Edmond Malinvaud

THE THEORY OF UNEMPLOYMENT RECONSIDERED

YRJÖ JAHNSSON LECTURES

The Theory of Unemployment Reconsidered

E. MALINVAUD

BASIL BLACKWELL

© Basil Blackwell 1977, 1985 Reprinted 1978 Second edition 1985

First published 1977

Basil Blackwell Ltd 108 Cowley Road, Oxford OX4 IJF, UK

Basil Blackwell Inc. 432 Park Avenue South, Suite 1505, New York, NY 10016, USA

All rights reserved. Except for the quotation of short passages for the purposes of criticism and review, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

Except in the United States of America, this book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

British Library Cataloguing in Publication Data.

Malinvaud, Edmond

The theory of unemployment reconsidered.—

2nd ed. — (Yrjö Jahnsson lectures)

1. Unemployment

I. Title II. Series 331.13'7'01 HD5705.5

ISBN 0-631-14475-7

ISBN 0-631-14371-8 Pbk

Library of Congress Cataloging in Publication Data.

Malinvaud, Edmond.

The theory of unemployment reconsidered.

(Yrjö Jahnsson lectures)

Includes bibliographical references and index.

1. Unemployment—Mathematical models. 2. Keynesian economics. I. Title. II. Series.

HD5706.M156 1985 331.13'7'01 85-7367

ISBN 0-631-14475-7 ISBN 0-631-14371-8 (pbk.)

Typeset by Freeman Graphic, Tonbridge, Kent. Printed in Great Britain by Billing and Sons Ltd, Worcester

Preface to the Second Edition

Eight years after the first edition of this book, its main message still stands, namely that the microeconomic theory of fixed-price general equilibrium has direct significance for the macroeconomic theory of involuntary unemployment. This message can be restated with only minor additions in the text, making reference to recently published works dealing with the subject.

It raises, however, a few critical issues about which no consensus can be recorded at this time in the economist's profession. These issues motivated my consideration, as well as that of others, on various occasions. Information on what I think about them today and on where else I dealt with them may be useful for the reader of this book. In particular he or she may like to know how my 1978 Marshall lectures¹ and 1983 Royer lectures² relate to the 1976 Yrjö Jahnsson lectures.

The first issue concerns the relevance of any macroeconomic theory of involuntary unemployment. Is there ever such a thing as a general excess supply of labour? I tried in the first lecture on 'Mass Unemployment' to explain thoroughly why a positive answer is usually given

¹E. Malinvaud, *Profitability and Unemployment*, Cambridge University Press, Cambridge 1980.

²E. Malinvaud, Mass Unemployment, Basil Blackwell, Oxford 1984.

to this question, and why the great variations in the unemployment rate cannot be reconciled with the idea, sometimes put forward, that unemployment, as recorded in the statistics, is only voluntary.

The second issue questions whether an appropriate theory can be built on the fixed-price hypothesis, or more precisely on the hypothesis that prices are exogenous in the short run for the determination of the temporary general equilibrium. Granting the possible existence of excess supplies or demands in this equilibrium, should not theory recognize some feedback to prices, even when attention is limited to the short run? Theory would, of course, be the better for such recognition – as long as it were realistic.

In actual fact, price rigidities are due to some fundamental features in the social organization, as well as to costs in information gathering, in contracting and in adjusting exchange relationships to a permanently moving environment. All this is not easy to formalize, to study and to confront with incomplete market clearing of varying form and magnitude. Macroeconomic theory must then start from specifications in which feedbacks from excess demands or supplies to prices are represented in a rather crude way. Two types of such specifications have been studied.

The first one simply states that, for the temporary equilibrium to be determined each price is a function of an exogenous variable and of the excess demand for the corresponding commodity. Prices are then neither fully flexible nor absolutely rigid. At the equilibrium, incomplete market clearing and rationing still occur, but prices are endogenous and would then change if something was changed in the conditions of this equilibrium. Although

this type of specification has not been much studied,³ its results would clearly be similar to those derived from the fixed-price hypothesis, but with usually smaller multipliers.

The second type of specification starts from the observation that the reasons explaining price rigidities have a good deal in common with those explaining imperfect competition. Models of imperfect competition can then be built in which features derived from the fixed-price hypothesis are also found.⁴ The temporary equilibrium is then determined from exogenously given perceived demand and supply functions rather than from exogenously given prices; these perceived functions are viewed as applying in the short run and as being likely to move from one equilibrium to the next; when the curve representing one such function is assumed to be kinked at a given price, this price usually prevails and the difference from the fixed price assumption may appear to be only nominal. Potentially, however, this imperfect competition approach is more general, but of course much more cumbersome to put into operation.

One notable aspect of the fixed-price hypothesis is its adhesion to the 'law of one price': all exchanges of any given commodity are made at the same price against money. This is of course an approximation. But the approximation may appear less and less satisfactory as excess supplies or demands become more important and

³See however R. B. Myerson, 'Prix et indicateurs de tension dans un modèle d'équilibre général', *Cahiers du séminaire d'économétrie*, No. 22, CNRS, Paris 1980.

⁴See in particular T. Negishi, *Microeconomic Foundations of Keynesian Macroeconomics*, North-Holland Publishing Company, Amsterdam 1979; O. Hart, 'A model of imperfect competition with Keynesian features', *Quarterly Journal of Economics*, Feb. 1982.

x Preface

more durable.⁵ Since in such cases the gains from ignored mutually advantageous trades become more sizeable and more detectable, one may expect that some of these trades will be made at deviant prices. Indeed, whenever sustained important shortages or excess supplies have prevailed, one has observed the development of black markets, hidden economies, dualism and the like. All this is of course missed by the theory discussed here.

The third critical issue concerns how the short-run temporary equilibrium is described as changing through time and whether the fixed-price theory provides a valuable building block for a good theory of economic evolution. This subject, which is approached in the last chapter of this book, but in a very limited way, raises many questions. It was the main topic of my Marshall lectures, in which the dynamics implied by price revisions and capital accumulation was studied within a particular model. It was also the main topic of the second of my Royer lectures, in which the various aspects of a dynamic theory were surveyed and heuristically discussed.

Finally, a last critical issue of a different nature concerns what the newly reconsidered theory of unemployment has now to convey to policy-makers who would like to contain and remove the present mass unemployment prevailing in many parts of the world. Some paragraphs in the second and third chapters might seem to suggest that this book claims to deal directly with the issue. Such a reading would be a misinterpretation. Indeed, the discussion of policy measures within a prototype model are intended to demonstrate that the approach will ultimately be relevant for policy-makers; but it does not proceed

⁵The point was made in a review of this book by A. Coddington; see *Journal of Economic Literature*, Sept. 1978, p. 1012.

Preface xi

from an analysis of the main features of the present employment situation, neither does it consider which policy mix might bring about concrete improvement in the situation. The third of my Royer lectures was devoted to the present policy issue; it clearly shows that, if the approach studied in this book is important and illuminating in some respects, other complementary approaches must also be used and classroom exercises such as those discussed here do not suffice for a complete grasp of the real problems.

This second edition has benefited from contributions made by many people. Special mention must be made of four particularly careful readers of the first edition, who were kind enough to inform me of the errors and ambiguities of the former text: S. Chae, K. Hildenbrand, W. Hildenbrand and M. Yamada.

Preface to the First Edition

When we study the impact of macroeconomic policy on unemployment, as we must now do throughout the world, our main conceptual framework is the well-known Keynesian theory. After more than two decades during which the formal model derived from the *General Theory* remained substantially unchanged, a number of research workers have recently undertaken a reconsideration that, bearing on the basic foundations, should now lead us to a better understanding of the unemployment phenomenon itself.

Contributing to the famous series of the Yrjö Jahnsson lectures, I shall try here to present my own views on where we now stand in this undertaking. I should like to convey my strong belief that the reconsideration is a major step in the development of our science. Indeed it tends to have the characteristics of great theoretical achievements: clear foundations, consistency with many observed facts, unification of theories which previously appeared as fundamentally distinct.

To speak of *the* unemployment theory is, of course, an 'abus de langage', since we shall be concerned here only with the massive 'involuntary unemployment' that at times appears above what is called 'frictional unemployment'. Labour economists have to consider many questions

about the nature of the latter and about the factors affecting it at the micro or macro level. Neither should one believe that frictional unemployment is clearly distinguishable from, and causally independent of, involuntary unemployment. The distinction is concerned rather with our analytical method for approaching a complex phenomenon than with two identifiable components of statistical unemployment. Labour economists must also study hidden unemployment and the participation of people within the labour force – a factor of great importance, since it is linked with the employment situation. But general economists often speak of *the* unemployment theory when considering only involuntary unemployment, and I shall do so here.

When I speak of the Keynesian theory, I shall make a second 'abus de langage', since I shall never refer to its full elaboration, but only to the multiplier model presented mainly in the first chapters of the General Theory. Indeed, the recent reconsideration concerns much less the role of interest rate and monetary policy than the foundations and domain of validity of the multiplier model. This is not meant to imply that Keynes's more elaborate theory should be neglected but only that, at the present stage, theoretical research will benefit from concentrating on the simplest expression of Keynes's thoughts. ¹

Such being my subject, I shall try, in the first chapter, to discuss the best approach to building an unemployment theory; I shall then present the basic elements for such a theory. The second chapter will be devoted to a prototype model that I consider appropriate for a first representation

¹Moreover, as I shall explain later, the multiplier model that will be discussed may not be quite the one Keynes had in mind, but rather that of his disciples.

of the phenomena concerning us here. I shall then distinguish two cases corresponding respectively to what will be called 'classical unemployment' and 'Keynesian unemployment'; the choice of the macroeconomic policy will be examined for each of these two cases, and for a third one of 'repressed inflation' as well. Among the various questions that will be dealt with in chapter 3, the main one will concern why Keynesian unemployment is much more frequent than classical unemployment. I shall, however, point to various circumstances that make the present situation somewhat akin to classical unemployment; this fact may explain the renewed interest for certain old-fashioned views about the economic policy that would best restore full employment.²

²This text has benefited from many suggestions first made at Professor Paunio's seminar in Helsinki, and subsequently by K. Arrow, R. J. Barro, G. Debreu, J. Drèze, J. Green, H. I. Grossman, F. Hahn, S. Honkapohja, G. Laroque and many others.

Contents

Preface	to the	Secon	d Edition
Prefac	e to th	e First	Edition

vii xii

1 Elements for a Theory

1

The Keynesian approach · Why a general equilibrium concept? · Price rigidities in the short run · An equilibrium with rationing · A formalization · Perceived constraints · Supply and demand · Typology of equilibria · Short-run analysis and long-term equilibrium

2 A Prototype for the Analysis of Short-run Equilibrium and Policy

35

The general framework · Employment, rationing and prices · Consumers · Rationing of consumers · Producers · Effective policies for a better equilibrium · The Keynesian equilibrium · Classical unemployment · Repressed inflation

CONTENTS

3 Unemployment and Medium-term Economic Policy

81

Role of the price—wage constellation · Impact of changes concerning exogenous variables · Short-run rationing and long-run equilibrium · Short-term fluctuations tend to favour inflation and Keynesian unemployment · The price—wage constellation might be biased towards a lower real wage rate than in the Walrasian equilibrium · Prices and wages seem to react more quickly to excess demand than to excess supply · Actual wages and prices may lag or anticipate with respect to their medium-run path · The classical nature of unemployment in the 1970s · Many markets: Keynesian unemployment with classical contamination · The role of saving · Conclusion

Appendix The case of a fixed labour supply

120

Index

131

1

Elements for a Theory

1 The Keynesian approach

The term *involuntary* unemployment makes it obvious from the start that the labour market is one in which supply exceeds demand. Suppliers are therefore rationed in the sense that some of them do not find jobs. Hence, unemployment theory must be closely connected with the theory of rationing.

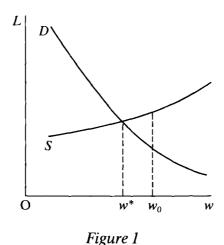
This simple fact has unfortunately led in the past to a misconception about the cure of unemployment, a misconception against which J. M. Keynes had to fight when he presented his own analysis.

One way of understanding the issue is to realize that, roughly speaking, the naïve theory that lies behind this misconception makes undue use of partial equilibrium analysis in a situation where general equilibrium analysis is called for. Considering the labour market in isolation and observing that supply exceeds demand, one has the

In this book 'involuntary unemployment' is used to mean the excess supply of labour. Since the phrase has been used by others with a different meaning, I am avoiding it in some of my other writings. On this point see pp. 11–17 in E. Malinvaud, *Mass Unemployment*, Basil Blackwell, Oxford 1984.

¹Keynes expressed this by saying that the second postulate of the classical school, namely the equality between the utility of wage and the marginal disutility of labour, no longer holds. (See *General Theory*, chapter 2 and in particular the last section 7 of that chapter.)

great temptation of drawing a graph with the wage rate w as abscissa² and the quantity of labour L as ordinate. The involuntary unemployment situation is one in which the present wage rate w_0 leads to a supply S in excess of demand D. Excluding pathological cases, this means that equilibrium of the labour market must correspond to a smaller wage rate w^* . Involuntary unemployment would be reduced if only the wage rate fell.



The role of this simple analysis which, accepting the term to be outdated, I shall call 'classical', appears in

²Whether nominal or real wage rate is considered does not matter at this stage. But I shall argue later that, in the theory of unemployment, we must restrict the concept of 'the labour market' to refer to exchanges of labour against money. Hence, the nominal wage rate is the price on this market.

³In the *General Theory* the word 'classical' refers in most places to a theory in which all markets are assumed to be cleared. In this sense the classical theory is a special case of Keynes's theory and cannot deal with involuntary unemployment. But, in chapter 19, Keynes discusses the 'clas-

some important writings of the inter-war period.⁴ Keynes was sufficiently concerned by it to discuss it in his *General Theory* (chapter 19, I).

Why is the previous reasoning unjustified? Basically because it neglects the fact that, in the situations actually observed, rationing on the labour market is related to, and dependent on, rationing on the goods markets. Since firms cannot sell as much as they want, since they will not produce more than they can sell, since in the short term their labour requirement is strictly linked to the level of their output, and since the demand for goods depends on labour incomes, the demand curve D for labour will shift (and actually also the supply curve) when the wage rate will move from w^0 towards w^* , and this shift is likely to counteract the reduction of the discrepancy between demand and supply.

Hence, the proper theoretical framework is one in which supplies are rationed both on the labour market and on the goods market. Moreover the two types of rationing are so tightly interdependent that, in order to study policies against involuntary unemployment, one

sical' view according to which a decrease of the wage rate would reduce unemployment. In order to limit confusion, I shall use 'Walrasian' instead of 'classical' in the first sense.

⁴In Hicks's *Theory of Wages* (1932), we read: 'under competitive conditions, this unemployment must lead to a fall in wages, going on until *the excess of labour was absorbed*' (p. 56 of the Macmillan 1963 edn, my italics).

See also chapters IX and X of the same book, in particular chapter X, § I, where – starting from a full employment equilibrium – the final effect of a rise of real wages is worked out; the text ends with: 'The final position thus reached is one of equilibrium, if the existence of the unemployed is left out of account' (p. 199).

One should also refer to the writings of J. Rueff and to the discussion about the existence of a strong statistical correlation between unemployment and the real wage rate: J. Rueff, 'Les variations du chômage en Angleterre', Revue politique et parlementaire, 10 Dec. 1925; M. Hilton,

feels justified in concentrating attention exclusively on the formation of demand on the goods market.

The preceding argument is the well-known stand adopted for introducing the Keynesian theory. One may therefore be surprised to realize that it has not been more widely looked at. Indeed, quite a few clauses are assumed in order to justify the Keynesian model; moreover, the preceding reasoning does not completely disprove the 'classical suggestion'. Theoretical economists have spent a great deal of analytical skill in pursuit of a full clarification of questions that have much less social significance than those considered here.

My own explanation of this theoretical lacuna attributes some importance to the lack of a general equilibrium framework concerning an economy with rationing. My main purpose here will therefore be to study such a framework.

2 Why a general equilibrium concept?

Before I proceed, I must make it clear why general equilibrium analysis is a proper approach to the study of

^{&#}x27;Communication sur la relation possible existante entre le mouvement des salaires réels et le chômage', Bulletin de l'Institut International de Statistique, Tome XXIV, 1, Varsovie, 1930, p. 135; J. Denuc, 'Les fluctuations comparées du chômage et des salaires dans quelques pays de 1919 à 1929', Bulletin de la Statistique Générale de la France, April-June 1930, p. 327.

Historians of the inter-war period have, however, pointed out that most of those economists who were teaching and expanding the traditional theory of prices did not propose at the time a policy of wage cuts, but rather a true demand management policy. Their recommendations did not then result from their theory. See for instance M. Blaug, 'Kuhn versus Lakatos or paradigms versus research programmes in the history of economics', in S. J. Latsis (ed.) *Method and Appraisal in Economics*, Cambridge University Press, 1976.