

Contents

Preface

xix

Part I Introduction

1 What Is Development Economics Good For? 1

- 1.1 Assessing Global Poverty and Prosperity 1
 - 1.1A Lessons from international statistics 1
 - 1.1B Poverty in Ethiopia 4
- 1.2 Defining the Development Objective 6
- 1.3 Understanding the Development Process 8
- 1.4 Analyzing Development Policy 9
 - 1.4A Development policies and programs 9
 - 1.4B The need for good policy analysis and the role of economics 10
- 1.5 This Text 13
- References 13
- Questions for Review 14
- Questions for Discussion 14

Part II Development Objectives and the Big Picture

2 Well-Being 16

- 2.1 Life among the Poor in Bangladesh 16
- 2.2 A Working Definition of Well-Being 18
- 2.3 How Households in Developing Countries Pursue Well-Being 19
 - 2.3A How households in developing countries earn income 19
 - 2.3B How households in developing countries spend income and acquire goods and services 21
 - 2.3C How households in developing countries cope with fluctuations and shocks 22
 - 2.3D How households in developing countries build better futures through investment 24
- 2.4 Household-Level Determinants of Well-Being 25
 - 2.4A Assets 25
 - 2.4B Needs 26
 - 2.4C Market conditions 26
 - 2.4D Institutions 27

2.5	Empirical Study of Well-Being	28
2.5A	Real household income per capita	28
2.5B	Real consumption expenditure per capita	29
2.5C	Direct assessment	30
2.5D	Asset measures	30
2.5E	An example	31
	References	32
	Questions for Review	33
	Questions for Discussion	33
	Problems	33

3 Economic Growth 34

3.1	Meaning and Measurement of Economic Growth	34
3.1A	The definition and developmental significance of economic growth	34
3.1B	Measures of economic growth	35
3.2	Global Diversity in Growth Rates	37
3.3	The Proximate Sources of Economic Growth	38
3.3A	Theoretical framework for studying firm-level labor productivity	39
3.3B	Theoretical framework for studying aggregate labor productivity	42
3.3C	Total factor productivity growth versus factor accumulation: growth and development accounting	43
3.3D	Room for improvement	46
3.4	The Determinants of Growth	48
3.4A	Cross-country growth regression studies	49
3.4B	The micro-level underpinnings of rapid economic growth	51
3.4C	The need for micro-level, context-specific study	53
	References	53
	Questions for Review	54
	Questions for Discussion	54
	Problems	55

4 Economic Growth Theory in Historical Perspective 57

4.1	Introduction to Theoretical Growth Models	57
4.2	The 1940s and 1950s: Capital Fundamentalism, Structuralism, and Dualism	58
4.2A	Themes	58
4.2B	The Harrod–Domar growth model	59
4.2C	The Lewis model of labor-surplus dualistic development	62
4.3	The 1960s and 1970s: Neoclassical Perspectives, Technology, and Human Capital	65
4.3A	Themes	65
4.3B	The simple neoclassical growth model	66
4.3C	The neoclassical growth model with technical change	70
4.3D	Neoclassical growth with human capital	72

- 4.4 The 1980s to the Present: Market Imperfections, Increasing Returns, and Poverty Traps 73
 - 4.4A Themes 73
 - 4.4B Endogenizing technical change 73
 - 4.4C Productivity advance as a byproduct of investment in physical or human capital 74
 - 4.4D Productivity advance as the outcome of purposeful research, development, and technology transfer activities 75
 - 4.4E Investigating poverty traps 77
 - 4.4F Deeper determinants of growth 80

References 80

Questions for Review 81

Questions for Discussion 82

Problems 82

5 Poverty, Inequality, and Vulnerability 84

- 5.1 Definitions and Measures 84
 - 5.1A Poverty 84
 - 5.1B Inequality 90
 - 5.1C Vulnerability 94
- 5.2 Poverty, Inequality, Vulnerability, and Economic Growth 96
 - 5.2A Values, beliefs, and development targets 96
 - 5.2B Mathematical relationships linking growth, inequality, and poverty 97
 - 5.2C Growth, inequality, and poverty as joint outcomes of the socioeconomic system 98
 - 5.2D Theoretical connections from growth policies to poverty reduction 98
 - 5.2E Theoretical connections from poverty reduction policies to growth 99
 - 5.2F Empirical relationships among growth, inequality, and poverty reduction 100
 - 5.2G Growth and vulnerability 102
 - 5.2H Further motivation for micro-level, context-specific study 103

References 103

Questions for Review 104

Questions for Discussion 104

Problems 105

Part III Analytical Framework: Decisions, Markets, and Institutions

6 Consumption, Time Allocation, and Production Choices 108

- 6.1 Choices, Development, and Development Economics 108
- 6.2 Consumption Choices, with Application to Nutrition Policy 110
 - 6.2A A motivation 110
 - 6.2B Basic consumer theory: allocating budgets 111
 - 6.2C Nutrition policy 117
- 6.3 Labor Supply Choices, with Application to Child Labor 121
 - 6.3A A motivation 121
 - 6.3B Basic labor supply theory: allocating time 122
 - 6.3C Child labor 127

6.4	Basic Producer Theory, with Application to Green Revolution Labor Market Effects	131
6.4A	A motivation	131
6.4B	Basic producer theory: maximizing profits	131
6.4C	The green revolution's impact on rural labor	135
	References	137
	Questions for Review	138
	Questions for Discussion	139
	Problems	140

7 Households 142

7.1	Diversity in Development and Policy Analysis	142
7.2	Unitary Household Theories: From Consumers, Labor Suppliers, and Producers to Households	143
7.2A	A motivation	143
7.2B	Wage labor households	144
7.2C	Farm households	147
7.2D	Nonfarm business households	157
7.2E	Incapacitated households	157
7.2F	The poverty impacts of rising global food prices	158
7.3	Non-unitary Household Theories: From Simple Utility Maximization to Cooperation and Conflict	160
7.3A	A motivation	160
7.3B	Gender in unitary household models	160
7.3C	Cooperative bargaining and other models of efficient collective decision making	162
7.3D	Separated spheres and mental accounts	166
7.3E	Gender in development policy analysis	168
	References	169
	Questions for Review	170
	Questions for Discussion	171
	Problems	172

8 Domestic Markets for Goods and Services 174

8.1	Markets in Developing Countries	174
8.2	Transfer Costs	175
8.2A	Market exchange and the costly transfer of goods	175
8.2B	Transfer costs in developing countries	175
8.2C	Market intermediaries and transfer costs	176
8.2D	Transfer costs and market limitations	178
8.3	A Model of Market Equilibrium in the Presence of Transfer Costs	179
8.3A	Motivation	179
8.3B	Competitive equilibrium in a single market	179
8.3C	Relationships among markets at different geographic levels and in different geographic locations	184
8.3D	Policy analysis applications	186

8.4	The Economics of Market Development	189
8.4A	Market expansion and growth: the big picture	189
8.4B	Market expansion through transfer cost reduction: a closer look	191
8.4C	Investments that encourage market expansion by reducing transfer costs	194
8.4D	Barriers to private investment in transfer cost-reducing assets	196
8.4E	Government and NGO roles in encouraging market development	197
	References	200
	Questions for Review	201
	Questions for Discussion	201
	Problems	202
	Appendix 8A: Comparative Advantage and the Gains from Market Exchange	203

9 Labor Markets 208

9.1	Labor Markets and Development	208
9.2	Multidimensional Work Arrangements and Worker Well-Being	209
9.2A	Diversity in work and working conditions	209
9.2B	Diversity in employment contracts	211
9.3	Mobility in Developing Country Labor Markets	216
9.3A	A simple model of labor mobility in development	216
9.3B	Geographic mobility concerns	221
9.3C	Interfirm mobility and related costs	224
9.3D	Sectoral mobility and labor market segmentation	225
9.4	Skill Acquisition in Developing Country Labor Markets	230
9.4A	A benchmark model of skills in labor markets	230
9.4B	Skill types and the economics of skill investments	232
9.4C	Education, job training, and policy	234
	References	237
	Questions for Review	238
	Questions for Discussion	239
	Problems	240

10 Investment and Financial Markets 242

10.1	Investment, Financial Markets, and Development	242
10.2	Private Investment Decisions	243
10.2A	A motivation	243
10.2B	Investors and investment projects	243
10.2C	Intertemporal comparisons and investment choices	244
10.2D	Risk and insurance	251
10.2E	A model of private investment decisions	255
10.2F	Application to the study of low fertilizer use in Africa	257
10.3	Financial Markets, Financial Constraints, and Development	259
10.3A	Basic financial market functions	259
10.3B	Financial markets in developing countries	261

10.3C	Financial transaction costs	263
10.3D	Asymmetric information and financial market failures	265
10.3E	Psychological and social barriers to saving	270
10.3F	Financial constraints on investment	271
10.3G	Policy responses	273
	References	275
	Questions for Review	276
	Questions for Discussion	276
	Problems	277

11 International Markets and General Equilibrium 280

11.1	Globalization and Development	280
11.2	A Partial Equilibrium Model of International Trade, with Application to Export Expansion	282
11.2A	Partial equilibrium model of international trade	282
11.2B	Determinants of export volume	285
11.3	General Equilibrium Models of Trade, Production Structure, and Income Distribution	288
11.3A	The specific factors model	288
11.3B	Interpretation and extension of the specific factors model	296
11.3C	The factor proportions model	299
11.3D	General lessons and questions	304
11.3E	Trade liberalization and income distribution: surprises in the 1990s	304
11.4	Trade, Investment, Innovation, and Economic Growth	306
11.4A	A motivation	306
11.4B	Theoretical possibilities	306
11.4C	Trade policy and growth over the last 60 years	307
	References	311
	Questions for Review	312
	Questions for Discussion	312
	Problems	313

12 Institutions and Cooperation 314

12.1	Institutions, Cooperation, and Development	314
12.2	Cooperation and Institutions: Key Concepts from Game Theory and Behavioral Economics	316
12.2A	Cooperation in standard game theory	317
12.2B	Behavioral economics, reciprocity, and cooperation	328
12.3	Economic Analysis of Community-Level Institutions	331
12.3A	An agenda for research on community-level institutions in developing countries	331
12.3B	Institutions governing local common property resources	332
12.3C	Informal insurance institutions	335
12.3D	Customary and informal land rights institutions	337
	References	341
	Questions for Review	343
	Questions for Discussion	343
	Problems	343

13 Policy, Governance, and Political Economy 346

- 13.1 Policy, Governance, Politics, and Development 346
- 13.2 Intervention Rationales and Policy Design 347
 - 13.2A Private versus social decisions 347
 - 13.2B Rationales for intervention and their implications for policy design 350
 - 13.2C Incorrect diagnosis and policy design failure 358
 - 13.2D An important caveat 359
- 13.3 Good Governance of Policy Implementation 359
 - 13.3A Governance failures 359
 - 13.3B The underpinnings of good governance 361
 - 13.3C Governance structure design choices 362
 - 13.3D Governance reforms 365
- 13.4 The Political Economy of Development 371
- References 374
- Questions for Review 375
- Questions for Discussion 375
- Problems 376

Part IV Policy Analysis Approach and Applications

14 Policy Analysis 377

- 14.1 Policy Analysis Concepts and Objectives 377
- 14.2 Seven Questions to Guide Policy Analysis 379
 - Question 1: What are the policy's objectives? 380
 - Question 2: What design details define the policy on paper? 381
 - Question 3: What design details define the policy's impact in practice? 383
 - Question 4: What sorts of individuals, households, or firms are directly affected by the policy, how large are these groups, and how might the identity and sizes of the groups change over time? 383
 - Question 5: What effect does the policy have on the well-being and behavior of the directly affected groups in the short, medium, and long run? 385
 - Question 6: When changes in the behavior of the directly affected induce changes in markets, institutions, and the physical environment, what spillover and feedback effects result, and how do these effects vary over time? 386
 - Question 7: What are the budgetary costs of the policy, and how do they vary over time? 389
- 14.3 Putting the Seven Questions to Work 390
- References 390
- Questions for Review 390

15 Targeted Transfer Programs 391

- 15.1 Targeted Transfer Programs in Developing Countries 391
 - 15.1A Targeted transfers and development 391

15.1B	Targeted transfer program objectives	392
15.1C	Targeted transfer program design and implementation	392
15.2	The Economics of Targeted Transfer Program Participation and Impacts	395
15.2A	Participation decisions and targeting concerns	395
15.2B	Effects of participation on household well-being and behavior	397
15.2C	Targeted transfers and vulnerability	400
15.2D	Targeted transfers and markets	400
15.2E	Targeted transfers and institutions	401
15.2F	Targeted transfers and the environment	402
15.2G	Budgetary costs of targeted transfer programs	402
15.3	Evaluating Targeted Transfer Programs	403
15.4	Analyzing Transfer Program Design Questions	405
15.4A	Comparing impacts for two program designs	405
15.4B	To condition or not?	407
15.4C	Cash versus food?	408
15.4D	Involve the community?	411
	References	413
	Questions for Review	414
	Questions for Discussion	414
	Problems	415

16 Workfare 417

16.1	Workfare in Developing Countries	417
16.1A	The multidimensional appeal of workfare programs	417
16.1B	Workfare program objectives	417
16.1C	Workfare program design and implementation	418
16.2	The Economics of Workfare Program Participation	420
16.2A	Workfare program participation and targeting	420
16.2B	Direct impacts of workfare participation on well-being and behavior	425
16.2C	Impacts on vulnerability	427
16.2D	Workfare and labor markets	427
16.2E	Other short-run spillover effects	431
16.2F	Longer-run infrastructure impacts	431
16.2G	Budgetary costs	432
16.3	Workfare Program Evaluation and Design	432
16.3A	Wage setting	433
16.3B	Supervision and piece rates	435
16.3C	Priorities and governance structures	435
	References	438
	Questions for Review	438
	Questions for Discussion	439
	Problems	440

17 Agricultural Market Interventions and Reforms 442

- 17.1 Developing-Country Government Intervention in Agricultural Markets 442
 - 17.1A Background and focus 442
 - 17.1B Design and implementation of agricultural market interventions and reforms 443
- 17.2 The Economics of Agricultural Market Intervention and Reform 446
 - 17.2A Market-level analysis: taxes and subsidies 446
 - 17.2B Market-level analysis: institutional concerns 454
 - 17.2C The distribution of direct impacts on real income and well-being 457
 - 17.2D Behavioral responses of the directly affected 459
 - 17.2E Spillover and feedback effects 460
 - 17.2F Impacts on economic growth 463
- 17.3 Analyzing the Benefits and Costs of Agricultural Market Reforms 464
 - 17.3A General observations 464
 - 17.3B Agricultural market liberalizations in the 1980s and 1990s 465
- References 467
- Questions for Review 468
- Questions for Discussion 468
- Problems 469

18 Infrastructure Policies and Programs 471

- 18.1 Infrastructure in Developing Countries 471
 - 18.1A Infrastructure stocks in developing and developed countries 471
 - 18.1B Infrastructure services in developing and developed countries 472
 - 18.1C Infrastructure policy objectives 473
 - 18.1D Infrastructure policy design and implementation 473
- 18.2 The Economics of Infrastructure Service Use and Supply 475
 - 18.2A New infrastructure service uses and benefits 476
 - 18.2B Who uses infrastructure services? 478
 - 18.2C Effects of infrastructure service use on users' well-being 480
 - 18.2D Other direct and indirect effects of infrastructure service use 482
 - 18.2E Private sector supply of infrastructure services and rationales for intervention 483
 - 18.2F Budgetary costs 486
- 18.3 Evaluating Infrastructure Programs and Design Changes 487
 - 18.3A Evaluating infrastructure programs 487
 - 18.3B Raising fees 488
 - 18.3C Governance of operation and maintenance 490
- References 492
- Questions for Review 493
- Questions for Discussion 494
- Problems 495

19 Education 496

- 19.1 Education in Developing Countries 496
 - 19.1A Education investment in developing and developed countries 496
 - 19.1B Ultimate and proximate objectives in education policy 497
 - 19.1C Primary and secondary education policy design and implementation 498
- 19.2 The Economics of Primary and Secondary Education in Developing Countries 500
 - 19.2A School enrollment decisions 501
 - 19.2B The direct and indirect effects of schooling 505
 - 19.2C Governance and the quality of teaching and learning 507
 - 19.2D Budgetary costs 509
 - 19.2E Rationales for intervention 509
- 19.3 Evaluating Education Policy Reforms 511
 - 19.3A Education reform objectives 511
 - 19.3B Evaluating education reforms 511
 - 19.3C Eliminating school fees 512
 - 19.3D School-based management reforms 514
 - 19.3E Voucher-based privatization 517
- References 519
- Questions for Review 521
- Questions for Discussion 521
- Problems 522

20 Agricultural Research and Extension 523

- 20.1 Technical Change in Developing Country Agriculture 523
 - 20.1A Agricultural technical change and development 523
 - 20.1B The nature and diversity of technical change in agriculture 524
 - 20.1C The process of technical change in agriculture 525
- 20.2 The Economics of Technical Change in Agriculture 526
 - 20.2A Agricultural technology adoption decisions 527
 - 20.2B Direct and indirect effects of technology adoption 532
 - 20.2C Investment in agricultural research and rationales for intervention 534
 - 20.2D Agricultural extension service supply and rationales for intervention 536
- 20.3 Agricultural Research and Extension Policy Design and Evaluation 538
 - 20.3A Agricultural research and extension policy objectives 538
 - 20.3B Agricultural research policy design, implementation, and evaluation 539
 - 20.3C Agricultural extension policy design, implementation, and evaluation 540
 - 20.3D How valuable are public sector investments in agricultural research and extension? 540
 - 20.3E Redirecting research subsidies from push toward pull mechanisms 542
 - 20.3F Agricultural extension governance reforms 543
- References 545
- Questions for Review 545
- Questions for Discussion 546
- Problems 546

21 Microfinance 548

- 21.1 Microfinance in Developing Countries 548
 - 21.1A The microfinance idea 548
 - 21.1B Microfinance program objectives 548
 - 21.1C Microfinance program design and implementation 549
- 21.2 The Economics of Microcredit 553
 - 21.2A Participation in microcredit programs 553
 - 21.2B Direct effects on well-being 557
 - 21.2C Spillover and feedback effects 559
 - 21.2D Microlending costs and financial sustainability 559
 - 21.2E Rationales for intervention in microcredit 563
- 21.3 Evaluation and Design of Microcredit Programs 564
 - 21.3A Evaluation of microcredit programs 564
 - 21.3B Financial sustainability, commercialization, and poverty impact 565
 - 21.3C Microcredit program design changes 568
 - 21.3D The shift from credit-led to savings-led microfinance 570
- References 571
- Questions for Review 572
- Questions for Discussion 573
- Problems 573

22 Public Health, Health Care, and Health Insurance 575

- 22.1 Health and Health Policy in Developing Countries 575
 - 22.1A Health, health care, and health spending in developing and developed countries 575
 - 22.1B Causes and consequences of health outcomes in developing countries 578
 - 22.1C Health policy objectives and broad policy options 580
- 22.2 Economic Analysis of Programs Promoting Health Input Use 581
 - 22.2A Households' acquisition of health inputs 581
 - 22.2B Health input supply, rationales for intervention, and program design options 584
 - 22.2C Direct and indirect effects of acquiring and using health inputs 586
 - 22.2D Evaluating health input policies 587
 - 22.2E Free distribution or sale of insecticide-treated bed nets? 587
- 22.3 The Economics of Health Insurance Programs 589
 - 22.3A Health insurance, health care utilization, and out-of-pocket spending 590
 - 22.3B Health insurance, health care quality, and efficiency 591
 - 22.3C Design and implementation of health insurance programs 593
 - 22.3D Health insurance program costs and subsidies 597
 - 22.3E Impacts and enrollment 598
 - 22.3F Evaluation of voluntary health insurance programs 600
 - 22.3G Community-based health insurance 601
- References 604
- Questions for Review 605
- Questions for Discussion 606
- Problems 606

Appendix A Interpreting and Evaluating Empirical Evidence 609

- A.1 Empirical Research Questions 609
- A.2 Measuring Variables 610
- A.3 Estimating Means, Proportions, and Other Population Distribution Parameters 611
- A.4 Estimating Causal Effects 617
- References 640

Appendix B Glossary 641

Index 655