The Dynamics of Socio-Economic Development

An Introduction

Why are poor countries poor and rich countries rich? How are wealth and poverty related to changes in nutrition, health, life expectancy, education, population growth and politics? This modern, non-technical introduction to development studies explores the dynamics of socio-economic development and stagnation in developing countries. Taking a quantitative and comparative approach to contemporary debates within their broader context, Szirmai examines historical, institutional, demographic, sociological, political and cultural factors. Key chapters focus on economic growth, technological change, industrialisation and agricultural development, and consider social dimensions such as population growth, health and education. Each chapter contains comparative statistics on trends from a sample of twenty-nine developing countries. This rich statistical database allows students to strengthen their understanding of comparative development experiences. Assuming no prior knowledge of economics, the book is suited for use in interdisciplinary development studies programmes as well as economics courses, and will also interest practitioners pursuing careers in developing countries.

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The Dynamics of Socio-Economic Development
An Introduction

Adam Szirmai
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Preface

The aim of this book is to provide a general introduction to the dynamics of socio-economic development and to the study of the problems of developing countries. It is a reflection of multidisciplinary courses on ‘development’, which I have been teaching since 1987 at the University of Groningen and the Eindhoven University of Technology. The book was written for students of universities and other institutions of higher education, who encounter the problems of developing countries in the course of their own disciplinary studies and who are in need of a general introduction to this field. It is also intended for people pursuing a professional career in developing countries and readers with a general interest in development. The text can be read as an introduction by students with no prior knowledge of development. It also can be used at a more advanced level as a handbook, providing an overview of current theoretical and empirical debates and controversies in the field of development studies. The book provides non-economists with a non-technical introduction to economic perspectives on development, while introducing economists to a broader socio-economic view of development.

The central issue in development, as approached in this book, lies in low levels of per capita income and low standards of living among the mass of the population in the so-called developing countries. The key elements in the book are trends in per capita income and changes in standards of living and welfare, and the factors that affect economic development or economic stagnation in the long term. The core of development is thus defined in economic terms. However, the explanatory factors are not limited to economic ones. Historical, institutional, cultural, demographic, political, social and ecological factors are all of great importance for the analysis of economic development. They will receive ample attention in the book.

It needs to be emphasised that the concept of development is much broader than that of economic development alone. Development involves a wide range of changes in a variety of social indicators such as health, education, technology or life expectancy, which are directly or indirectly linked to economic changes, but which need to be studied in their own right. This is reflected in the title of the book, which refers to socio-economic development.

The structure of the book takes the key factors distinguished in economic theories of growth – labour, capital and land and technological change – as its main point of departure. However, in line with the interdisciplinary nature of the book, these factors are interpreted in broad fashion. Technological change
lies at the heart of growth and economic development. Two main issues discussed in chapter 4 are the role of technological change in development, and the consequences of accelerating technological change for developing countries. The treatment of the primary production factor 'labour' is couched in terms of a more general discussion of demographic and human factors in development. These include population growth and the interrelationships between population growth and economic development (Chapter 5), topics such as health, disease, mortality and life expectancy (Chapter 6) and education, human capital and literacy (Chapter 7). I argue that health and education are important as independent aspects of development in their own right. But the state of health and levels of education also influence the quality of the labour force, the productivity of labour and the socio-economic dynamics of a country.

Modern economic growth is historically associated with massive capital accumulation in the industrial sector and a structural transformation of agrarian societies into societies in which industry and services become more and more important. Structural change and the shift to industry are discussed in Chapter 8, which also deals with the role of primary exports in these transformations. Capital accumulation is discussed in Chapter 9 in the context of the overall process of industrialisation. This chapter also pays attention to the different industrialisation strategies that developing countries have followed over time, including import substitution, balanced growth, labour intensive export orientation, promotion of the informal sector and technological upgrading.

The discussion of the production factor 'land' is broadened to include the whole issue of agricultural and rural development. The role of the agricultural sector in the wider process of development is examined in Chapter 8, which makes a case for the continued importance of agriculture in developing countries. In Chapter 10, the development of agricultural production and productivity is discussed against the background of social changes in rural communities and rural areas. This chapter also presents data on trends in food consumption and an overview of the recent debates on modern biotechnology.

The discussion of economic development in Chapters 4 to 10, is preceded and followed by chapters which place development in an historical and international perspective. Chapter 2 focuses on the development of the international economic and political order since the fifteenth century. Chapter 3 deals with the theories and empirics of growth and stagnation. The approach in these chapters is historical and comparative. Chapter 11 focuses on the political aspects of development and the interrelations between state formation, democratic rule and economic growth. Chapter 12 introduces the cultural context of development and discusses the dynamic relationships between cultural change and economic development. Changes in the international political and economic order since World War II are reviewed in Chapter 13. In this chapter, attention is paid to the evolution of international institutions and organisations on the one hand, and the implications of the international division of labour and free trade for developing countries on the other. This chapter includes a discussion of developing country debt, the emergence of structural
adjustment policies and the recent debates on globalisation and the architecture of the international financial system. The final chapter (Chapter 14) focuses on the role of foreign aid in development. Foreign aid is seen as part of international resource flows. It is discussed in the context of theories of development and the many different factors influencing development in the long run. Every chapter ends with questions for review and suggestions for further readings.

Empirical data have an important place in this book. It is my conviction that a serious debate of development issues should be grounded in sound empirical information. Throughout the book, I present empirical data on long-run economic, social and political trends for a sample of twenty-nine developing countries, representing Asia, Latin America and Africa. These twenty-nine countries represent more than three-quarters of the total population of developing countries in the year 2000. The same set of countries is used throughout the book, providing an empirical basis for the discussion of theories, patterns and trends in development. The book contains over seventy tables, usually covering the period from 1950 to the present and sometimes going back to the pre-war period. The country data are supplemented by aggregate statistics for different regions and continents.

This book is accompanied by a website, which presents the detailed worksheets underlying the tables in the book. These worksheets show how the tables in the book have been put together from a variety of sources. The address of this website is: http://www.dynamicsofdevelopment.com. We hope this website will serve as an important didactic tool for the empirical study of development. It will introduce students to the increasing wealth of international comparative statistics on all dimensions of development. More and more data are accessible in electronic form on websites of research institutions and international organisations. Our website will provide links and references to the most important international sources of data on development, serving as a structured portal for statistics on development. A second function of the website is to foster a more critical attitude towards the use of statistics. Statistical tables are constructs, which depend on assumptions, models, concepts, decisions about what data to use, how to combine data from different sources, what years to compare, how to link data for different years in a consistent fashion and so forth. It is important to be clear about how the data have been collected and organised, what assumptions and choices have been made and what sources have been used. If such information is not provided – as is too often the case – the statistics cannot be trusted. Examination of the worksheets on the website will help readers to formulate their own conclusions, which may well differ from those of this author. They will come to understand that tables should be seen as working hypotheses, rather than final statements. Finally, the website allows us to provide more detail than is possible in the tables in the book. It will also allow for updating on a continuous basis, so the statistics remain up to date.

Despite its considerable length this book has no pretensions to completeness. The attempt to synthesise a very wide range of subjects in a single book will
inevitably leave specialists on different topics unsatisfied. Also, the book is written as an introduction to the ongoing debate on development, rather than a final summary of our knowledge of all different aspects of it. In the choice of subjects, the emphasis has been on the long-run dynamics of development and the factors that play a role in these dynamics.

This book has a long history. A first version was published in Dutch in 1993. An English translation was published in 1997 by Prentice Hall under the title *Social and Economic Development: Trends. Problems Policies*. However, both the real world and our thinking about development are changing so rapidly that a mere revision was not sufficient. All chapters have been fundamentally rewritten and expanded, the analysis has changed in the light of new insights, new chapters have been added on technology and culture, and new statistics and materials have been incorporated. This has resulted in what amounts to a new textbook, under a new title and with a new publisher. I am grateful to Cambridge University Press for allowing me to undertake this task.

I could not have written this book without the support of numerous colleagues and ex-colleagues. They generously let me profit from their knowledge of and insights into the various aspects of development. I have made extensive use of their advice, their publications, and their empirical research. I have both learned from and enjoyed years of fruitful and intensive discussions with them. I would like to thank the following persons for their advice and stimulating comments on previous drafts of the manuscript: Bart van Ark, Carolina Castaldi, Peter Druijven, Pierre van der Eng, Jacob de Haan, Hal Hill, Niels Hermes, Jojo Jacob, Hans-Paul Klijnsma, Jos Koetsier, Remco Kouwenhoven, Paul Lapperre, Robert Lensink, Angus Maddison, Kees van der Meer, Nanno Mulder, Allessandro Nuvolari, Howard Pack, Dirk Pilat, Gé Prince, Henny Romijn, Johan Schot, Jan Stel, Ida Terluin, Marcel Timmer, Harry van Vianen, Geert Verbong and Bart Verspagen. As always, the responsibility for the book and its shortcomings rests with the author alone. A special word of thanks is due to Paul Lapperre for his help designing the cover and selecting the illustrations.

In preparing the tables, I have been fortunate to enjoy the support of a series of enthusiastic and talented student assistants. At the Eindhoven University of Technology, Dennis Bours, Rick van der Kamp, Herjan Siegers and Rik Luiten have helped collect and organise the statistical materials incorporated in the book. During the last year-and-a-half, Souli Nnafie has provided invaluable help in updating and revising all the tables. I am also thankful for the generous support and encouragement provided by Chris Harrison, Pat Maurice and their colleagues at Cambridge University Press. I gratefully dedicate this book, as previous ones, to my wife Veronika.

Adam Szirmai
Eindhoven
January 2004
Abbreviations

ACER  age-specific enrolment rate
ACP  Asian, Caribbean and Pacific Countries
ADB  Asian Development Bank
ASEAN  Association of South East Asian Nations
BMR  basal metabolic rate
CFCs  chlorofluorocarbons
CGIAR  Consultative Group on International Agricultural Research
CIF  cost, insurance and freight included
CIMMYT  Centro Internacional de Mejoramiento de Maíz y Trigo
        (International Maize and Wheat Improvement Centre)
CMEA  Council for Mutual Economic Assistance
CPI  Corruption Perceptions Index
DAC  Development Assistance Committee (OECD)
DALYs  disability-adjusted life years
DRS  Debt Reporting System (World Bank)
ECLA  United Nations Economic Commission for Latin America
ECOSOC  Economic and Social Council of the UN
EEC  European Economic Community
EC  European Community
ECLA  United Nations Commission for Latin America
ESAF  Enhanced Structural Fund Facility (IMF)
ESCAP  United Nations Economic and Social Commission for Asia and
        the Pacific
EU  European Union
EWLP  Experimental World Literacy Programme
FAO  United Nations Food and Agriculture Organisation
FDI  foreign direct investment
FLN  Front de la libération nationale (national liberation front, Algeria)
FOB  free on board
GATT  General Agreement on Tariffs and Trade
GDFF  Geographical Distribution of Financial Flows to Developing
        Countries
GDP  gross domestic product
GFCF  gross fixed capital formation
GGDC  Groningen Growth and Development Centre
GNP  gross national product
<table>
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<td>GSP</td>
<td>Generalised System of Preferences</td>
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<td>HALE</td>
<td>healthy life expectancy</td>
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<td>HDR</td>
<td>Human Development Report</td>
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<tr>
<td>HIPC</td>
<td>heavily indebted poor countries</td>
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<td>IADB</td>
<td>Inter-American Development Bank</td>
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<td>IBPGR</td>
<td>International Board for Plant Genetic Resources</td>
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<td>IBRD</td>
<td>International Bank for Reconstruction and Development (World Bank)</td>
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<td>ICC</td>
<td>International Criminal Court</td>
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<tr>
<td>ICRASAT</td>
<td>Research Institute for Crops in the Semi-arid Tropics</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IPPC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<td>IRRI</td>
<td>International Rice Research Institute</td>
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<td>ISI</td>
<td>import-substituting industrialisation</td>
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<td>ISIC</td>
<td>International Standard Industrial Classification</td>
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<td>ITO</td>
<td>International Trade Organisation</td>
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<td>LAFTA</td>
<td>Latin American Free Trade Association</td>
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<td>LDC</td>
<td>least developed countries</td>
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<td>LEISA</td>
<td>low external input and sustainable agriculture</td>
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<td>LMIC</td>
<td>lower-middle-income countries</td>
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<td>MICS</td>
<td>moderately indebted countries/middle-income countries</td>
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<td>MITI</td>
<td>Ministry of Industry and Trade (Japan)</td>
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<td>MNC</td>
<td>multinational companies</td>
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<td>MPS</td>
<td>material product system</td>
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<tr>
<td>N ach</td>
<td>need for achievement</td>
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<td>NAFTA</td>
<td>North American Free Trade Association</td>
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<td>NATO</td>
<td>North Atlantic Treaty Organisation</td>
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<td>NFDI</td>
<td>net foreign direct investment</td>
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<td>NGO</td>
<td>Non Governmental Organisation</td>
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<td>NICs</td>
<td>newly industrialising countries</td>
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<td>NIEO</td>
<td>New International Economic Order</td>
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<td>NToD</td>
<td>net transfers on debt</td>
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<td>OA</td>
<td>Other Assistance</td>
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<td>OAU</td>
<td>Organisation of African Unity</td>
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<td>OAS</td>
<td>Organisation of American States</td>
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<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>OEM</td>
<td>original equipment manufacturing</td>
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<td>OFID</td>
<td>OPEC Fund for International Development</td>
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<td>OFEC</td>
<td>Organisation of Petroleum Exporting Countries</td>
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Abbreviations

 PPPs  purchasing power parities
 PRI  Institutional Revolutionary Party
 PRS  poverty reduction strategy
 QUALYs  quality-adjusted life years
 RAUI  ‘risk aversion causes underinvestment’
 R&D  research and development
 SAL  Structural Adjustment Loan (World Bank)
 SAF  Structural Adjustment Facility (IMF)
 SECAL  Sectoral Adjustment Loan (World Bank)
 SICs  semi-industrialised countries: or severely indebted countries
 SNA  System of National Accounts
 TNCs  transnational companies
 TRIPS  Agreement on Trade-Related Aspects of Intellectual Property Rights
 TVEs  township and village enterprises
 UIA  Union of International Associations
 UMICs  upper-middle-income-countries
 UN  United Nations
 UNCED  United Nations Conference on Environment and Development
 UNCTAD  United Nations Conference on Trade and Development
 UNDP  United Nations Development Programme
 UNEP  United Nations Environmental Programme
 UNEPTA  United Nations Extended Program of Technical Assistance
 UNESCO  United Nations Educational, Scientific and Cultural Organisation
 UNICEF  United Nations Children Fund
 UNIDO  United Nations Industrial Development Organisation
 UNITAR  United Nations Institute for Training and Research
 UNPF  United Nations Population Fund
 USAID  United States Agency for International Development
 USSR  Union of Socialist Soviet Republics
 WB  World Bank (see IBRD)
 WDI  World Development Indicators (World Bank)
 WDR  World Development Report (World Bank)
 WDT  World Debt Tables (World Bank)
 WFP  World Food Programme
 WHO  World Health Organization
 WIPO  World Intellectual Property Organisation
 WRI  World Resources Institute
 WTO  World Trade Organisation
 WWI  World Watch Institute
Acknowledgements


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