A Model of Macroeconomic Activity

Volume I: The Theoretical Model

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Ballinger Publishing Company • Cambridge, Mass.
A Subsidiary of J. B. Lippincott Company

International Standard Book Number: 0-88410-268-8

Library of Congress Catalog Card Number: 74-12199

Printed in the United States of America

Library of Congress Cataloging in Publication Data

Fair, Ray C

A model of macroeconomic activity.
Bibliography: v. 1, p.
Contents: v. 1. The theoretical model.
1. Macroeconomics--Mathematical models. I. Title.

HB171.F24 339 74-12199
ISBN 0-88410-268-8

Table of Contents

List of Tables

Preface

The work in this volume grew out of both my dissatisfaction with the standard static-equilibrium model that is found in most macroeconomic textbooks and my interest in the problem of basing macroeconomic theory on more solid microeconomic foundations. I was also interested in trying to incorporate into a general model of macroeconomic activity the recent work in economic theory that has been done on relaxing the assumptions of perfect information and the existence of tâtonnement processes that clear markets every period.

It soon became apparent as I began working on this project that the model that I had in mind would not be capable of being analyzed by standard analytic methods. I wanted to develop a macroeconomic model that was general, was based on solid microeconomic foundations, and was not based on the assumptions of perfect information and the existence of tâtonnement processes. I also wanted the model to account for wealth effects, capital gains effects, and all flow-of-funds constraints. Because of the likely complexity of any model of this sort, I decided at an early stage of the project to use computer simulation techniques to help analyze the properties of the model. The methodology that I followed is described in section 1.3.

One of the main dangers in building a model that is only feasible to analyze using computer simulation techniques is that the model becomes too detailed or complex for anyone other than the model builder to want to spend the time that it takes to understand the model. I clearly face this danger in the present case. However, I have tried to write this volume to make the model as intelligible as possible in as simple a way as possible. First, I have constructed a "condensed" version of the basic model, with the aim of making the model easier to understand. Second, I have constructed a "static-equilibrium" version

of the model, with the hope that this will put the basic model in a better perspective. Third, I have organized the discussion so that the different sectors are each discussed individually before the overall model is put together. The discussion of each sector is fairly self-contained, so that the reader can concentrate at first on the properties of each sector without having to comprehend the complete model. (I have, however, given a brief outline of the overall model in Chapter One.) Finally, I have relied heavily on the use of tables to present the model and have tried to make the tables fairly self-contained from the discussion in the text. One should be able to get a good picture of the overall model from a careful reading of the tables. The tables should also be useful for reference purposes.

There are, as discussed in Chapter Eight, many ways in which the present model might be extended. In many cases these extensions were not carried out here because of the desire not to increase the complexity of the model anymore than already existed. In future work, if the model does not turn out to be too unwieldy to comprehend, it would be of interest to carry out many of the extensions.

This volume is one of two. In Volume II an empirical model will be developed that is based on the theoretical model found in this volume. Because there is no unique way to specify an empirical version of the theoretical model, it seemed best to present the theoretical and empirical models in two separate volumes. The present volume can be read without reference to Volume II.

Neither volume has been written specifically as a textbook. It is possible, however, that either or both volumes could be used as texts in a graduate level macroeconomics course. Because of my unhappiness with the standard textbook model, I have used for the past two years parts of the present volume in a graduate level macroeconomics course that I have taught at Princeton.

I would like to thank a number of people for their helpful comments on an earlier draft of this volume. These include Alan S. Blinder, Gregory C. Chow, Robert W. Clower, Kenneth D. Garbade, Herschel I. Grossman, Edwin Kuh, and Michael Rothschild. I am also grateful to the National Science Foundation for financial support.

Ray C. Fair
May 1974

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Volume1: The Theoretical Model

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Index

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