MACROECONOMIC ANALYSIS AND STABILIZATION POLICY

Macroeconomic analysis and stabilization policy

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PREFACE

This book has evolved from a graduate course in macroeconomics which I have given at the Australian National University over the past five years. Many good books on the subject are now available and the reader may legitimately wonder how this book differs from some of the existing texts in the area.

The main focus of this book is on the construction and analysis of an integrated macroeconomic model. In developing such a model, there are four main aspects which we wish to stress, and which so far have not received adequate attention in existing textbooks.

First, and most important, we emphasize what we call the 'intrinsic dynamics' of the macroeconomic system. This is the dynamics inherent in the system arising from the creation of securities by certain groups in the economy, in order to finance their operations. Typically, the government prints money or issues debt in order to finance its deficit, while firms issue bonds or stocks to finance their investments. These securities are in turn absorbed by households through the process of savings. These relationships necessarily impose a dynamic structure on the macroeconomic system, even if all the underlying behavioural relationships are static. It is the analysis of this dynamic system which forms the central theme of this book and which until now has been conspicuously absent from existing macroeconomic textbooks.

Secondly, a good deal of attention is devoted to developing current ideas in inflation theory – particularly pertaining to the role of inflationary expectations – and incorporating these into a fully integrated macroeconomic model. Thirdly, several chapters are devoted to the international aspects of macroeconomics. These are typically given very brief attention in macroeconomic textbooks, being left to specialist books on international economics. But with increasing international integration, it seems that international macroeconomics should be treated as part of the received body of macroeconomic theory and not just left to specialized books on the subject. Finally, the book discusses in some detail several aspects of stabilization policy, and in particular gives an introduction to optimal stabilization theory.

These four areas reflect the main emphasis of the approach adopted in the present volume and also include what I believe are some of the more important topics neglected by existing books. On the other hand, many books give excellent treatments of the component parts of the macroeconomic system, such as the consumption function, investment function, etc., and these are not discussed in any detail here. Rather, the objective is to

take standard forms of such functions and to introduce them into a complete macroeconomic model. In this respect, the present volume can be regarded as complementary to some of the existing texts, which discuss the theoretical and empirical issues relating to these component functions in great detail.

Some of the material appearing in this volume has been adapted from articles which originally appeared in journal form. In particular, I am grateful to the editors and publishers of the *International Economic Review, Australian Economic Papers, Economic Journal, Canadian Journal of Economics* and the *Journal of International Economics* for their kind permission to include material which was originally published in their journals. The paper that I wrote with David H. Pyle, The Dynamics of Government Policy in an Inflationary Economy: An 'Intermediate-Run' Analysis, *Journal of Money, Credit, and Banking*, Vol. VIII, No. 4 (November 1976), copyright ©1976 by the Ohio State University Press, has also been adapted for use in this volume.

In undertaking a project of this size, one necessarily incurs many debts. Many individuals have read parts of the material either in draft form, or in the form of papers which subsequently were revised into chapters. In particular, I would like to express my gratitude to Edwin Burmeister, Geoffrey H. Kingston, Steven W. Kohlhagen, Thomas Mayer, Robert A. Meyer, Frank Milne, John Pitchford, Michael G. Porter, Alan Preston, David H. Pyle, Edward Sieper, Robert M. Solow, Pravin K. Trivedi and W. Murray Wonham, either for reading various parts of the material or for discussions at earlier stages. Comments by graduate students in macroeconomics at the ANU, who were exposed to the manuscript in draft form, were also useful in clarifying various parts. In particular I would like to thank Geoff Carmody and Ian McKenzie for their helpful comments. I would also like to thank Debbie Stoyles for her superb typing of numerous drafts of the manuscript. Thanks are also due to Isobel Everitt who assisted most ably with the typing of two of the chapters and to Lindy Spence for editorial assistance. Finally, I would like to thank my wife, Michelle, and children, Geoffrey and Jacqueline, for their patience and forbearance throughout this long project.

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NOTE

Throughout this book, where no ambiguity can arise, we shall adopt the convention of letting primes denote total derivatives and denoting partial derivatives by appropriate subscripts. Time derivatives will be denoted by dots about the variable concerned. Thus we shall let

$$f'(x) \equiv \frac{df}{dx}; \quad f_i(x_1, \ldots, x_n) \equiv \frac{\partial f}{\partial x_i} \qquad i = 1, \ldots, n,$$

$$f_{ij}(x_1, \ldots, x_n) \equiv \frac{\partial^2 f}{\partial x_i \partial x_j} \text{ etc.,} \quad \dot{x} \equiv \frac{dx}{dt}$$

The application of a bar to a letter is used to denote either a stationary equilibrium value to a dynamic system, or the fact that the variable to which it is applied is fixed exogenously. The intended meaning should be quite clear from the particular context.