

Development

Economics

Debraj Ray

DEVELOPMENT ECONOMICS

DEBRAJ RAY

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Preface

This book provides an introduction to *development economics*, a subject that studies the economic transformation of developing countries. My objective is to make a large literature accessible, in a unified way, to a student or interested individual who has some training in basic economic theory. It is only fair to say that I am not fully satisfied with the final product: in attempting to provide a well-structured treatment of the subject, I have had to sacrifice comprehensiveness. Nevertheless, I do believe that the book goes quite far in attaining the original objective, within the limitations created by an enormous and unwieldy literature and the constraints imposed by my own knowledge and understanding.

The primary target for this book is the senior undergraduate or masters level student with training in introductory or intermediate economic theory. I also recommend this book as background or supplementary reading for a doctoral course in development economics, along with the original articles on the subject.

Mathematical requirements are kept to a minimum, although some degree of mathematical maturity will assist understanding of the material. In particular, I have eschewed the use of calculus altogether and have attempted to present theoretical material through verbal argument, diagrams, and occasionally elementary algebra. Because the book makes some use of game-theoretic and statistical concepts, I have included two introductory appendixes on these subjects. With these appendixes in place, the book is self-contained except for occasional demands on the reader's knowledge of introductory economic theory.

I begin with an overview of developing countries (Chapter 2). I discuss major trends in per capita income, inequality, poverty, and population, and take a first look at the important structural characteristics of development. Chapters 3–5 take up the study of economic growth from several aspects.

Chapters 6–8 shift the focus to an analysis of *unevenness* in development: the possibility that the benefits of growth may not accrue equally to all. In turn, these inequalities may influence aggregate trends. This interaction is studied from many angles. Chapter 9 extends this discussion to population growth, where the relationship between demography and economics is explored in some detail.

Chapter 10 studies unevenness from the viewpoint of structural transformation: the fact that development typically involves the ongoing transfer of resources from one sector (typically agriculture) to another (typically industry and services). This chapter motivates a careful study of the agricultural sector, where a significant fraction of the citizens of developing countries, particularly the poor, live and work.

Chapters 11–15 study informal markets in detail, with particular emphasis on the rural sector. We analyze the land, labor, credit and insurance markets.

Chapter 16 introduces the study of trade and development. Chapter 17 motivates and studies the instruments of trade policy from the point of view of a single country. Finally, Chapter 18 studies multilateral and regional policies in trade.

For programs that offer a single semester course in economic development, two options are available: (1) if international economic issues can be relegated to a separate course, cover all the material up to the end of Chapter 15 (this will require some skimming of chapters, such as Chapters 4–6 and 11–15); (2) if it is desirable to cover international issues in the same course, omit much or most of the material in Chapters 11–15. A year-long course should be able to adequately cover the book, but some supplementary material may be required for international economics, as well as financial issues in development, such as inflation and monetary policy.

This book could not have been written without my students and the many classes I have taught in development economics over the years: I thank students at Boston University, at the Indian Statistical Institute, at the People's University of China in Beijing, at Stanford, and at Harvard. I would also like to thank the many people who have read and commented on earlier drafts of this book and have used them in courses they have taught, among them Jean-Marie Baland, Abhijit Banerjee, V. Bhaskar, Gautam Bose, Ira Gang, James Foster, Patrick Francois, Gabriel Fuentes, Bishnupriya Gupta, Ashok Kotwal, Dilip Mookherjee, Jonathan Morduch, James Robinson, Ann Velenchik, Bruce Wydick, and Frederic Zimmerman.

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Contents

Preface	xv
Chapter 1: Introduction	3
Chapter 2: Economic Development: Overview	7
2.1. Introduction	7
2.2. Income and growth	10
2.2.1. Measurement issues	10
2.2.2. Historical experience	16
2.3. Income distribution in developing countries	21
2.4. The many faces of underdevelopment	25
2.4.1. Human development	25
2.4.2. An index of human development	27
2.4.3. Per capita income and human development	29
2.5. Some structural features	33
2.5.1. Demographic characteristics	34
2.5.2. Occupational and production structure	34
2.5.3. Rapid rural–urban migration	36
2.5.4. International trade	38
2.6. Summary	42
Exercises	44
Chapter 3: Economic Growth	47
3.1. Introduction	47
3.2. Modern economic growth: Basic features	48
3.3. Theories of economic growth	51
3.3.1. The Harrod–Domar model	51
3.3.2. Beyond Harrod–Domar: Other considerations	58
3.3.3. The Solow model	64
3.4. Technical progress	71
3.5. Convergence?	74
3.5.1. Introduction	74
3.5.2. Unconditional convergence	74
3.5.3. Unconditional convergence: Evidence or lack thereof	75
3.5.4. Unconditional convergence: A summary	80
3.5.5. Conditional convergence	82
3.5.6. Reexamining the data	84
3.6. Summary	88

Appendix	90
3.A.1. The Harrod–Domar equations	90 • 3.A.2. Production functions and per capita magnitudes
Exercises	94

Chapter 4: The New Growth Theories 99

4.1. Introduction	99
4.2. Human capital and growth	100
4.3. Another look at conditional convergence	105
4.4. Technical progress again	107
4.4.1. Introduction	107 • 4.4.2. Technological progress and human decisions
4.4.3. A model of deliberate technical progress	109 •
4.4.4. Externalities, technical progress, and growth	112 • 4.4.5. Total factor productivity
4.4.5. Total factor productivity	117
4.5. Total factor productivity and the East Asian miracle	119
4.6. Summary	123
Appendix: Human capital and growth	125
Exercises	126

Chapter 5: History, Expectations, and Development 131

5.1. Introduction	131
5.2. Complementarities	132
5.2.1. Introduction: QWERTY	132 • 5.2.2. Coordination failure
5.2.3. Linkages and policy	138 • 5.2.4. History versus expectations
5.2.4. History versus expectations	143
5.3. Increasing returns	147
5.3.1. Introduction	147 • 5.3.2. Increasing returns and entry into markets
5.3.2. Increasing returns and entry into markets	148 • 5.3.3. Increasing returns and market size: Interaction
5.3.3. Increasing returns and market size: Interaction	150
5.4. Competition, multiplicity, and international trade	152
5.5. Other roles for history	155
5.5.1. Social norms	155 • 5.5.2. The status quo
5.5.2. The status quo	156
5.6. Summary	159
Exercises	161

Chapter 6: Economic Inequality 169

6.1. Introduction	169
6.2. What is economic inequality?	170
6.2.1. The context	170 • 6.2.2. Economic inequality: Preliminary observations
6.2.2. Economic inequality: Preliminary observations	171
6.3. Measuring economic inequality	173
6.3.1. Introduction	173 • 6.3.2. Four criteria for inequality measurement
6.3.2. Four criteria for inequality measurement	174 • 6.3.3. The Lorenz curve
6.3.3. The Lorenz curve	178 • 6.3.4. Complete measures of inequality
6.3.4. Complete measures of inequality	184

- 6.4. Summary 192
- Exercises 193

Chapter 7: Inequality and Development: Interconnections 197

- 7.1. Introduction 197
- 7.2. Inequality, income, and growth 199
 - 7.2.1. The inverted-U hypothesis 199 • 7.2.2. Testing the inverted-U hypothesis 201 • 7.2.3. Income and inequality: Uneven and compensatory changes 209 • 7.2.4. Inequality, savings, income, and growth 211 • 7.2.5. Inequality, political redistribution, and growth 218 • 7.2.6. Inequality and growth: Evidence 220 • 7.2.7. Inequality and demand composition 223 • 7.2.8. Inequality, capital markets, and development 226 • 7.2.9. Inequality and development: Human capital 237
- 7.3. Summary 238
- Appendix: Multiple steady states with imperfect capital markets 241
- Exercises 244

Chapter 8: Poverty and Undernutrition 249

- 8.1. Introduction 249
- 8.2. Poverty: First principles 250
 - 8.2.1. Conceptual issues 250 • 8.2.2. Poverty measures 253
- 8.3. Poverty: Empirical observations 256
 - 8.3.1. Demographic features 257 • 8.3.2. Rural and urban poverty 259 • 8.3.3. Assets 259 • 8.3.4. Nutrition 261
- 8.4. The functional impact of poverty 267
 - 8.4.1. Poverty, credit, and insurance 268 • 8.4.2. Poverty, nutrition, and labor markets 272 • 8.4.3. Poverty and the household 279
- 8.5. Summary 288
- Appendix: More on poverty measures 290
- Exercises 292

Chapter 9: Population Growth and Economic Development 295

- 9.1. Introduction 295
- 9.2. Population: Some basic concepts 297
 - 9.2.1. Birth and death rates 297 • 9.2.2. Age distributions 300
- 9.3. From economic development to population growth 302
 - 9.3.1. The demographic transition 302 • 9.3.2. Historical trends in developed and developing countries 303 • 9.3.3. The adjustment of birth rates 307 • 9.3.4. Is fertility too high? 318

- 9.4. From population growth to economic development 326
 - 9.4.1. Some negative effects 326 • 9.4.2. Some positive effects 332
- 9.5. Summary 338
- Exercises 340

Chapter 10: Rural and Urban 345

- 10.1. Overview 345
 - 10.1.1. The structural viewpoint 345 • 10.1.2. Formal and informal urban sectors 346 • 10.1.3. Agriculture 348 • 10.1.4. The ICRISAT villages 349
- 10.2. Rural–urban interaction 353
 - 10.2.1. Two fundamental resource flows 353 • 10.2.2. The Lewis model 353
- 10.3. Rural–urban migration 372
 - 10.3.1. Introduction 372 • 10.3.2. The basic model 373 • 10.3.3. Floors on formal wages and the Harris–Todaro equilibrium 374 • 10.3.4. Government policy 379 • 10.3.5. Comments and extensions 386
- 10.4. Summary 395
- Exercises 398

Chapter 11: Markets in Agriculture: An Introduction 403

- 11.1. Introduction 403
- 11.2. Some examples 404
- 11.3. Land, labor, capital, and credit 409
 - 11.3.1. Land and labor 409 • 11.3.2. Capital and credit 412

Chapter 12: Land 415

- 12.1. Introduction 415
- 12.2. Ownership and tenancy 416
- 12.3. Land rental contracts 420
 - 12.3.1. Contractual forms 420 • 12.3.2. Contracts and incentives 423 • 12.3.3. Risk, tenancy, and sharecropping 431 • 12.3.4. Forms of tenancy: Other considerations 436 • 12.3.5. Land contracts, eviction, and use rights 441
- 12.4. Land ownership 445
 - 12.4.1. A brief history of land inequality 445 • 12.4.2. Land size and productivity: Concepts 446 • 12.4.3. Land size and productivity: Empirical evidence 453 • 12.4.4. Land sales 456 • 12.4.5. Land reform 457
- 12.5. Summary 462

Appendix 1: Principal–agent theory and applications	463
12.A.1. Risk, moral hazard, and the agency problem	463 •
12.A.2. Tenancy contracts revisited	466
Appendix 2: Screening and sharecropping	474
Exercises	478

Chapter 13: Labor 483

13.1. Introduction	483
13.2. Labor categories	484
13.3. A familiar model	486
13.4. Poverty, nutrition, and labor markets	489
13.4.1. The basic model	489 •
13.4.2. Nutrition, time, and casual labor markets	499 •
13.4.3. A model of nutritional status	500
13.5. Permanent labor markets	504
13.5.1. Types of permanent labor	504 •
13.5.2. Why study permanent labor?	505 •
13.5.3. Permanent labor: Nonmonitored tasks	507 •
13.5.4. Permanent labor: Casual tasks	515
13.6. Summary	522
Exercises	524

Chapter 14: Credit 529

14.1. Introduction	529
14.1.1. The limits to credit and insurance	529 •
14.1.2. Sources of demand for credit	531
14.2. Rural credit markets	532
14.2.1. Who provides rural credit?	532 •
14.2.2. Some characteristics of rural credit markets	540
14.3. Theories of informal credit markets	543
14.3.1. Lender's monopoly	543 •
14.3.2. The lender's risk hypothesis	544 •
14.3.3. Default and fixed-capital loans	545 •
14.3.4. Default and collateral	546 •
14.3.5. Default and credit rationing	548 •
14.3.6. Informational asymmetries and credit rationing	553 •
14.3.7. Default and enforcement	555
14.4. Interlinked transactions	561
14.4.1. Hidden interest	563 •
14.4.2. Interlinkages and information	564 •
14.4.3. Interlinkages and enforcement	564 •
14.4.4. Interlinkages and creation of efficient surplus	565
14.5. Alternative credit policies	572
14.5.1. Vertical formal–informal links	573 •
14.5.2. Microfinance	578
14.6. Summary	584
Exercises	586

Chapter 15: Insurance

591

- 15.1. Basic concepts 591
- 15.2. The perfect insurance model 596
 - 15.2.1. Theory 596 • 15.2.2. Testing the theory 597
- 15.3. Limits to insurance: Information 600
 - 15.3.1. Limited information about the final outcome 601 •
 - 15.3.2. Limited information about what led to the outcome 602
- 15.4. Limits to insurance: Enforcement 605
 - 15.4.1. Enforcement-based limits to perfect insurance 606 •
 - 15.4.2. Enforcement and imperfect insurance 608
- 15.5. Summary 615
- Exercises 617

Chapter 16: International Trade

621

- 16.1. World trading patterns 621
- 16.2. Comparative advantage 627
- 16.3. Sources of comparative advantage 630
 - 16.3.1. Technology 630 • 16.3.2. Factor endowments 631 •
 - 16.3.3. Preferences 636 • 16.3.4. Economies of scale 638
- 16.4. Summary 643
- Exercises 644

Chapter 17: Trade Policy

647

- 17.1. Gains from trade? 647
 - 17.1.1. Overall gains and distributive effects 647 • 17.1.2. Overall losses from trade? 650
- 17.2. Trade policy: Import substitution 656
 - 17.2.1. Basic concepts 657 • 17.2.2. More detail 660
- 17.3. Export promotion 676
 - 17.3.1. Basic concepts 677 • 17.3.2. Effect on the exchange rate 678 •
 - 17.3.3. The instruments of export promotion: More detail 679
- 17.4. The move away from import substitution 684
 - 17.4.1. Introduction 684 • 17.4.2. The eighties crisis 685 •
 - 17.4.3. Structural adjustment 690
- 17.5. Summary 699
- Appendix: The International Monetary Fund and the World Bank 701
- Exercises 705

Chapter 18: Multilateral Approaches to Trade Policy	711
18.1. Introduction	711
18.2. Restricted trade	714
18.2.1. Second-best arguments for protection	714 • 18.2.2. Protectionist tendencies 715 • 18.2.3. Explaining protectionist tendencies 717
18.3. Issues in trade liberalization	725
18.3.1. Introduction	725 • 18.3.2. Regional agreements: Basic theory 727 • 18.3.3. Regional agreements among dissimilar countries 730 • 18.3.4. Regional agreements among similar countries 735 • 18.3.5. Multilateralism and regionalism 746
18.4. Summary	753
Exercises	755
Appendix 1: Elementary Game Theory	757
A1.1. Introduction	757
A1.2. Basic concepts	757
A1.3. Nash equilibrium	759
A1.4. Games over time	767
Appendix 2: Elementary Statistical Methods	777
A2.1. Introduction	777
A2.2. Summary statistics	778
A2.3. Regression	783
References	805
Author Index	829
Subject Index	835

Development Economics

Chapter 1

Introduction

I invite you to study what is surely the most important and perhaps the most complex of all economic issues: the economic transformation of those countries known as the developing world. A definition of "developing countries" is problematic and, after a point, irrelevant.¹ The *World Development Report* (World Bank [1996]) employs a threshold of \$9,000 per capita to distinguish between what it calls high-income countries and low- and middle-income countries: according to this classification, well over 4.5 billion of the 5.6 billion people in the world today live in the developing world of "low- and middle-income countries." They earn, on average, around \$1,000 per capita, a figure that is worth contrasting with the yearly earnings of the average North American or Japanese resident, which are well above \$25,000. Despite the many caveats and qualifications that we later add to these numbers, the ubiquitous fact of these astonishing disparities remains.

There is economic inequality throughout the world, but much of that is, we hope, changing. This book puts together a way of thinking about both the disparities and the changes.

There are two strands of thought that run through this text. First, I move away from (although do not entirely abandon) a long-held view that the problems of all developing countries can be understood best with reference to the international environment of which they are a part.² According to this view, the problems of underdevelopment must first and foremost be seen in a global context. There is much that is valid in this viewpoint, but I wish to emphasize equally fundamental issues that are *internal* to the structure of developing countries. Although a sizeable section of this book addresses international aspects of development, the teacher or reader who wishes to

¹ The *Third World*, a group of low-income countries united by common economic characteristics and often a common history of colonialism, is just as much a political as an economic concept. Narrower economic classifications are employed by several international organizations such as the World Bank. A composite index that goes beyond per capita income is described in *Human Development Report* (United Nations Development Programme [1995]). There is substantial agreement across all these classifications.

² This view includes not only the notion that developing countries are somehow hindered by their exposure to the developed world, epitomized in the teachings of *dependencia* theorists, but also more mainstream concerns regarding the central role of international organizations and foreign assistance.

concentrate *exclusively* on these aspects will not find a comprehensive treatment here.

The second strand is methodological: as far as possible, I take a unified approach to the problems of development and emphasize a recent and growing literature that takes a level-headed approach to market failure and the potential for government intervention. It is not that markets are intrinsically bad or intrinsically good: the point is to understand the conditions under which they fail or function at an inefficient level and to determine if appropriate policies grounded in an understanding of these conditions can fix such inefficiencies. These conditions, I argue, can be understood best by a serious appreciation of subjects that are at the forefront of economic theory but need to permeate more thoroughly into introductory textbooks: theories of incomplete information, of incentives, and of strategic behavior. Few people would disagree that these considerations lie at the heart of many observed phenomena. However, my goal is to promote a student's understanding of such issues as a commonplace model, not as a set of exceptions to the usual textbook paradigm of perfect competition and full information.

Because I take these two strands to heart, my book differs from other textbooks on development in a number of respects. Most of these differences stem from my approach to exposition and choice of subject matter. Although I do not neglect the historical development of a line of research or inquiry, I bring to bear a completely modern analytical perspective on the subject. Here are some instances of what I mean.

(1) The story of economic underdevelopment is, in many ways, a story of how informal, imaginative institutions replace the formal constructs we are accustomed to in industrialized economies. The landlord lends to his tenant farmer, accepting labor as collateral, but a formal credit market is missing. Villagers insure each other against idiosyncratic shocks using their greater information and their ability to impose social sanctions, but a formal insurance market is missing. Institutions as diverse as tied labor, credit cooperatives, and extended families can be seen as responses to market failure of some sort, precipitated in most cases by missing information or by the inability of the legal system to swiftly and efficiently enforce contracts. This common thread in our understanding is emphasized and reemphasized throughout the book.

(2) The absence or underfunctioning of markets gives rise to two other features. One is the creation of widespread externalities. Proper classification of these externalities provides much insight into a variety of economic phenomena, which appear unconnected at first, but which (in this sense) are just the common expression of a small variety of external effects. So it is that simple concepts from game theory, such as the Prisoners' Dilemma or the coordination game, yield insights into a diverse class of development-related problems. Again, the common features of the various problems yield