

Informal Sector in Economic Development

Prabir Bhattacharya

Informal Sector in Economic Development

An Analytical Foundation



Prabir Bhattacharya Heriot-Watt University Edinburgh, UK

University of Glasgow Glasgow, UK

ISBN 978-3-031-60242-9 ISBN 978-3-031-60243-6 (eBook) https://doi.org/10.1007/978-3-031-60243-6

@ The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2024

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG.

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

If disposing of this product, please recycle the paper.



ACKNOWLEDGEMENTS

I am grateful to Partha Dasgupta, Meghnad Desai, Paul Hare, Christopher Heady, Ravi Kanbur, Rafael Repullo, Javi Palacio-Torralba, Bryan Rynne and Cyprian Wronka for many helpful discussions and suggestions. I have presented parts of the book at various seminars. I have benefitted greatly from the discussion in these seminars. In particular, I would like to thank the participants at the seminars at the Corvinus University of Budapest, Kyoto Institute of Economic Research at the Kyoto University, London School of Economics, Norwegian School of Economics, Research Institute for Economics and Business Administration at the University of Kobe, Strathclyde University, University College London, University of Science and Technology Beijing, and the Yokohama National University.

A number of good friends have provided encouragement and support over the years. I recall with great pleasure the many good times and good discussions I had with Prathivadi Anand, Christine Chu, Peter Lawrence, Anne Miller, Douglas Mair, Yasushi Nakamura, Takahiro Sato, Thomas Torrance, Burhane Tewolde, Bashabi and Neil Fraser and Geoffrey Wyatt. I raise a toast to these marvellous friends.

My sister, Sanghamitra, and my brother-in-law, Nilendu Bhattacharya, gave me, in the winter of 2022, in their home in India, all the comfort and time I needed to unwind and think about how best to organise the material presented in this book. I am deeply grateful.

viii ACKNOWLEDGEMENTS

My greatest debt by far is to my wife and our two children. Chitra and I have navigated life together for more than 25 years. She has been a stead-fast companion and support all through. And the children, Pratik and Shreya, as they navigate their teenage years, continue, as ever, to be a source of wonder and joy. The fact that they now help us out when we are flummoxed by the latest technology, gadgets, or vocabulary is, as the saying goes, neither here nor there! It is just good to have them around. This book is dedicated to all three of them.

Contents

1	Introduction			1 6		
	Bibliography					
2	A	Model of	Development: The Static Analysis	7		
	1					
	2	2 The Model Outline				
	3					
		3.1 The	Rural Sector	10		
		3.2 The	Urban Area	12		
		3.2.	1 The Formal Sector	12		
		3.2.	2 The Informal Sector	14		
			3 The Demand for Labour in the Urban Area	14		
			4 Consumption Behaviour of Workers in the			
			Urban Ārea	15		
	4	The Full	Model	16		
	5					
			r and the Asymmetric Feature of the Model	17		
	6 Relationship Between the Various Endogenous Variables					
		of the Mo		20		
	7		tive Static Results	24		
			ects of a Change in the 'Minimum' Wage in the			
			mal Sector	24		
			ects of a Change in the Labour Supply in the			
			han Avea	30		

		7.3	Effects of a Change in the Maximum Permissible Size of Firms Beyond Which the 'Minimum' Wage Comes into Operation	31	
		7.4	*	31	
			of I_M Firms	34	
	8	V		35	
	9	Con	clusion	35	
	Bibliography				
3	A Model of Development: The Dynamic Analysis				
	1	Intr	oduction	44	
	2	The.	Dynamic Model	44	
		2.1	The Model Outline and Rural-Urban Migration	44	
		2.2	The Model	48	
	3	Nun	nerical Solution	49	
		3.1	Setting the Scene	49	
		3.2	Different Cases Relating to the Formal Sector		
			Wage and the Simulation Results	52	
		3.3	Some Additional Results	58	
	4	4 Policy Implications and Conclusion			
	Bibliography				
4	A	Mode	el of Optimal Development	65	
		1 Introduction		65	
	2	The.	Model and the Steady State	66	
	3	The	Optimal Path	72	
	4	Para	ameter Values, Feasibility Regions and Steady-State		
		Solu	tions	75	
	5	Con	cluding Remarks	79	
	Bi	Bibliography			
5	A	Concl	luding Note	87	
	Bibliography				

	CONTENTS XI
Appendices	89
Bibliography	99
Author Index	103
Subject Index	105

List of Figures

Fig. 3.1	The number of rural hirers (h) , manual labourers (m) , total urban labour (L) as fractions of total population (T) , and employees in the formal sector (f) as fractions of urban	
	labour (L)	52
Fig. 3.2	The rural sector wage (w) , the formal sector	
J	wage (v^*) , the informal sector wage (v) and the rural	
	hirer's income (Π_b)	54
Fig. 3.3	Lorenz curves (plotted at time periods 0, 8.135, 35.135 and 60	
	for all cases and one plotted additionally for each case at the	
	point of maximum inequality [when the Gini coefficient peaks])	56
Fig. 3.4	Locus of Gini coefficients over time	57
Fig. 4.1	The optimal path of the formal sector wage, v^*	73
Fig. 4.2	The path of the informal sector wage, v	74
Fig. 4.3	The path of capital, k	75
Fig. 4.4	The evolution of urban population, l	76
Fig. 4.5	The evolution of Gini coefficient	77
Fig. 4.6	Evolution of v^* vis-à-vis α and β . The steady-state value of v^*	
	is only dictated by n ; therefore, no changes occur when α	
	and β are modified	78
Fig. 4.7	Evolution of v vis-à-vis α and β . β exerts little influence on the	
	steady-state values of ν for large values of α . For smaller values,	
	when β tends to zero, the value of ν is dependent on γ , α and	
	n. A non-linear trend appears in that region. On the other	
	hand, α has a greater dominance on the behaviour of v , which	
	decreases nonlinearly as α increases. Varying β causes small	
	changes in v , whereas α has a strong and nonlinear influence.	
	Particularly, when α decreases, ν increases	79