These growth rates are based on estimates of GDP and GDP per capita, in 1990 international Geary-Khamis dollars, for the selected benchmark years. The progressive, indeed rapid, decline in the relative importance of developing countries in the world economy over the period from 1820 to 1950 is easily explained in terms of slow growth in GDP as compared with West Europe, North America, East Europe and Japan. The differences in the relative importance

of regions within the developing world that surfaced over time can also be explained in terms of differences in growth performance. From 1820 to 1950, the dramatic decline in the share of Asia in world income was attributable to the much slower GDP growth as compared with every other part of the world. The relatively stable share of Africa in world income was attributable to respectable GDP growth rates that were not significantly lower than elsewhere in the world, whereas the sharp increase in Latin America's share in world income was attributable to GDP growth rates that were much higher than any other part of the world.

TABLE 12
GROWTH RATES IN THE WORLD ECONOMY BY REGIONS: 1820–1998
(PER CENT PER ANNUM)

GDP	1820–1870	1870–1913	1913–1950	1950–1973	1973–1998
Asia	0.03	0.94	0.90	5.18	5.46
Africa	0.52	1.40	2.69	4.45	2.74
Latin America	1.37	3.48	3.43	5.33	3.02
Western Europe	1.65	2.10	1.19	4.81	2.11
Western offshoots	4.33	3.92	2.81	4.03	2.98
Eastern Europe	1.36	2.31	1.14	4.86	0.73
Former USSR	1.61	2.40	2.15	4.84	-1.15
Japan	0.41	2.44	2.21	9.29	2.97
GDP per capita	**1820–1870**	**1870–1913**	**1913–1950**	**1950–1973**	**1973–1998**
Asia	-0.11	0.38	-0.02	2.92	3.54
Africa	0.12	0.64	1.02	2.07	0.01
Latin America	0.10	1.81	1.43	2.52	0.99
Western Europe	0.95	1.32	0.76	4.08	1.78
Western offshoots	1.42	1.81	1.55	2.44	1.94
Eastern Europe	0.63	1.31	0.89	3.79	0.37
Former USSR	0.63	1.06	1.76	3.36	-1.75
Japan	0.19	1.48	0.89	8.05	2.34

Source: Maddison (2001: Appendix A: 1d 1e, 2d 2e, 3d 3e and 4d 4e).

Note: West Europe includes 16 selected countries. Western offshoots includes USA, Canada, Australia and New Zealand. East Europe includes seven selected countries. Asia includes 56 selected countries. Africa includes 57 selected countries. Latin America includes 44 selected countries.

The divergence or convergence in per capita income between groups of countries that emerged over time, highlighted earlier in the paper, is clearly reflected in differences in growth rates of GDP per capita. From 1820 to 1950, there was a great divergence in per capita income between West Europe and North America on the one hand and Asia on the other, but this divergence was much less in Latin America as also Africa. The divergence in per capita incomes between West Europe and Asia is striking.[47] Even if it is tautological, the widening productivity gap was the essential underlying factor. There was sustained productivity growth with industrialization in Western Europe and a steady productivity decline with deindustrialization in Asia. It has been argued that the great divergence between Europe and Asia, during the nineteenth century, was attributable to the

[47] It is worth noting that, *circa* 1750, life expectancy, consumption levels and product markets in these two parts of the world were similar and living standards of the people were not far apart (Pomeranz 2000).

fortunate location of coal, which substituted for timber, and trade with the Americas that allowed West Europe to grow along resource-intensive and labour-saving paths, while Asia hit a cul-de-sac.[48] This argument does not, indeed cannot, provide a complete explanation, for the basic causes were manifold and complex. The economic growth in West Europe was, in important part, also attributable to the organization of production in the capitalist system, based on a division of labour associated with capital accumulation and technical progress. International migration, which moved people from land-scarce Europe to land-abundant America, supported the process. And the outcome was a structural transformation in the composition of output and employment. This process, which moved labour from employment in agriculture to manufacturing, in turn, led to sustained increases in productivity. The access to resources from colonies in the Americas and elsewhere was just one part of the story.

The evidence presented in Table 12 also explains the changes in the significance of developing countries in the world economy and the observed regional differences within them during the second half of the twentieth century. Just as differences in growth rates of GDP per capita mirror the divergence or convergence in per capita income as compared with industrialized countries. However, this table, which seeks to focus attention on long-term changes, is not entirely appropriate for a study of the period since 1950. There are two reasons. First, it is based on three selected benchmark years, whereas complete time-series data on GDP and GDP, from national accounts statistics, are available starting 1950. Second, evidence available suggests that 1980, rather than 1973, was the turning point in terms of economic growth, when there was a discernible break in the trend almost everywhere in the world economy.[49]

To focus on the periods since 1950, Table 13 presents evidence on growth rates in GDP and GDP per capita for regions within the developing world, the developing countries, the industrialized countries and the world economy, during the periods 1951–80 and 1981–2005. It is worth noting that time-series data on GDP and GDP per capita for the entire period 1951–2005 are not available from a single source. The figures for the period 1951–80 are based on the Maddison data, as UN data are not available before 1971. The figures for the period 1981–2005 are based on UN data because Maddison data are not available after 2001. These two sources are not strictly comparable. However, it is possible to resolve the problem, as data are available from both sources for the period 1981–2000. To facilitate a comparison, Table 13 also presents figures on growth rates during 1981–2000, computed separately from Maddison data and UN data. A comparison of the two sets of growth rates during the period 1981–2000, for which both sources are available, shows that the numbers correspond closely, Thus, it is reasonable to infer that the growth rates for the periods 1951–80 and 1981–2005, even if computed from different sources, are comparable.

---

[48] This hypothesis is the essential theme in Pomeranz (2000).

[49] This proposition is set out, with supporting evidence, in Nayyar (2008b). See also, Amsden (2007).

TABLE 13
GROWTH RATES IN THE WORLD ECONOMY BY REGIONS: 1951–2005
(PER CENT PER ANNUM)

	Maddison data		UN data	
	1951-1980	1981-2000	1981-2000	1981-2005
GDP				
Asia	6.28	4.04	3.90	4.06
Latin America	4.69	2.01	2.09	2.26
Africa	4.12	2.42	2.60	2.97
Developing countries	4.84	2.65	2.74	3.04
Industrialized countries	4.40	2.56	2.59	2.50
World	4.77	2.64	2.72	2.95
GDP per capita				
Asia	2.90	1.61	1.36	1.63
Latin America	2.11	0.15	0.20	0.44
Africa	1.66	-0.17	-0.06	0.39
Developing countries	2.19	0.39	0.42	0.80
Industrialized countries	3.50	2.04	2.06	1.96
World	2.40	0.66	0.69	0.99

Source: Nayyar (2008b).

Notes:

(a) The growth rates for each period are computed as geometric means of the annual growth rates in that period.

(b) The Maddison data and the UN data on GDP and GDP per capita are not strictly comparable.

(c) The Maddison data on GDP and GDP per capita, which are in 1990 international Geary-Khamis dollars, are PPPs used to evaluate output that are calculated based on a specific method devised to define international prices. This measure facilitates inter-country comparisons.

(d) The UN data on GDP and GDP per capita are in constant 1990 US dollars.

(e) The figures in this table for the world economy cover 128 countries, of which 21 are industrialized countries and 107 are developing countries.

(f) Latin America includes the Caribbean.

The arrest of the decline in the relative importance of developing countries in the world economy, during the period 1951–80, is easily explained in terms of GDP growth rates that were somewhat higher than GDP growth rates in industrialized countries. And the significant increase in the importance of developing countries since 1980 is clearly attributable to GDP growth rates that were higher than in industrialized countries. It would seem that economic growth in all regions in the developing world during the period 1951–80 was impressive and much better than it was during the period 1820–1950. The divergence within the developing world began thereafter. The modest recovery in Asia's share of world income after 1950, followed by its rapid rise since 1980, was attributable to much higher GDP growth rates than elsewhere in the world. Economic growth in Latin America during the period 1951–80 was also comparable with that in industrialized countries so that it increased its share of world income, but its growth performance was distinctly worse after 1980 so that there was some decline in its share of world income. Similarly, Africa experienced a contraction in its share of world income, particularly after 1980, as GDP growth rates were lower than elsewhere in the world.

Economic growth in the developing world during the second half of the twentieth century was not associated with any convergence in per capita incomes as compared with the industrialized world. The divergence in per capita incomes persisted. In fact, for Latin America and Africa, this divergence registered a significant increase in the period since 1980. Asia was, perhaps, the exception in so far as the divergence stopped and there was a modest beginning in terms of closing the income gap starting 1980, but it was not quite convergence except in a few countries. This is reflected in the persistent, and for some regions mounting, differences in growth rates of GDP per capita. Table 13 shows that even where GDP growth rates in developing countries were higher than in developing countries, GDP per capita growth rates were significantly lower because population growth rates remained at high levels as death rates declined but birth rates did not. Indeed, during the period 1981–2005, despite the economic slowdown in rich countries, growth in GDP per capita in the industrialized world was about two per cent per annum, as compared with a growth in GDP per capita that was 0.8 per cent per annum in developing countries, 0.4 per cent per annum in Latin America and Africa, and 1.6 per cent per annum in Asia. The catch-up in industrialization and development was obviously limited to a small number of developing countries where economic growth was associated with a structural change in the composition of output and employment that also led to an improvement in the living conditions of most people in these countries.[50]

Growth performance matters, not only in explaining the past but also for understanding the present, which is a significant determinant of the future. For one, it constitutes a starting point: where you get depends upon where you start out from. For another, growth performance in the present exercises an important influence on sustainable growth in the future so that it shapes the growth rate that can be assumed in future projections. The significance of the present is clearly illustrated by the impact of the financial crisis and economic turndown that surfaced in late 2008 and has led to a sharp slowdown in economic growth across countries in the world economy. Obviously, this has implications for the prospects of a catch-up for developing countries as a slowdown in growth would prolong the process in time. What is more, it suggests that, if recovery is slow in the industrialized world, the developing countries can moderate their slowdown, even if they cannot sustain their present growth rates, by a greater reliance on domestic rather than external markets.

Most growth scenarios for the future are based on an extrapolation of growth from the past. In attempting future projections, such exercises assume that growth rates would remain at levels observed in the recent past. The crisis and the downturn in the world economy would require a modification in the assumptions about plausible rates of growth. It must be said that, for any given assumption about growth, these projections suggest broad orders of

---

[50] This hypothesis is developed, at some length, by Ocampo et al. (2009). The authors attempt to explain divergences in growth and development over the past fifty years between countries that are latecomers to industrialization. The focus is on links between economic structure, policy and growth. The concept of economic structure refers to the composition of production activities, the associated patterns of specialization in international trade, the technological capabilities of the economy, the educational level of the labour force, the structure of ownership, the nature of essential State institutions and the development of (or constraints on) markets, which, taken together, can either constrain policy choice or widen policy choice. This approach is used to explain why some countries succeeded in their pursuit of development but there was a much larger number that did not. UN (2006) also attempts a similar analysis of divergences in growth and development.

magnitude rather than precise predictions.[51] Even so, such projections highlight the power of compound growth rates because growth rates do, indeed, matter. If GDP grows at ten per cent per annum, national income doubles in seven years. If GDP grows at seven per cent per annum, national income doubles in ten years. If GDP per capita grows at five per cent per annum, per capita income doubles in fourteen years. In the period since 1950, growth rates for some countries in Asia, to begin with Japan and Korea, then China and India, have been in this range for some time. If such growth rates are sustained, their cumulative impact over time is no surprise. However, growth is not simply about arithmetic. In fact, it is about more than economics.

8 TRANSFORMING GROWTH INTO DEVELOPMENT

The growth performance of the developing world during the second half of the twentieth century was impressive in the aggregate, particularly as compared with the preceding 80 years, but it was uneven across regions and countries. It must be recognized that such growth, even if it had been distributed in a more equal manner across geographical space, may not have been sufficient. The essential problem was that rapid economic growth was usually not transformed into meaningful development that improved the living conditions or ensured the wellbeing of ordinary people. Of course, in a few countries rapid growth led to meaningful development. But in a larger number of countries growth did not lead to development. And a significant number of countries experienced neither growth nor development. The outcome was uneven development. It had three manifestations. First, there was a widening of the gap between rich and poor countries in the world. Second, there was an exclusion of countries, or regions within countries, from the process of development. Third, there was an exclusion of people associated with the persistence of widespread poverty in a world with pockets of prosperity.

Since 1950 we have witnessed a widening of the gap not only between industrialized and developing countries but also between countries within the developing world. It is worth putting this in its wider context by considering some historical evidence on world inequality.

8.1 International inequality

There are three concepts of international inequality.[52] The first is a measure of income distribution between countries, un-weighted by population, which assumes that each country, irrespective of its size of population, is made up of a representative individual and the per capita income of countries determines inter-country income distribution in the world. The second is a measure of income distribution between countries, weighted by population, which assumes that intra-country income distribution is perfectly equal and uses per capita income in each country weighted by its population to determine inter-country income distribution in the world. The third is a measure of income distribution

[51] For a more detailed discussion on projecting growth rates in the world economy, see Nayyar (2010).

[52] For a lucid discussion on measurement of international inequality, see Milanovic (2005).

between people in the world estimated from the actual incomes of individuals irrespective of the countries where they live.

FIGURE 4
WORLD INEQUALITY IN HISTORICAL PERSPECTIVE: 1820 TO 2000

Figure 4a: Population-unweighted country distribution

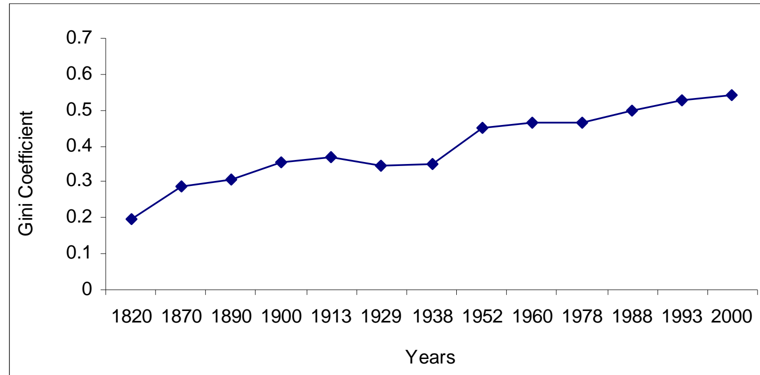


Figure 4b: Population-weighted country distribution

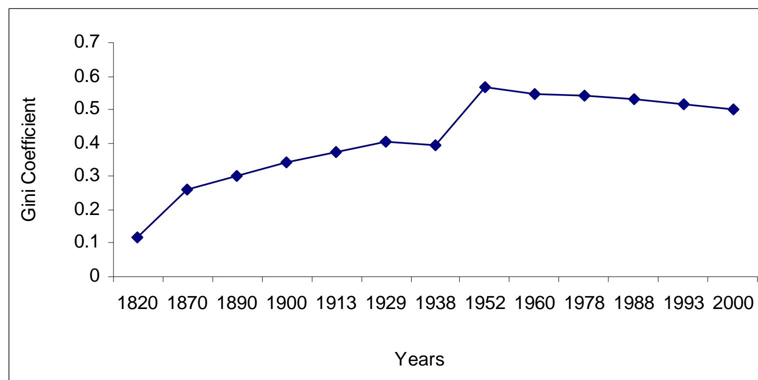
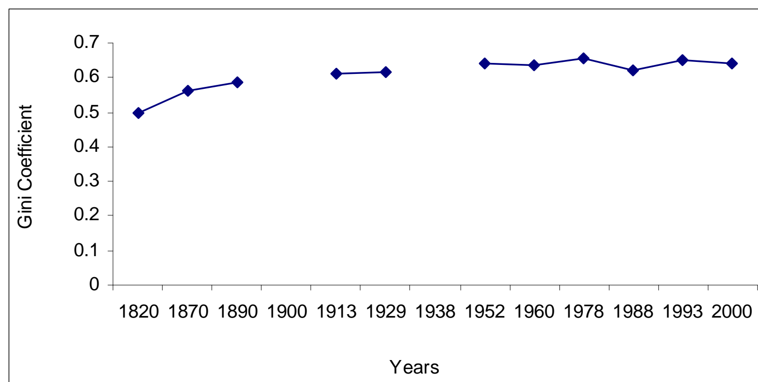


Figure 4c: Global income inequality among people



Source: Milanovic (2005).

Figure 4 presents available evidence on world inequality in historical perspective, measured by Gini coefficients, over the period from 1820 to 2000.[53] Figure 4a shows that the population un-weighted international inequality between countries increased rapidly from 1820 to 1913 and, once again, from 1938 to 2000. Figure 4b shows that the population weighted international inequality between countries increased even more rapidly during 1820–1929 and, once again, during 1938–52 but declined slowly thereafter until 2000. This trend in declining international inequality is attributable almost entirely to the increase in per capita income in two countries, China and India, with large populations. And if China and India are excluded, population weighted international inequality does not register a decline after 1980. When China alone is excluded, the clearly decreasing trend is replaced by a mildly increasing trend beginning in the early 1980s. When China and India are both excluded, the clearly decreasing trend is replaced by a clearly increasing trend beginning, once again, in the early 1980s. Obviously, in the period since 1980, the economic size and the rapid growth of China and India make this significant difference to population weighted international inequality.[54] Figure 4c shows that global income inequality among people, which increased rapidly from 1820 to 1913, and remained in roughly the same range thereafter until 2000, was much higher than the international inequality between countries. In sum, international inequality between countries increased rapidly during 1820–1913 and increased, once again, during 1952–2000 excluding China and India. Income inequality among people in the world increased rapidly during 1820–1913 and remained in that range at a somewhat higher level from 1952 to 2000.

8.2 Widening gap between countries

During the second half of the twentieth century, the income gap between rich and poor countries widened. It is worth citing some statistics. The ratio of GDP per capita in the 20 richest countries to GDP per capita in the 20 poorest countries of the world rose from 54:1 during 1960–62 to 121:1 during 2000–02.[55] The ratio of GDP per capita in the richest country to GDP per capita in the poorest country of the world rose from 190:1 in 1960 to 545:1 in 2000.[56] This comparison is based on data in constant prices but at nominal exchange rates. In terms of PPP, the difference is not as high but the widening of gap over time is more pronounced. The Maddison data, in 1990 international Geary-Khamis dollars, show that the ratio of GDP per capita in the richest country to GDP per capita in the poorest country of the world rose from 32:1 in 1960 to 129:1 in 2000.[57]

---

[53] The data for this figure are obtained from Milanovic (2005: Table 11.1).

[54] For a detailed discussion, with supporting evidence, see Milanovic (2005: 85-7). In this context, it is worth noting that that the exclusion of China makes more difference than the exclusion of India, while the exclusion of India makes little difference during the late twentieth century.

[55] See Nayyar (2006: 154).

[56] This ratio has been calculated from data on GDP per capita at constant 2000 dollars reported in World Bank (2007). In 1960, Switzerland was the richest and Burundi was the poorest in the world. In 2000, Luxembourg was the richest and Congo was the poorest in the world.

[57] These ratios have been calculated from data on GDP per capita in 1990 international Geary-Khamis dollars reported in Maddison (2003). In 1960, Switzerland had the highest per capita GDP at 12457 while Guinea had the lowest per capita GDP at 392. In 2000, the USA had the highest per capita GDP at 28129 while Zaire had the lowest per capita GDP at 218.

This international inequality was attributable largely to the widening gap between industrialized and developing countries. The evidence presented in Table 3 confirms the increasing divergence in per capita income between the industrialized world and every region of the developing world during 1950–2001 except for Asia since 1973. Table 14 presents evidence on the Theil coefficient of world inequality for all countries in 1960, 1980 and 2000. It shows that, throughout the period, more than 85 per cent of the population weighted inequality between countries in the world was attributable to inequality between regions. This was, in turn, entirely on account of the gap between industrialized countries and developing countries. In fact, a decomposition of the Theil coefficient of international inequality, by region, for 1960, 1980, and 2000 shows that the contribution of industrialized countries to overall inequality between countries in the world was greater than what was attributable to inequality between regions.[58]

TABLE 14
THEIL DECOMPOSITION OF INTERNATIONAL INEQUALITY
THEIL COEFFICIENT OF WORLD INEQUALITY FOR ALL COUNTRIES

	1960	1980	2000
Between regions	0.45 (*0.35*)	0.51 (*0.42*)	0.45 (*0.48*)
Within regions	0.07 (*0.07*)	0.05 (*0.05*)	0.08 (*0.09*)
TOTAL	0.51 (*0.42*)	0.56 (*0.48*)	0.53 (*0.56*)

THEIL COEFFICIENT OF DEVELOPING WORLD INEQUALITY

	1960	1980	2000
Between regions	0.25 (*0.17*)	0.26 (*0.17*)	0.08 (*0.12*)
Within regions	0.06 (*0.07*)	0.09 (*0.10*)	0.15 (*0.19*)
TOTAL	0.32 (*0.24*)	0.36 (*0.27*)	0.23 (*0.31*)

Source: UN (2006).

Note: The inequality index considers only inequality between countries and not inequality within countries. The inequality measure is weighted for the population in each country. The Theil coefficients are calculated from the data in Maddison (2001). In order to avoid the possible problem of end-years as outliers, the figures in this table are based on five-year averages for both GDP and population: 1958–62 for 1960, 1978–82 for 1980, and 1998–2001 for 2000. Figures in parenthesis are Theil coefficients for all countries excluding China.

Even so, international inequality between countries in the developing world was significant. What is more, it registered a discernible increase during the second half of the twentieth century. Between 1960–2000, the ratio of GDP per capita in the richest country to GDP per capita in the poorest country rose from 29:1 to 113:1 in Asia, from 24:1 to 118:1 in Africa and 16:1 to 37:1 in Latin America.[59] Table 13 also presents evidence on the Theil coefficient of developing world inequality. It shows that this inequality increased between 1960–80, as also between 1980–2000, if we exclude China. Over this period, in the developing world, the contribution of inter-regional inequality fell while that of intra-

---

[58] See UN (2006 Annex Table A1).

[59] These ratios have been calculated from data on GDP per capita in constant 2000 dollars reported in World Bank (2007). In Asia, in 1960, Hong Kong was the richest and China was the poorest, while, in 2000, Hong Kong was the richest and Nepal was the poorest. In Africa, in 1960, Seychelles was the richest and Burundi was the poorest, while, in 2000, Malta was the richest and Congo was the poorest. In Latin America and the Caribbean, in 1960, Bahamas was the richest and Honduras was the poorest, while, in 2000, Bahamas was the richest and Haiti was the poorest.

regional inequality rose. Available evidence confirms that between 1960–2000, international inequality within regions increased everywhere in the developing world, as also in the erstwhile socialist countries, although it diminished in the industrialized world.[60]

8.3 Exclusion of countries

There is, at the same time, an exclusion of countries, as also regions within countries, from the process of development. The least developed countries (LDCs) provide a most striking illustration.[61] The number of LDCs doubled from 24 in the early 1970s to 48 in the early 2000s. At the turn of the century, the share of LDCs in world output was less than one per cent. In fact, assets of the three richest people in the world were more than the combined GDP of all LDCs. Yet, LDCs, with 600 million people, accounted for ten per cent of the world population. In nominal terms, the average GDP per capita in LDCs was one-sixth of that in developing countries and one-hundredth of that in industrialized countries. Even in terms of PPP, GDP per capita in LDCs was three-tenth of that in developing countries and one-twenty-fifth of that in industrialized countries. Economic development has simply not created social opportunities for most people in LDCs. Adult literacy was less than 50 per cent as compared with more than 80 per cent in developing countries. Life expectancy at birth was 49 years as compared with 62 years in developing countries. Of the total population, 30 per cent of people were not expected to survive to the age of 40. Infant mortality rates were 108 per 1,000 births as compared with 65 per thousand births in developing countries. Gross enrolment ratios in tertiary education were less than two per cent as compared with 18 per cent in developing countries. More than 40 per cent of the population did not have access to safe drinking water. And, for every 1,000 people there were just three telephone lines, seven newspapers and not even one personal computer. The situation in LDCs is distinctly worse than the average in the developing world. It would seem that their exclusion from the process of development is an important factor underlying the international inequality between countries not only in the world as a whole but also within the developing world.

There is a similar exclusion of regions within countries from the process of development. This is not altogether new. But markets and liberalization tend to widen regional disparities because there is a cumulative causation which creates market-driven virtuous circles or vicious circles. Regions that are better endowed with natural resources, physical infrastructure, educated or skilled labour, experience a rapid growth. Like magnets, they attract resources from people elsewhere. In contrast, disadvantaged regions tend to lag behind and become even more disadvantaged. Over time, the gap widens through such cumulative causation. This has happened in most countries that have experienced rapid growth. There is an increase in economic disparities between the north and the south in Mexico, which is a function of distance from USA. In Brazil, regional inequalities between the northeast and the south, in particular Sao Paulo, increased significantly during the

---

[60] Between 1960-2000, the population unweighted Gini coefficient increased from 0.38 to 0.51 in Africa, from 0.36 to 0.53 in Asia, from 0.31 to 0.35 in Latin America and from 0.15 to 0.32 in Eastern Europe and the former USSR, but it decreased from 0.23 to 0.16 in the industrialized countries (Milanovic 2005: 48).

[61] Most of the statistics cited in this paragraph are reported in UNCTAD (2000). Some are obtained from later annual issues of the UNCTAD Report on *Least Developed Countries*.

period of rapid economic growth. The economic disparities between coastal China in the East and the hinterland in the West are much greater than before. In Indonesia, the economic gap between Java and the other islands is much wider. In India, the regions that already had a distinct economic lead have left other regions behind. In this context, it is interesting to note that the substitution of provinces in China and states in India, for the two largest countries, in estimates of international inequality leads to a significant change in the picture. The growing inter-regional inequality in China and India has a discernible impact on population weighted world inequality. If the provinces in China and states in India are treated as countries, the population weighted Gini coefficient of international inequality, so defined, reveals a significant increase since 1980.[62]

8.4 Exclusion of people

The exclusion of people from the process of development is a part of the same story. The incidence of poverty in the developing world circa 1950 was high. There was a modest reduction in the proportion of the population below the poverty line in most developing countries during the period 1950–80 but this reduction was nowhere near what was needed to diminish, let alone eradicate poverty. The period since then has witnessed a change for the worse, rather than better, in many parts of the developing world.[63] The incidence of poverty increased in most countries of Latin America, the Caribbean and sub-Saharan Africa during the 1980s and the 1990s. Much of Central Asia experienced a sharp rise in poverty during the 1990s. However, East Asia, Southeast Asia and South Asia experienced a steady decline in the incidence of poverty during this period. But most of this improvement is accounted for by changes in just two countries, with large populations, China and India.

Between 1990 and 2001, the proportion of people below the poverty line of PPP$1 per day dropped from 28 to 21 per cent of the population whereas the number of the poor dropped from 1.2 billion to 1.1 billion. However, most of this progress was in China and India. In this period, the number of the poor rose in Africa, Latin America and Central Asia. Yet, at the turn of the century, the number of people who could not meet basic human needs in terms of food and clothing, let alone shelter, education and health care, was more than 1 billion. If the poverty line is drawn at PPP$2 per day, between 1990–2001, the number of the poor in the world remained unchanged at 2.7 billion even if their proportion in world population dropped from 62 to 53 per cent. The evidence cited here is based on World Bank estimates.[64] Some have argued that the World Bank underestimates poverty while others have argued that the World Bank overestimates poverty.[65] The former is the more plausible of the two arguments, particularly if estimates of poverty were to use a more narrowly-defined consumption basket with greater weight for food and necessities. It

---

[62] For a more detailed discussion, with statistical analysis and supporting evidence, see Milanovic (2005: 96-100).

[63] See ILO (2004) and Nayyar (2006).

[64] For a succinct discussion of the trends in poverty, see Kaplinsky (2005).

[65] Pogge and Reddy (2002) estimate that, if the poverty line is drawn at $1 per day, in 1998, the number of the poor was 1,640 million (32% of world population). In contrast, Sala-i-Martin (2002) estimates that, if the poverty line is drawn at $1 per day, in 1998, the number of the poor was only 353 million which was less than 7% of the world population. The former is both more plausible and more convincing. For a detailed discussion, see Kaplinsky (2005).

would serve little purpose to enter into a discussion on the poverty debate here. For it is clear that at least one-fifth but possibly more than one-half the world population lives in absolute poverty, while the number of the poor in the world ranges from 1.1 to 2.7 billion, depending upon the poverty line drawn. These poor people live mostly in the developing world and constitute a significant proportion of its population. And this poverty has persisted at high levels during a period that has witnessed an increase in the share of developing countries in world income.

9 FUTURE PROSPECTS: DETERMINANTS AND CONSTRAINTS

Is it, then, possible to speculate or hypothesize about the future prospects of developing countries in the world economy? The past is relevant. And so is the present. There are underlying factors which suggest a strong potential for growth. But there are also real constraints on future growth. Much would depend upon whether or not developing countries can alleviate these constraints. Of course, each of these constraints can be eased through appropriate correctives or interventions. In the ultimate analysis, however, the constraints can be overcome in a sustainable manner only if economic growth is transformed into meaningful development, such that it improves the wellbeing of the people. If this happens, it would reinforce the process of growth and development through a cumulative causation. If this does not happen, developing countries will find catch-up difficult and will continue to lag behind the industrialized world.

The economic determinants of potential growth in the developing world are a source of good news. And, in principle, developing countries may be able to attain or sustain high rates of economic growth for some time to come for the following reasons. First, their population size is large, which is a possible source of growth, and their income levels are low, which means that the possibilities of growth are greater. Second, their demographic characteristics, in particular the high proportion of young people in the population, which would mean an increase in their workforce for some time to come, are conducive to growth, provided that developing countries spread education to create capabilities among people. Third, in most developing countries, wages are significantly lower than in the world outside, which is an important source of competitiveness and in manufacturing activities, while there are large reservoirs of surplus which would mean that relatively low wages would continue to be a source of competitiveness for some time. Fourth, the potential for productivity increase is considerable at earlier stages of development at the extensive margin, from almost zero productivity in agriculture to some positive, even if low, productivity in manufacturing or services, followed by a transfer of such labour from low productivity employment to somewhat higher productivity employment at the intensive margin.

In practice, developing countries may not be able to realize this potential for growth because of constraints that may differ across space or surface over time. It is obvious that there are specific constraints in different countries, whether leaders or laggards. Some examples are instructive. In China, the declining productivity of investment at the margin

and the sustainability of the political system are both potential constraints.[66] In India, the crisis in agriculture, the bottlenecks in infrastructure and the limited spread of education in society are potential constraints. In Congo, where the initial conditions for development have not yet been created, there are constraints almost everywhere that stifle possibilities of growth. Apart from country-specific constraints, there are general constraints, common to most developing countries, such as poor infrastructure, underdeveloped institutions, inadequate education, unstable politics and bad governance. In addition, there are possible constraints that may not be discernible so far but may arise from the process of growth such as economic exclusion, social conflict, environmental stress and climate change. And, there are some constraints that may be exogenous to developing countries, such as worsening terms of trade, restricted market access for exports, inadequate sources of external finance, or a crisis in a world economy.

In the pursuit of development, poverty eradication, employment creation and inclusive growth are an imperative. For one, these are constitutive as the essential objectives of development. For another, these are instrumental as the primary means of bringing about development.[67] This is the only sustainable way forward for developing countries because it would enable them to mobilize their most abundant source, people, for the purpose of development. There is a complexity in the process of development. Yet, some initial conditions and some essential foundations are almost obvious. The spread of education in society is an imperative as it provides the essential foundations of development in countries that are latecomers to industrialization. Similarly, the development of an infrastructure, both physical and social, is an essential part of the initial conditions that must be created in the earlier stages of industrialization. Most important, perhaps, there is a critical role for the state in terms of policies, institutions and governance. Developing countries must endeavour to combine economic growth with human development and social transformation. This requires a creative interaction between the state and the market, beyond the predominance of the market model in the process of development. It is, in part, about regulating markets and, in part, about inclusive growth. Such a 'great transformation' in the developing world, in the early twenty-first century, similar to 'great transformation' in the industrialized world during the early twentieth century, could recreate the past in the future.[68]

---

[66] What is more, historical experience suggests that the rate of labour productivity growth in the rich industrialized countries is about two per cent per annum. It is unlikely that China will stay above that level for much longer, unless it becomes a significant innovator in terms of new technologies.

[67] This argument is similar to Amartya Sen's conception of development as freedom, who argues that development is about expanding real freedoms that people enjoy for their economic wellbeing, social opportunities and political rights. Such freedoms are not just constitutive as the primary ends of development. Such freedoms are also instrumental as the principal means of attaining development. For a lucid analysis, see Sen (1999).

[68] In his seminal book, Karl Polanyi (1944) analysed what he characterized as the 'great transformation' in Europe in the nineteenth and twentieth centuries. In doing so, he described a double-movement: the first from a pre-capitalist system to the market-driven industrialization in the nineteenth century; the second (which he termed the 'great transformation') from the predominance of the market model to a more inclusive world in which the State played a corrective, regulatory, role. This transformation which began in the early twentieth century was complete by the mid twentieth century. But it did not last long. There was a resurgence of the market model in the late 1970s. Hence, in the early twenty-first century, the situation in developing countries is similar to the pre-transformation situation in Europe. In an interesting and original essay, Frances Stewart (2007) explores two important questions: whether a new 'Great

10 CONCLUSION

In the span of world history, developing countries are a relatively recent phenomenon that emerged about 150 years ago. At the beginning of the second millennium, in 1000 AD, Asia, Africa and Latin America, taken together, accounted for 82 per cent of world population and 83 per cent of world income. Their dominance, even if somewhat diminished, continued for the next eight centuries. Indeed, in 1820, less than 200 years ago, these three continents still accounted for about three-fourths of the world's population and about two-thirds of the world's income. The transformation of the world economy began around then. It was driven by the industrial revolution in Britain, the advent of colonialism, and the revolution in transport and communication through the railway, the steamship and the telegraph. The rise of West Europe and the decline of Asia were outcomes of this process. The division of the world into industrialized countries, mostly in temperate climates, and developing countries, mostly in tropical climates, was clear circa 1870. The next 80 years witnessed a rapid economic decline, particularly in Asia, as the share of developing countries in world output, manufacturing and trade collapsed. But there was more to this great divergence. Between 1870 and 1950, as a proportion of per capita incomes in West Europe, North America and Oceania, per capita incomes in Asia fell from one-half to one-tenth, in Africa from more than one-third to less than one-seventh, and in Latin America from three-fifths to two-fifths.

The economic recovery of developing countries in the world economy, as a group, began circa 1950. Latin America was an exception. It was the success story of the developing world during the period 1870–1950. The resurgence in the developing world as a whole, which started around 1950, was attributable, in part, to strategies and policies in the post-colonial era that created the initial conditions and laid the essential foundations of development. The period 1951–80 witnessed rapid economic growth almost everywhere in the developing world, which provided a sharp contrast with the near stagnation in the colonial era. This growth slowed down during the period 1981–2005, particularly in Africa and Latin America. But growth in industrialized countries also slowed down while growth in Asia continued and at high rates in some countries. Consequently, there was a rapid increase in the share of developing countries in international trade, industrial production and total output. And, *circa* 2005, the significance of developing countries in the world economy was about the same as it was in 1870. But per capita income in developing countries as a proportion of that in industrialized countries did not return to the proportion in 1870, largely because the share of developing countries in world population rose from two-thirds in 1950 to more than four-fifths in 2005. It would seem that, in the aggregate, the decline of developing countries in the world economy during the 80 years from 1870 to 1950 has been almost made up for during the 60 years from 1950 until now.

It is, however, important to stress that the impression of widespread development is misleading because aggregates are deceptive. Much of the catch-up is attributable to about a dozen countries. Of course, some concentration is inevitable. And it is not new. All the same, regional differences in economic performance within the developing world are

---

Transformation' is needed, and whether such a transformation is possible in contemporary developing countries.

striking. And there is more divergence than convergence in income when compared with the industrialized countries. Many poor countries and poor people continue to lag behind. Indeed, there is exclusion of countries and of people, reflected in persistent poverty and rising inequality. The essential problem is that rapid economic growth has often not been transformed into meaningful economic development, which would improve the living conditions of people, ordinary people. Yet, there is a strong potential for growth in developing countries in terms of economic determinants and underlying factors. There are also real constraints. Even so, the potential can be realized. The obvious needs, which would be conducive to growth, are: development of infrastructure, the spread of education, appropriate policies, essential institutions, and good governance. But growth in developing countries can sustained only if it is inclusive, through poverty eradication and employment creation, so that it mobilizes their most abundant resource, people, in the pursuit of development.

It is necessary to recognize that the significance of developing countries in the world would be shaped not only in the sphere of economics but also in the realm of politics. Their emerging significance in the world economy is attributable in part to their share in world population and in world income and in part to their engagement with the world through international trade, investment and finance. The mid 2000s are perhaps a turning point. Even so, in the economic sphere, their potential importance in future far exceeds their actual importance at present. In the realm of politics, however, their importance is more discernible at the present juncture, which is attributable in part to their size in terms of population (that is young rather than old) and in part to their size in terms of geographical space. It is plausible to argue, though impossible to prove, that this represents the beginnings of a profound change in the balance of economic and political power in the world. History does not repeat itself. But it would be wise to learn from history. The early nineteenth century was a turning point in the world economy. It was the beginning of the end of Asia's dominance in the world. And it was the beginning of the rise of Europe, in particular Britain, to dominance in the world. The early twentieth century was the next turning point. It was the beginning of the end of Britain's dominance in the world. And it was the beginning of the rise of the USA to dominance in the world. The catch-up and the transformation spanned half a century. The early twenty-first century perhaps represents a similar turning point. It could be the beginning of the end of the dominant status of the USA in the world. The emergence of countries outside North America and Western Europe, particularly the powerhouse economies in Asia, which began with the East Asian success stories and is now manifest in the rise of China and India, represents a striking transformation. In addition, there are emerging economies in other continents of the developing world, among which Brazil and South Africa deserve mention. Of course, in the decades to come, the continued rise of these countries, or the developing world as a whole, is not quite predictable and by no means certain. It would depend, in large part, on whether developing countries can transform themselves into inclusive societies where economic growth, human development and social progress move in tandem. This catch-up and transformation, if it materialises, could also span half a century or longer. Yet, the beginnings of a shift in the balance of power are discernible. And the past could be a pointer to the future.

REFERENCES

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

—— (2001). *The Rise of the Rest: Challenges to the West from Late Industrializing Economies*. New York: Oxford University Press.

—— (2007). *Escape from Empire: The Developing World's Journey from Heaven to Hell*. Cambridge: The MIT Press.

Bairoch, P. (1975). *The Economic Development of the Third World since 1900*. London: Methuen.

—— (1982). 'International Industrialization Levels from 1750 to 1980'. *Journal of European Economic History,* 11: 269–333.

—— (1993). *Economics and World History: Myths and Paradoxes*. Chicago: Chicago University Press.

Baran, P.A. (1957). *The Political Economy of Growth*. New York: Monthly Review Press.

Bhaduri, A., and D. Nayyar (1996). *The Intelligent Person's Guide to Liberalization*. New Delhi: Penguin Books.

Chang, H.-J. (1996). *The Political Economy of Industrial Policy*. London: Macmillan.

—— (2002). *Kicking Away the Ladder: Development Strategy in Historical Perspective*. London: Anthem Press.

Dahlman, C.J., B. Ross-Larson, and L. Westphal (1987). 'Managing Technological Development: Lessons from Newly Industrializing Countries', *World Development*, 15 (6): 759–75.

Findlay, R., and K.H. O'Rourke (2007). *Power and Plenty: Trade, War and the World Economy in the Second Millennium*. Princeton: Princeton University Press.

Frank, A.G. (1971). *Capitalism and Underdevelopment in Latin America*. Harmondsworth: Penguin Books.

—— (1998). *Re-Orient: Global Economy in the Asian Age*. Berkeley: University of California Press.

Furtado, C. (1970). *Economic Development in Latin America.* Cambridge: Cambridge University Press.

Griffin, K. (1969). *Underdevelopment in Spanish America*. London: George Allen and Unwin.

Helleiner, G.K. (ed.) (1992). *Trade Policy, Industrialization and Development*. Oxford: Clarendon Press.

Hobsbawm, E. (1987). *The Age of Empire.* London: Weidenfeld and Nicolson.

Kaplinsky, R. (2005). *Globalization, Poverty and Inequality*. Cambridge: Polity Press.

Kindleberger, C.P. (1996). *World Economic Primacy: 1500–1990*. New York: Oxford University Press.

Lall, S. (1990). *Building Industrial Competitiveness in Developing Countries*. Paris: OECD Development Centre.

—— (1997). 'Imperfect Markets and Fallible Governments: The Role of the State in Industrial Development'. In D. Nayyar (ed.), *Trade and Industrialization*. Delhi: Oxford University Press.

Lewis, W.A. (1978). *The Evolution of the International Economic Order*. Princeton: Princeton University Press.

Maddison, A. (1995). *Monitoring the World Economy: 1820–1992*. Paris: OECD Development Centre.

—— (2001). *The World Economy: A Millennial Perspective*. Paris: OECD Development Centre.

—— (2003). *The World Economy: Historical Statistics.* Paris: OECD Development Centre.

Marglin, S., and J. Schor (eds) (1990). *The Golden Age of Capitalism*. Oxford: Clarendon Press.

Massey, D. (1988). 'Economic Development and International Migration in Comparative Perspective'. *Population and Development Review*, 14(2).

Nayyar, D. (1978). 'Transnational Corporations and Manufactured Exports from Poor Countries'. *Economic Journal*. 8(1): 59–84.

—— (1997). 'Themes in Trade and Industrialization', In D. Nayyar (ed.), *Trade and Industrialization*. Delhi: Oxford University Press.

—— (2002). 'Cross-Border Movements of People'. In D. Nayyar (ed.), *Governing Globalization: Issues and Institutions*. Oxford: Oxford University Press.

—— (2006). 'Globalization, History and Development: A Tale of Two Centuries'. *Cambridge Journal of Economics*, 30(1): 137–59.

—— (2008). 'The Internationalization of Firms from India: Investment, Mergers and Acquisitions'. *Oxford Development Studies*, 36(1): 111–31.

—— (2008a). 'International Migration and Economic Development'. In J. Stiglitz and N. Serra (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance*. Oxford: Oxford University Press.

—— (2008b). 'Learning to Unlearn from Development'. *Oxford Development Studies,* 36(3): 259–80.

—— (2010). 'China, India, Brazil and South Africa in the World Economy: Engines of Growth?'. In A. U. Santos-Paulino and G. Wan (eds), *Southern Engines of Global Growth*. Oxford: Oxford University Press, forthcoming.

Ocampo, J.A., C. Rada, and L. Taylor (2009). *Economic Structure, Policy and Growth in Developing Countries*. New York: Columbia University Press.

Pogge, T.W., and S. Reddy (2002). 'How Not to Count the Poor'. www.socialanalysis.org

Polanyi, K. (1944). *The Great Transformation: The Political and Economic Origins of Our Times*. Boston: Beacon Press.

Pomeranz, K. (2000). *The Great Divergence: China, Europe and the Making of the Modern World Economy.* Princeton: Princeton University Press.

Reinert, E.S. (2007). *How Rich Countries Got Rich and Why Poor Countries Stay Poor*. New York: Carroll and Graf.

Rodrik, D. (1992). 'Closing the Productivity Gap: Does Trade Liberalization Really Help?'. In G.K. Helleiner (ed.), *Trade Policy, Liberalization and Development*. Oxford: Clarendon Press.

—— (1997). *Has Globalization Gone Too Far?* Washington DC: Institute for International Economics.

Sala-i-Martin, X. (2002). 'The World Distribution of Income'. *NBER Working Paper* 8933. Cambridge MA: National Bureau of Economic Research.

Shapiro, H., and L. Taylor (1990).' The State and Industrial Strategy'. *World Development*, 18 (6): 861–78.

Sen, A. (1999). *Development as Freedom*. New York: Alfred E. Knopf.

Stalker, P. (1994). *The Work of Strangers: A Survey of International Labour Migration*. Geneva: International Labour Office.

Stewart, F. (2007). 'Do We Need a "New Great Transformation?" Is One Likely?'. In G. Mavrotas and A. Shorrocks (eds), *Advancing Development: Core Themes in Global Economics*. Basingstoke: Palgrave Macmillan.

Stiglitz, J.E. (1989). 'On the Economic Role of the State'. In A. Heertje (ed.), *The Economic Role of the State*. Oxford: Basil Blackwell.

Tinker, H. (1974). *A New System of Slavery: The Export of Indian Labour Overseas: 1830–1920*. Oxford: Oxford University Press.

UNCTAD (2000). *The Least Developed Countries 2000 Report*. New York, Geneva: UN.

—— (2006). *World Investment Report: FDI from Developing Countries and Transition Economies: Implications for Development*. New York and Geneva: UN.

UN (2006). 'Diverging Growth and Development, World Economic and Social Survey 2006'. New York: UN.

UNIDO (1981). *World Industry in 1980*, New York: UN.

Wade, R. (1990). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton: Princeton University Press.

Williamson, J.G. (2002). *Winners and Losers over Two Centuries of Globalization*. WIDER Annual Lecture 6. Helsinki: UNU-WIDER.

World Commission on the Social Dimension of Globalization (2004). *A Fair Globalization: Creating Opportunities* for *All*. Geneva: ILO.

World Bank (2007). *World Development Indicators 2007*. Washington DC: World Bank.

WIDER ANNUAL LECTURES (ISSN 1455-3082)

11 *The Climate Change Challenge*
Kemal Derviş

10 *Global Patterns of Income and Health: Facts, Interpretations, and Policies*
Angus Deaton

9 *The World is Not Flat: Inequality and Injustice in our Global Economy*
Nancy Birdsall

8 *Rethinking Growth Strategies*
Dani Rodrik

7 *Global Labour Standards and Local Freedoms*
Kaushik Basu

6 *Winners and Losers in Two Centuries of Globalization*
Jeffrey G. Williamson

5 *Horizontal Inequality: A Neglected Dimension of Development*
Frances Stewart

4 *Globalization and Appropriate Governance*
Jagdish N. Bhagwati

3 *Is Rising Income Inequality Inevitable? A Critique of the Transatlantic Consensus*
Sir Anthony B. Atkinson

2 *More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus*
Joseph E. Stiglitz

1 *The Contribution of the New Institutional Economics to an Understanding of the Transition Problem*
Douglass C. North

The collection of Annual Lectures 1997–2004 is available as:
Wider Perspectives on Global Development
Published in Studies in Development Economics and Policy, by Palgrave Macmillan (ISBN 9781403996312)