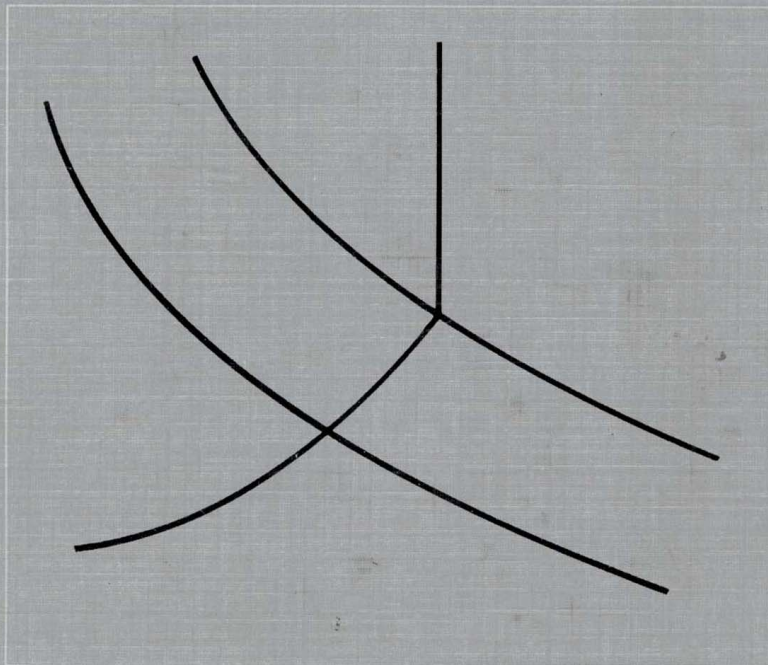


# MACROECONOMICS



DeLORME/EKELUND

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1983



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## Preface

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A keynote debate at a recent major confab of economists was intriguingly titled "What Macroeconomic Theory Is Best?" In the course of the debate, four distinguished economists indicated widespread differences of opinion on the nature and causes of inflation, unemployment, and macroeconomic activity generally. To be sure, the economic history of the 1960s and 1970s is replete with disconcerting macro happenings. The emergence of the OPEC cartel and other "supply shocks," disappointing growth in productivity and disappointing economic growth, and, most distressing of all, high and persistent inflation rates punctuated those decades. These features of the economy also sent economists scrambling for explanations.

The debate has run the gamut between the advocates of demand management and the advocates of supply-side policies in controlling economic ills, between fiscalists and monetarists in matters of policy implementation, and between those who champion the use of a balanced budget as a base for policy and those who do not. Further, there are those who argue, with some empirical support, that the economic business cycle is but a creature of politicians' self-interest. If the professional economist is confused, the introductory student of macroeconomics is in clear need of a "scorecard" to sort his or her way through the (embarrassingly) large number of theoretical and policy views on the nature of contemporary macroeconomics. The straightforward purpose of this intermediate text is to provide the introductory student with such a scorecard.

*Macroeconomics* is a simple presentation of the fundamentals of contemporary macroeconomic theory and policy intended for the typical one-semester or one-quarter course at the junior level of college work. In a systematic "building-block" approach, the student is introduced to classical, neo-Keynesian, fiscalist, monetarist, and supply-side views of the macroeconomic system. Our book consists of 17 chapters which are grouped into seven parts. Part I presents an introduction to macro concepts and problems, highlighted by the record of inflation, employment, and output in the recent past. Part II presents, in orderly fashion, the foundations of classical macroeconomic ideas and the 20-century (Keynesian) reaction to these concepts. Parts III and IV deal with the contemporary formulation of aggregate

demand from both private and public sources. Specific focus, as is traditional, is given to private consumption and investment expenditures. Part V develops the money market, integrates the money and commodity markets, and uses the familiar *IS-LM* model to produce an understanding of income and interest rate determination. International trade is presented, in Chapter 10, as an application and extension of the two-sector model developed in Chapter 9. Part VI introduces prices to the model and develops, systematically, the principles underlying concepts of both aggregate demand and supply.

All of the theory developed in the book is brought to bear, in Part VII, on a large variety of issues in macroeconomic policy. In the five chapters encompassed by this part, both short-run and long-run problems are considered. Short-run problems of economic stabilization, especially those dealing with the control of income, employment, and inflation, are analyzed in depth. In addition, important long-run difficulties with economic growth and productivity (experienced in the 1970s) are placed center stage in Chapter 15. Alternative interpretations—fiscalist, monetarist, and supply-side—are featured throughout these chapters.

A chapter of the “politics” of macroeconomics and on the possibility of a political business cycle concludes our discussion of policy. Here we analyze some principles concerning how budget decisions (that directly affect macroeconomic events) are made in a democracy. A basic and simple model of political competition is developed which clearly illustrates that macro policy decisions are not made in a vacuum but in a world of politics. It is our experience that the real-life aspects of this discussion strongly appeal to students at the intermediate level.

*Macroeconomics* is thus intended to contain exactly what the title implies. It aims to provide a clear and systematic portrayal of macroeconomic concepts without devoting excessive attention to extraneous and subsidiary issues. It is, above all, a book written for students who must learn basic macroeconomic concepts in the all-too-short quarter or semester. To this end, basic concepts, principles, and definitions are set apart from the text, questions for review and discussion are included at the end of each chapter, and footnote references for further reading are provided. In all we have sought to provide a comprehensive, but basic, text in macroeconomics that is pedagogically useful and easy for students to understand.

Many (some nonrepayable) debts are owed to others for their help and advice on this project. Professors Richard Ault (Louisiana State), Don Bellante (Auburn), David Kamerschen (Georgia), Cletus Coughlin (Georgia), Roger Garrison (Auburn), David Saurman (Auburn), Carter Hill (Georgia), Hiroaki Hayakawa (Georgia), Chris Paul (Alabama at Huntsville), Norman Wood (Georgia), Richard Wagner (Florida State), and graduate students Roy Cordato (George-Mason) and Karen Palesek (George-Mason) were most generous in their help and advice. The advice of our reviewers was very helpful, and here we would like to thank Professors John C. Drabicki (Arizona), Dennis R. Starleaf (Iowa State), John Trapani (Texas at Arlington), William E. Wehrs (Wisconsin at La Crosse), Stephen E. Reynolds (Utah), Walter L. Johnson (Missouri), and Robert R. Edminster (Utah). Dean George Horton at Auburn University was very supportive of our project. Very special thanks must be extended to Dr. Jack Tatom of the St. Louis Federal Reserve

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In sum, we hope that we have produced a useful introduction to an increasingly complex and important subject.

Charles D. Delorme, Jr.  
Robert B. Ekelund, Jr.

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PART

## INTRODUCTION

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# Macroeconomic concepts and problems: Economic troubles in our time

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A never-ending barrage of economic news from the media burns the ears of Americans. A lot of it, looking back over the decade of the 1970s and the early 1980s, has been bad. All the news seems to raise questions as to what can be done about economic problems. For example, the OPEC oil cartel raises prices, and inflation in the United States intensifies. Does this mean that OPEC is the cause of the inflation rates experienced over the late 1970s and early 1980s? High inflation and unemployment are sometimes reported simultaneously. Does this mean that “stagflation” is a permanent and inevitable part of the U.S. economic scene? The growth rate of productivity, output per U.S. worker, declined significantly over the 1970s, at least when one considers the long-term trend of a 3 percent average increase per year over the last 100 years. Witness the recent plight of the U.S. automobile industry. Can this trend be reversed? How?

Are there any answers to these vexing questions? There are, as you will see, but the answers coming from economists and politicians are embarrassingly numerous. Nixonomics, Carternomics, and Reaganomics all provided different answers to these basic economic questions, but beneath political policy assessments and implementations lie the prognostications and theories of economists past and present—post-Keynesian, monetarist, demand-side, and supply-side views, among others—and all are clamoring for attention. Some are contradictory, or seemingly contradictory, others complementary. The straightforward purpose of this book is to sort out the bases for these assessments of the U.S. economic system among contemporary economists, though we take no position ourselves. Thus, this text is about the economic ideas that have developed in order to deal with and to manipulate problems affecting us all. But all of this gets ahead of the story. First, let us look at some basics.

**WHAT IS  
MACROECONOMICS,  
AND HOW IS IT  
STUDIED IN THIS  
BOOK?**

Economics is sometimes viewed as a study of the allocation of resources. More specifically, it is often regarded as an investigation of how individuals in society choose to allocate scarce income or resources among competing wants or production objectives. Viewed in this way, economics is concerned with *micro* problems or with microeconomics. This of course does not mean that micro problems are small or unimportant. Rather, it means we limit the influence of outside factors in our analysis. The health care market may be considered a case in point. A microeconomic analysis of health care services in the United States would encompass, among other matters, a study of the consumers of health care and their demand conditions as well as the supply conditions and responses of the firms providing health care services. In a microanalysis of the question, everything else—energy prices, demand conditions for automobiles, natural gas production in Texas—is held constant. All these other variables are held constant (said to be *ceteris paribus* in the economist's language), or if they do change, they are assumed not to affect our analysis of health care over the period that we are considering. We thus abstract from all other things so that the health care market—or the market for peanuts, skilled labor, or prostitution—may be considered in isolation.

Macroeconomics starts from totally different assumptions, though the *method* for analyzing macro variables is quite the same. Here the investigator is concerned with *aggregate* variables such as the aggregate demand by all consumers for all goods and services produced in the United States over a year or some other period. No differentiation of markets is made. The demands for shoes, apples, movie tickets, and summer homes are all added together. Here *total* demand, and not ordinarily its composition, is considered important. Government spending, private domestic investment, aggregate disposable income, employment, *the* price level (not the price of Big Macs), *the* interest rate (not the interest rate on auto loans), and net foreign investment are typical variables with which macroeconomics deals.

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**CONCEPT**

Macroeconomic theory studies the causes of and interrelationships between aggregate economic phenomena (phenomena concerning the economy as a whole) such as inflation, the growth rate of income, and the rate of unemployment. Microeconomics, on the other hand, studies the factors affecting the relative prices of different goods and factors of production in individual markets (e.g., the supply and demand for potatoes or computer games).

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As usual, there are costs and benefits to such aggregations. When we only concentrate on “the big picture,” behavioral characteristics behind supply and demand in specific markets blur and interconnections between markets are also clouded. But a macro approach to the economy allows us to get a sharp overview of the *determinants* of the possible causes of our national economic performance. Macroeconomic *theory* is the explanation of how the aggregated variables interact and interconnect to produce the state of our national economic situation—most often gauged in terms of national output, employment, and price stability. The point

is that if economists know how these variables interact and are able to predict the form of their interaction on output, employment, or prices, the federal government *may* wish to change or alter the variables through *monetary policy* or *fiscal policy* in order to improve economic well-being. Let us take a closer look at macroeconomic policy and goals.

## **THE AGGREGATE ECONOMY: POLICY AND GOALS**

Aggregate economic analysis is really composed of two interrelated branches—macroeconomic theory and monetary theory. In practice the two are considered together, as they are, to a large degree, in this book. And however separate these two subjects are in theory, the policy goals are very much the same. Fiscal policy is basically an attempt to manipulate government expenditures and taxation so as to affect aggregate demand or aggregate supply in some manner that achieves desired macro goals such as full employment and price stability. Similarly, monetary policy—policy which affects money supply growth—can be used to affect inflation and employment. We will say more about fiscal and monetary policy and aggregate demand and supply later, but for the present we will focus on the objects of policy.

### **Full employment and price stability**

The full employment of resources, both human and nonhuman, at stable prices is essential to the increase of our national output and income. But full employment does not mean that all our resources are being used at full capacity at every point in time. It is a basic economic premise that adjustments in the economy owing to shifts in the supply of and demand for individual goods require that resources be mobile and flexible. Thus, some level of “frictional” or “transitional” unemployment of resources is considered normal, necessary, and desirable. Just what the full-employment level of unemployment is at any given time is debatable. Government statisticians at various times have debated whether 4 percent, 5 percent, 6 percent, or even 7 percent is “normal,” but this should not concern us here. The point is that the aggregate output or supply of goods and services is directly determined by the resources employed in production.

A number of possibilities related to resource adaptability may be illustrated by the concepts of demand and supply. In general, the aggregate supply of goods and services—the total supply of goods and services produced for sale—may or may not be very responsive to increases in the aggregate demand for these goods and services. Suppose that resources are very adaptable. Aggregate demand increases during a period of widespread unemployment would, in this event, cause increases in employment and output without significant increases in prices (inflation). Full employment, that is, an “acceptable” level of unemployment, could then be achieved without inflation.

Another possibility exists. The structure and resource mix in the economy may be such that, at a point of widespread unemployment, increases in aggregate demand would not only create additions to output but would cause inflation as well. In this event, resources would not flexibly adapt to increases in production without price or wage increases. A trade-off may exist, in other words, between changes in the level of output and employment and changes in the level of prices. Thus, society may have to choose between some level or rate of unemployment and some level or



rate of inflation. We will return to a discussion of this problem in a later chapter, but we should note at this point that a firm grasp of the macro theory in this text will help us to gain insights into the important economic events—such as unemployment and inflation—which surround us. Let us now consider some possible policy tools.

### **Fiscal and monetary policy: Preliminaries**

Just what are these policy tools, and what *might* they be able to accomplish? Although a reasonably practical answer to the latter part of this question awaits later discussion, preliminary identification of the tools and their functions is easy. Fiscal policy concerns general *budget policies*, i.e., congressional taxation and expenditure policies. At the onset of depression, the federal government may attempt to affect aggregate demand in the economy by a combination of tax cuts and government spending programs that would increase national employment and output. *Budget deficits* with government expenditures greater than tax revenues are the order of the day during recession or lagging economic growth. At such times an increase in government expenditures and/or a reduction in taxation may fill the bill.

Conversely, the preferred fiscal remedy during periods of inflation is to increase taxes or tax rates in combination with reductions in government spending. A *budget surplus*, with tax revenue greater than government expenditures, would then reduce aggregate spending and choke off both private and public demands. As a generalization, then, certain macroeconomists called fiscalists, Keynesians, or post-Keynesians support these sorts of policies in preference to, but perhaps not to the exclusion of, monetary policy. These economists tend to view monetary policy as mostly ineffective.<sup>1</sup>

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#### **CONCEPT**

Fiscal policy is the utilization of government spending and/or taxing policies to affect aggregate economic behavior. One major aim of such budget policies is to control swings in the business cycle originating in the private economy.

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Monetary policy, enacted by the U.S. central bank or Federal Reserve System, controls the monetary reserves of the financial system. Reserves are nothing more than the “cash backing” of deposits held by commercial banks, savings and loan associations, savings banks, and so on. In so controlling reserves, the Fed (short for the Federal Reserve System) attempts to direct changes in the money supply and/or interest rates. Manipulation of aggregate demand is one major object of the Fed’s game, and this is accomplished by spending changes induced by changes in interest rates or in the money supply.

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<sup>1</sup>The reader should be aware that this is a gross generalization. In other words, policy advisers would be expected to give “mixed” advice, and there are few *pure* Keynesians left. Furthermore, fiscal policy has “monetary” effects since government spending levels affect taxes or private capital markets through borrowing.