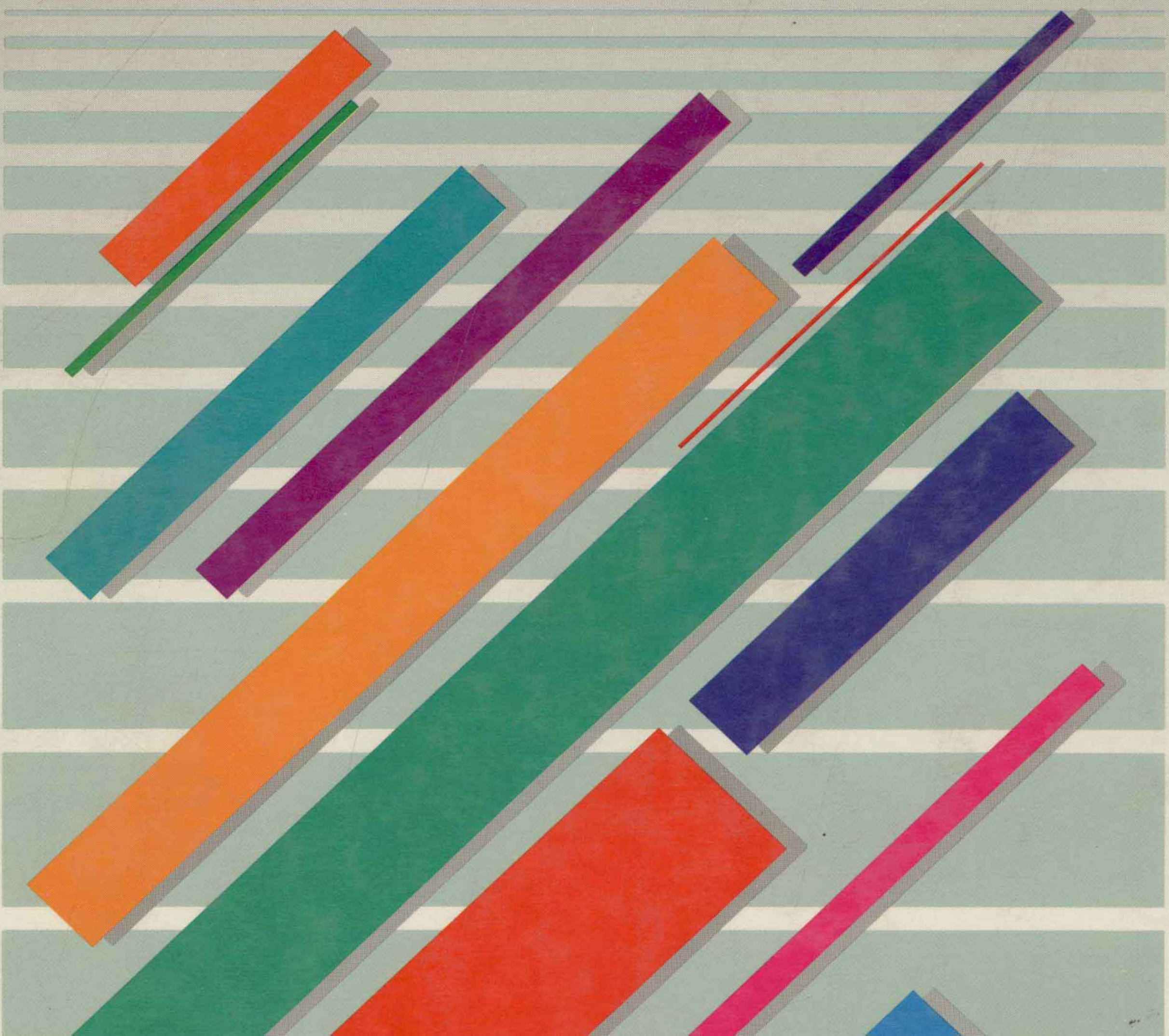
PAUL WACHTEL

MACRO ECONOMICS

FROM THEORY TO PRACTICE



MACRO ECONOMICS

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PAUL WACHTEL

Research Professor of Economics and Department Chairman
at New York University, Stern School of Business

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About the Author

Paul Wachtel is a research professor of economics and department chairman at the New York University Stern School of Business. He has been on the New York University faculty since 1972, shortly after obtaining his Ph.D. from the University of Rochester. His undergraduate degree is from Queens College of the City University of New York. Dr. Wachtel is also a research associate at the National Bureau of Economic Research and the author of the *Outlook* column for *NYU Business*. He has been a visiting economist at the Federal Reserve Bank of New York and a visiting professor at the Hebrew University in Jerusalem.

Paul Wachtel's research interests and publications cut across wide areas of macroeconomics. He has lectured widely on the implementation and effects of monetary policy, on the causes and consequences of inflation and inflation expectations, and on trends in personal saving behavior and capital formation. Recent publications include: "Deficit Announcements and Interest Rates," with John Young, *American Economic Review,* December 1987; *Trade Friction and Economic Policy,* edited with Ryuzo Sato, Cambridge University Press, 1987; "The Effects of Inflation and Money Supply Announcements on Interest Rates," with Thomas Urich, *Journal of Finance,* September 1984; and "Household Savings and Demographic Change: 1950–2050," *Research in Population Economics,* 1984.

Preface

Macroeconomics is a relatively new subject that has experienced several revolutions and counterrevolutions in its short history. These changes in thinking are more often than not linked to the evolution of macroeconomic problems and policy. Thus, a practical approach that emphasizes empirical analysis and real world developments is the most natural way to study macroeconomics. Although there are any number of textbooks on macroeconomic theory, there is still a distinct need for a text with the practical approach that motivates this book.

The structure of this text differs from that of many of its predecessors, a departure motivated by the desire to provide a context for understanding developments as they occur. I believe that many other texts spend so much time developing theoretical tools that students neither see the connections to the real world nor have the opportunity to apply them. Accordingly, this text presents both the core of macroeconomic theory and some of the tools for understanding empirical analysis before it turns to applied discussions.

The Text's Approach to Macroeconomics

Two major developments in macroeconomic thought in modern times—the Keynesian revolution and the appearance of new classical economics—show clearly how theory and real world influences are closely linked. The Keynesian revolution in macroeconomic thinking occurred when it did for two practical reasons. First, it was a response to the crisis of the Great Depression of the 1930s, which seemed to indicate that massive unemployment could persist indefinitely. Second, the then newly developed measures of aggregate activity—the national income and product accounts—enabled the Keynesians to both analyze the phenomena and develop their policy prescriptions.

The rational expectations or new classical approach, a very recent development in macroeconomic theory, provides a strong theoretical challenge to the Keynesian tradition of policy activism to manage the macroeconomy. The new classical revolution did not occur simply as an abstract theoretical development. Instead it was an attempt to understand why stabilization policy in the 1960s and 1970s was less successful than had been hoped. The new classical approach helps us understand the inherent limitations of forecasting and policy management which stem from the continuous evolution of the structure of the economy.

Our practical approach to macroeconomics suggests that we examine the applicability of theory and evaluate the impact of changes in policy. Empirical macroeconomics accomplishes these tasks, and in this text we explain how econometric modeling provides a formal link between theory and observation. We show how econometric results illustrate the real world implications and lessons of theory. The intent is not to teach econometrics, the specification and estimation of statistical models, but to show what econometric results can teach us about the economy. This is the first text that demonstrates how students can become educated users of econometric results without studying the statistical theory that underlies econometrics.

An understanding of empirical macroeconomics is very valuable because the differences that exist among macroeconomists often do not hinge on the fundamental building blocks of the core theory. Instead they stem from differences in emphasis and interpretation of the empirical phenomenon. The explanations of empirical phenomenon that are found throughout the book help us understand how each theoretical approach works and enables us to evaluate alternative policy recommendations.

An important message that emerges from this text is that macroeconomics cannot provide panaceas and definitive solutions for all economic ills. Different situations require different theoretical analyses and, furthermore, every policy recommendation is subject to uncertainty concerning its outcome. These limitations make macroeconomics a more difficult subject and perhaps at times a confusing one, but ultimately a more interesting one as well. Students will find in these pages the wherewithal to deal with these complexities in an intelligent fashion.

The Audience

This text is aimed at the student who is studying macroeconomics in order to become an educated observer of the economy. It does not set out to provide all the mathematical tools and apparatus that graduate study of economics requires. Nevertheless, I have not shied away from formal explanations when they are useful, and they are preferable to simply making assertions about theory.

The text starts with the basics of macroeconomics but moves into the heart of the subject rather quickly. Thus, it is accessible to students with little or no prior course work but is better suited to students who have had some prior training in an introductory economics course. This text was written for students who want to obtain a better understanding of how the macroeconomy works and what policy can and cannot accomplish. Such students are often found in courses such as:

- Undergraduate courses at the intermediate level with an applied bent for students who may or may not continue their formal studies in economics.
- Courses in master's programs of business schools. MBA students have,

more often than not, had a smattering of economics as undergraduates and are also unlikely to be on their way to becoming professional economists. Nevertheless, an understanding of applied macroeconomics is an important part of their liberal training in business.

- Courses on business cycles or forecasting. The distinction between macro theory courses and business conditions/forecasting courses has become increasingly blurred. Modern developments of macro theory have brought renewed interest in what used to be called (in the pre-Keynesian generation) business conditions. Applied forecasting can no longer be taught out of a theoretical context, and our practical approach bridges the gap between courses in macroeconomics and business conditions.

The Organization of the Book

To understand the theory and practice of macroeconomics, we need to explore the tools of empirical macroeconomics. Accordingly, the text begins with chapters on macroeconomic data and business cycle analysis which give the student the intuition to examine real world situations.

The tools of model building are presented only to the extent that they will be usable and helpful in meeting our goals. These tools—Keynesian aggregate demand, *IS-LM* analysis, total supply and demand, and the Phillips curve—are presented in Part 2 of the book, "The Theoretical Core." The core chapters start with the Keynesian revolution and move right through to the new classical approach. The exposition in the core chapters not only develops these tools, but does so in a context that explains the historical evolution of macroeconomic theory and its interaction with real world events.

In Parts 3 and 4 we turn to the practical concerns of macroeconomics. Part 3 is devoted to the formulation, implementation, and effects of macroeconomic policy. Since monetary policy has become increasingly more important in recent years, we take a close look at the financial sector and the way in which monetary policy is made. As a consequence, a number of issues that are often not discussed in other texts are explained, such as the choice between interest rate and money supply policy targets, the channels of supply side policy influence, the long-run effects of deficits, and estimates of the impacts of monetary and fiscal policy changes.

Since macroeconomic policy in recent years is often strongly influenced by international considerations, a chapter on the open economy is included in Part 3. The discussions on open economy in the core chapters were kept to a minimum for the sake of simplicity. In Part 3 we present a full exposition of all the theoretical and policy implications of the open economy, including the role of financial flows in exchange rate determination.

The final part of the text, Part 4, takes a closer look at the individual sectors of the economy. Modern theories of money demand, the labor sector, and consumption and investment demand are presented. These chapters build on some of the intuition presented in the core chapters and provide explanations of the microeconomic foundations of behavior. The micro foundations are presented when they assist in providing an explanation of behavior. For example, various explanations of behavior in the labor sector are presented to show why macroeconomics often assumes that there is some degree of wage rigidity. In addition, these chapters show some empirical results which enable us to estimate important relationships, such as the effect of interest rates on money demand and investment expenditures. Important concepts like the natural rate of unemployment are not simply treated as abstractions but are made operational with specific estimates of their magnitude.

Chapter 18 provides an introduction to the methods and techniques of econometric modeling. Students will learn how models can be used to assist in forecasting and in the analysis of policy changes. Model simulation concepts are explained so that econometric model estimates of the effect of policy changes on the economy are no longer a mystery.

The text concludes with a thorough presentation of the new classical approach (Chapter 19), which has not been thoroughly explained at an elementary level in other texts. Although this is by no means a book that subscribes to the new classical approach, the lessons of this influential school pervade the book. In this chapter the approach is subjected to a rigorous examination. It is left to last because the challenge to macroeconomic thinking provided by the new classical propositions has set the scene for much of the current research in macroeconomics. These include the renewed efforts of macroeconomists to understand why economic fluctuations occur and why inflation and unemployment persist.

Conclusion

Macroeconomics: From Theory to Practice is a text that will provide students with an understanding of how the macroeconomy works, how policy affects the economy, and how economists explain the phenomena that we observe. The text does this by relying on two fundamental pedagogical concepts—the interaction between theory and real world events and the use of empirical evidence to evaluate the implications of theory.

Macroeconomic theory has developed in response to real world conditions and problems. Thus, an understanding of macroeconomic theory requires an explanation of the historical context which gave birth to a particular approach. In addition, an understanding of how the macroeconomy works does not stop with theoretical models; in this book we go on to examine the empirical relationships that connect theory to real world conditions and events.

I believe that students who use this text will emerge from their studies as informed observers of the macroeconomy. When newspaper reports indicate that the Federal Reserve is tightening monetary policy, these students will understand what the Fed is trying to accomplish and why and how it will do so. When the president rails against the Congress for failing to cure its profligate ways, the student will be able to cut through the rhetoric and understand why a deficit may or may not be desirable and weigh the long-term consequences of the deficit against the short-term consequences of a tax increase in an informed manner. This text provides the wherewithal to examine these questions in a thoughtful manner; it makes macroeconomics operational.

Supplements

For instructors using this text a complete *Instructor's Manual* and *Test Bank* is available, prepared by Professor Jack Adams of the University of Arkansas. It contains an overview of each chapter as well as answers to the questions and problems in the test and also a complete set of test questions to accompany the book. The test questions are available for use with a personal computer.

Two items of particular value to students are the *Study Guide* and Macroeconomic Models Software, both prepared by Professor John Larson of Loyola College. The *Study Guide* offers a summary of each chapter, self-test items, and computer-assisted applications of macroeconomic theory for use with the accompanying software. The software itself provides programmed macroeconomic models that illustrate many important concepts, including the Keynesian cross, *IS-LM* analysis, and total supply and demand analysis. Numeric results and corresponding graphical results are presented in the context of LOTUS 1-2-3, Version 2 format. Hardware requirements are IBM or compatible PC equipped with DOS 2.0.

ACKNOWLEDGMENTS

When I joined the faculty of the Stern School of Business at New York University over 15 years ago, I was aked to teach a new course called Macroeconomics: Theory, Policy, and Forecasting. Although the course that I gave then had very little in common with this book, it started a long evolution of experience in teaching macroeconomics to business school students which led to the development of this text. Thus, my first thanks go to my students at NYU who made this possible. In particular, the book began to evolve from some lecture notes prepared by a group of students some years back, and I would like to express my appreciation to Ruth Dienstag, Uri Lowenstein, Sang Park, Nicholas Travelos, Judith Ugelow, and Eli Weitz.

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Paul Wachtel

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