

Growth and Income Distribution Essays in Economic Theory

LUIGI L. PASINETTI

CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE

LONDON NEW YORK NEW ROCHELLE

MELBOURNE SYDNEY



CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi, Dubai, Tokyo, Mexico City

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521295437

© Cambridge University Press 1974

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1974 Reprinted 1975, 1978 First paperback edition 1979 Reprinted 1980 Re-issued 2010

A catalogue record for this publication is available from the British Library

Library of Congress Catalogue Card Number: 74-76579

ISBN 978-0-521-20474-3 Hardback ISBN 978-0-521-29543-7 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet Web sites referred to in this publication, and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.



Contents

	Preface	ix
I	A mathematical formulation of the Ricardian system	1
	1. Theory of value	1
	2. Theory of distribution	4
	3. Theory of economic growth	6
	4. 'Natural' equilibrium in a two-commodity system	6
	5. Some characteristics of the Ricardian system	10
	6. The market solutions and the attainment of the 'natural' equilibrium	11
	7. The equilibrium of the stationary state	13
	8. The process of economic growth	15
	9. Multi-commodity production	18
	10. Concluding remarks	21
	Appendix – Existence and uniqueness of stable solutions	22
II	The economics of effective demand	29
	1. Malthus on effective demand	29
	2. The principle of effective demand	31
	3. Theories of under-consumption (and over-	22
	production)	33
	4. J. M. Keynes' 'general theory' of employment	36
	5. The principle of effective demand in a different context	41
	6. Ricardian features of Keynes' analysis	42
	7. Anti-Keynesian features of some 'Keynesian' literature	45
	HICIUIU	72



Growth and income distribution

	8. The principle of acceleration	48
	9. Final remarks	50
	Appendix - The 'lagged' multiplier	51
H	Cyclical fluctuations and economic growth	54
	1. The model	55
	2. A graphical device	56
	3. The dynamics of income	59
	4. The dynamics of the stock of capital	63
	5. Interrelations between the dynamics of income and the dynamics of capital	63
	6. The various interpretations of the endogenous	
	dynamics of an economic system	65
	7. Possibility of a steady growth	67
	8. The difficulties of providing a theory which may explain both cycles and growth	69
	9. A more flexible use of macro-economic models	71
	10. A reinterpretation of the complex dynamics of a modern economic system	72
	Mathematical appendix	75
١٧	From Classical to Keynesian economic dynamics	86
	1. Pre-Malthusian views on population	86
	2. Malthus' principle of population	88
	3. The 'law of diminishing returns'	89
	4. Population growth and technical progress	91
	5. Long-run equilibrium conditions – Domar's · contribution	93
	6. The 'natural' rate of growth - Harrod's contribution	95
	7. New answer to an old Ricardian problem	97
	8. Kaldor's theory of income distribution	99
	9. Concluding remarks	101
V	Rate of profit and income distribution in relation to the rate of economic growth	103
	1. A post-Keynesian theory of income distribution and of the rate of profit	103

vi



Contents

2. A correction	106
3. Reformulating the model	107
4. Rate and share of profits in relation to the rate	107
of growth	109
5. A fundamental relation between profits and	
savings	110
6. Implications	112
7. The conditions of stability	113
8. The case of a socialist system	116
9. Models and reality	118
VI The rate of profit in an expanding economy	121
1. Harrod-Domar's dilemma	121
2. The 'Cambridge equation'	121
3. The marginal productivity alternative	122
4. Extreme assumptions and general results	124
5. A first approximation synthesis	126
6. Irrelevance of the workers' propensity to save	127
7. A marginal productivity escape route	129
8. The workers' savings required for the	
disappearance of the capitalists	132
9. Capital-output ratio and rate of profit	132
10. The case of a highly flexible capital-output ratio	134
11. Conclusions for the general case	138
12. Rate of interest and rate of profit	139
13. Many groups of savers	141
14. Further extensions	142
15. A socialist economy	143
16. The rate of profit in an expanding economy	144
References	145
Index	147



Preface

The essays collected in this book (with the exception of Essay VI) were conceived in the years 1958-62, in a period when I moved, in quick succession, from the University of Cambridge, England, to Harvard University in the U.S.A., to Nuffield College, Oxford, and then back to Cambridge again. Essays 1, 111, and v have been published already, and are here reprinted by kind permission of the Review of Economic Studies, the Oxford Economic Papers and l'industria. I am reproducing them without alterations, except for obvious errors and misprints and a few very minor excisions - mainly footnotes, to avoid repetition. Essays 11, IV and VI appear here for the first time. Essays II and IV contain material which I have used in some of my lectures at the University of Cambridge, as many of my pupils will no doubt recognize. Essay vi on the other hand is much more recent, and is in a sense quite distinct from all the others; it was mainly written during my stay as Wesley Clair Mitchell Research Professor of Economics at Columbia University, New York, in 1971-72.

All the essays have in common the same basic conception of the working of the economic system and are therefore complementary to one another. I have sandwiched Essays II and IV in between the previously published essays to provide the missing links – an exploration of the deep Classical, and particularly Ricardian, foundations of Keynesian and post-Keynesian economic theory. As is shown in Essay II, Keynes' theory of effective demand, which has remained so impervious to reconciliation with marginal economic theory, raises almost no problem when directly inserted into the earlier discussions of the Classical economists. Similarly, as is shown in Essay IV, the post-Keynesian theories of economic growth and income distribution, which have required so many artificial assumptions in the efforts to reconcile them with marginal productivity theory, encounter almost no difficulty when directly grafted on to Classical economic dynamics. I have appended



Growth and income distribution

Essay VI to answer a series of questions which have arisen from a theorem contained in Essay V. After all the discussions, a final conclusion emerges on the basic forces determining the rate of profit in the process of economic growth.

I have tried, in the whole book, to insist on the positive and constructive aspects of Classical and post-Keynesian theories. Polemics has been left aside and criticism kept to a minimum. I hope I have succeeded in giving unity and homogeneity to the whole, and in providing a coherent picture of so much of the Keynesian and post-Keynesian economic thinking that has recently originated in Cambridge.

I am glad to take this opportunity to express my deep gratitude to that remarkable group of thinkers - Richard Kahn, Nicholas Kaldor, Joan Robinson and Piero Sraffa - whom I had the rare fortune of meeting, discussing with so often, and then being associated with, in Cambridge, which has been to me the most stimulating place I could possibly imagine for progressive thought in economic theory. To the reader of the present essays it will appear only inadequately how much I owe to them. The warning, therefore, becomes more than usually necessary that the conception of Keynesian economic theory that emerges from the following pages must not be taken as necessarily expressing their views. Though inspired by them, I alone must take full responsibility.

My thanks also go to all teachers, colleagues and pupils with whom I had countless discussions. It would take too long to list them all. But I should like to thank particularly: Richard Goodwin, James Duesenberry, Franco Modigliani, James Meade and Robin Marris.

I am grateful for financial support to the institutions where I have been working, but especially to: King's College, Cambridge; Nuffield College, Oxford; and the Department of Economics of Columbia University, New York.

L.L.P.

King's College, Cambridge December 1973