

高等院校双语教学适用教材
经济学

Macroeconomics

Tenth Edition

Robert J. Gordon

第十版

宏观经济学

【美】

罗伯特·J.戈登 著

段鹏飞 译注

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出版者的话

当前,在教育部的大力倡导下,财经和管理类专业的双语教学在我国各大高校已经逐步开展起来。一些双语教学开展较早的院校积累了丰富的经验,同时也发现了教学过程中存在的一些问题,尤其对教材提出了更高的要求;一些尚未进入这一领域的院校,也在不断探索适于自身的教学方式和方法以及适用的教材,以期时机成熟时加入双语教学的行列。总之,对各类院校而言,能否找到“适用”的教材都成为双语教学成功与否的关键因素之一。

然而,国外原版教材为国外教学量身定做的一些特点,如普遍篇幅较大、侧重于描述性讲解、辅助材料(如习题、案例、延伸阅读材料等)繁杂,尤其是许多内容针对性太强,与所在国的法律结构和经济、文化背景结合过于紧密等,却显然不适于国内教学采用,并成为制约国内双语教学开展的重要原因。因此,对国外原版教材进行本土化的精简改编,使之变成更加“适用”的双语教材,已然迫在眉睫。

东北财经大学出版社作为国内较早涉足引进版教材的一家专业出版社,秉承自己一贯服务于财经教学的宗旨,总结自身多年的出版经验,同培生教育出版集团和汤姆森学习出版集团等国外著名出版公司通力合作,在国内再次领先推出了会计、工商管理、经济学等专业的“高等院校双语教学适用教材”。这套丛书的出版经过了长时间的酝酿和筛选,编选人员本着“品质优先、首推名作”的选题原则,既考虑了目前我国财经教育的现状,也考虑了我国财经高等教育所具有的学科特点和需求指向,在教材的遴选、改编和出版上突出了以下一些特点:

- 优选权威的最新版本。入选改编的教材是在国际上多次再版的经典之作的最新版本,其中有些教材的以前版本已在国内部分高校中进行了试用,获得了一致的好评。
- 改编后的教材在保持英文原版教材特色的基础上,力求内容精要,逻辑严密,适合中国的双语教学。选择的改编人员既熟悉原版教材内容,又具有本书或本门课程双语教学的经验。
- 改编后的教材配有丰富的辅助教学支持资源,教师可在网上免费获取。
- 改编后的教材篇幅合理,符合国内教学的课时要求,价格相对较低。

本套教材是在双语教学教材出版方面的一次新的尝试。我们在选书、改编及出版的过程中得到了国内许多高校的专家、教师的支持和指导,在此深表谢意,也期待广大读者提出宝贵的意见和建议。

尽管我们在改编的过程中已加以注意,但由于各教材的作者所处的政治、经济和文化背景不同,书中的内容仍可能有不妥之处,望读者在阅读中注意比较和甄别。

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导 读

有人说，对于同一个经济问题，十个经济学家可能会给出十一个答案。经济学家听到这样的说法并不会生气，这正是经济学的有趣之处！如果是物理问题，一百个物理学家也只能给出一个答案吧。

随着数学在经济学中的大量应用，经济学越发成为一门严谨精密的学科，甚至看上去有些像科学了。科学的好处在于它可以被重复使用，而艺术的魅力却在于它的不可复制。与这二者相比，经济学要复杂一些，我们的理论丰富而富有逻辑，但所解释的问题充满了不确定因素。

经济学家们的意见看上去如此不同，但是他们所应用的理论工具却十分相似。无论是初级、中级，还是高级宏观经济学，都是在一般均衡框架下进行分析，只是对于某个具体经济现象，不同的经济学家认为是由不同的原因造成的，那么他们对于基准模型的修改自然不同。

每个经济学家的视角不同，讲故事的方式也不相同。曼昆在他所著的《宏观经济学》的序言中说：“尽管宏观经济学家分享共同的知识内容，但他们对如何最好地传授知识的看法却不完全相同。”您正在阅读的这本初级教材，就是作者按照他所认为的最容易被读者所接受的方式，讲解了宏观经济学最基本的理论，讨论了大多数经济学家普遍认同的结论。

与其他初级教材相比，本教材具有自己的特点：

第一，更加关注经济学内容的完整与连贯，正文中很少有冗繁复杂的数学推导，必要时作者将其添加在注释或附录中。

第二，在教材的最开始部分就引入开放经济，这正是我们这些无可选择地生存在这个经济全球化世界里的读者所关注的内容。

第三，注重理论对现实的解释，进行了大量的实证研究，当理论与现实拟合得不够理想时，作者充分分析了具体原因。

第四，作者十分注意对宏观经济政策的分析，这引导我们更加关注对理论的应用。

作为本书的译注人员，笔者提出以下建议，希望能够帮助读者更好地学习宏观经济学：

第一，读者在学习每一章之前，可以先仔细分析一下“本章概要”，看一看作者在这一章中都要讲解什么内容，这些内容之间又有什么样的内在联系。当学习完这一章之后，再根据自己的体会将脉络进行梳理，这样就不会出现不知所云的情况了。

第二，与其他经济学相比，宏观经济学关注经济总量，读者要在学习的过程中逐渐地体会宏观经济学家们研究问题的角度与方法。

第三，当前宏观经济学的研究越来越强调微观基础，读者可以尝试去思考宏观与微观是怎样联系在一起的，通过学习这本书是否能够在看待微观问题时也保持宏观视角。

第四，作者在实证分析中给出的都是美国的数据，在学习的过程中读者可以试着用所学的理论去分析我国的宏观经济现象与政策，将理论与现实联系起来。

事物的发展是有规律的，经济现象也是如此，经济学家的工作之一便是用经济学模型将这些规律抽象出来，然后再用这些简单有力的模型去解释五彩缤纷的世界。而抽象的过程当然无法避免不真实性，正如张五常所说：“经济学并无‘没有局限条件’的理论，正如其他理论，都一定有验证条件——否则就没有解释力了。”初学经济学时并不明白这个道理，后来才渐渐发现这种抽象使我们的理论变得简洁有力，直指实质。

希望读者在学习这本书的过程中既能够学习知识，又能够体会宏观理论的“优美”，为进一步的学习打下坚实的基础，并发掘自己在这方面的兴趣。



About the Author 作者简介

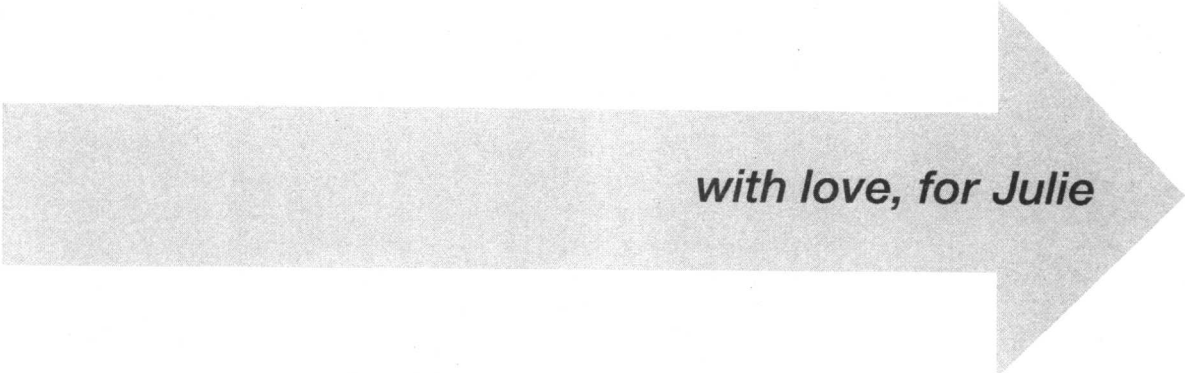
Robert J. Gordon

Robert J. Gordon is Stanley G. Harris Professor in the Social Sciences and Professor of Economics at Northwestern University. He did his undergraduate work at Harvard and then attended Oxford University in England on a Marshall Scholarship. He received his Ph.D. in 1967 at M.I.T. and taught at Harvard and the University of Chicago before coming to Northwestern in 1973, where he has taught for more than 30 years and was chair of the Department of Economics from 1992 to 1996.

Professor Gordon is one of the world's leading experts on inflation, unemployment, and productivity growth. His recent work on the rise and fall of the New Economy, the U.S. productivity growth revival, and the recent stalling of European productivity growth, have been widely cited. He is the author of *The Measurement of Durable Goods Prices*, which has become known as the definitive work showing that government price indexes substantially overstate the rate of inflation. His book of collected essays, *Productivity Growth, Inflation, and Unemployment*, was published in 2004. He is editor of *Milton Friedman's Monetary Framework: A Debate with His Critics*, *The American Business Cycle*, and *The Economics of New Goods*. In addition he is the author of more than 100 scholarly articles and more than 60 published comments on the research of others. In addition to his main field of macroeconomics, he is also a frequently quoted expert and author on the airline industry, and is the founder and president of an Internet chat group on airline management.

Gordon is a Research Associate of the National Bureau of Economic Research, a Research Fellow of the Centre for Economic Policy Research (London), a Guggenheim Fellow, a Fellow of the American Academy of Arts and Sciences, and a Fellow of the Econometric Society. He has served as the co-editor of the *Journal of Political Economy* and as an elected member of the American Economic Association. He serves currently as senior advisor to the Brookings Panel on Economic Activity and on the economic advisory panels of the Congressional Budget Office and the Bureau of Economic Analysis. He has served as a member of the Technical Panel on Assumptions and Methods of the Social Security Administration, and on the national "Boskin Commission" to assess the accuracy of the U.S. Consumer Price Index.

Gordon lives in Evanston, Illinois, with his wife Julie and their two dogs, Lucky and Toto.



with love, for Julie

Preface: To the Instructor 前言:致教师

Every time we teach macroeconomics, the business and political climate changes from what it was in last year's class and from the last textbook edition. Current debates include whether higher oil prices will rekindle inflation and derail the economic recovery, why and whether the post-2001 economic recovery in the U.S. has been "jobless," how and whether to reform Social Security, and how economic growth in China and India are changing the global economic landscape.

This book stems from the belief that all macroeconomic questions relate to a core set of basic macro puzzles, and that those puzzles have solutions. This text guides students to the most direct solution of each puzzle and implements that approach by introducing a few basic models. These models are then applied immediately in Case Study sections and International Perspective boxes.

I have found it most effective to begin the course with business cycles and inflation because my students relate to what is happening today, and what will happen in the near future. Later in the course, we turn to a unified discussion of growth theory, the failure of many poor nations to achieve economic growth, and take a closer look at policy and the sources of economic instability.

Economics has become increasingly empirical, and it is critical that students learn to interpret data and use it to evaluate macroeconomic questions. This text uses two strategies to reinforce the connection between theory and data. First, the text includes a unique set of data that provide capsule illustrations of how recent research explains, or challenges, the macro puzzles. The data set goes far beyond what is available on government data Web sites, was developed exclusively for this text, and is available online for use in your course. Second, I am delighted to point out that, for the first time, the text appears in full color. Color is used strategically to reinforce macroeconomic theory by linking theoretical models to the corresponding real-world data.

Guiding Principles of the Text

This text has been guided by five organizing principles since its inception, and the tenth edition develops them further.

1. **Macro questions have answers.** The use of traditional macro models can be enormously fruitful in developing answers to macro puzzles. Unlike other texts, this book introduces the natural level of output and natural rate of unemployment in the first few pages of Chapter 1. Students learn from the beginning that the output and unemployment gaps move in opposite directions, and that to understand why output is so low is the same as understanding why unemployment is so high. Similarly, the fully developed dynamic inflation model of Chapter 8 shows that we have an answer to the puzzle of why inflation was so high in the 1970s and so low in the 1990s.

When an economic model fails, this is not swept under the rug, but rather is used to highlight what the model misses, as in the lively treatment in Chapter 10 of “Puzzles That Solow’s [Growth] Theory Cannot Explain” (see pp. 334–39). The Solow failure opens the way to a unique treatment of the debate between the new institutional economics, and the exponents of a tropical geography explanation of the failure of poor countries to converge to the income level of rich countries (pp. 354–69). This is a departure from other intermediate macro texts, which barely mention the theory’s failures or the modern research that takes us beyond these failures.

2. **Up-front treatment of business cycles and inflation.** Students come to the macro classroom caring most about today’s issues, starting with how they and their family members can avoid unemployment. Responding to this basic curiosity of students, a core principle of this book is that students should be taught about business cycles first, instead of beginning the text with the dry abstractions of classical economics and growth theory. This allows us to begin with topical issues that interest students, such as the jobless 2002–04 recovery, the aggressive monetary and fiscal expansion to combat the jobless recovery, the continuing slump in Japan, and high unemployment in Europe.

Accordingly, this text introduces the *IS-LM* model immediately after the first two introductory chapters, with a goal in each edition of having the *IS* and *LM* curves cross by p. 100 (it happens on p. 104 of this edition). An integrated treatment covers monetary and fiscal policy stabilization, fiscal and foreign deficits and national saving, and the interplay between the balance of payments and exchange rates. The *AS-AD* model then allows an in-depth treatment of the Great Depression, and a dynamic version of the *AS-AD* model directly implies the Phillips Curve and the sources of high and low inflation. By the end of Chapter 9, students have learned the core theory of business cycles and inflation, and the text then turns to basic growth theory, the puzzles that Solow’s theory cannot explain, and the big issues of economic growth and the non-convergence of so many poor countries.

3. **Integration of models.** The challenge many instructors face is that most intermediate macro texts overload the simple models, offering a new model every chapter or two without telling students how the models connect and work together. This book adopts the core distinction between short-run macro devoted to explaining business cycles and their prevention, and long-run macro dedicated to explaining economic growth and the long-run consequences of debt and deficits.

This text is unique in its focused, cohesive presentation of the macro concepts. The aggregate demand curve is explicitly derived from the *IS-LM* model (pp. 198–203), and then the short-run Phillips Curve is explicitly derived from the short-run aggregate supply curve (pp. 235–37). In discussing the biggest question of economic growth—why so many nations are still so poor—the text provides an integration of the production function in the Solow growth theory with the added elements of human capital, political capital (i.e., legal systems and property rights), geography, and infrastructure (pp. 362–68).

4. **Simple graphs can convey important research results.** The graphs in this book go beyond those in the typical macro textbook in several dimensions, including the use of original data, the double-stacking of graphs plotting related concepts (see pp. 233 and 252), the extensive use of shading be-

tween lines to convey concepts like a positive and negative output gap, and the integrated use of color. A unique feature of this text is its use of graphs on the natural level of real GDP and the natural rate of unemployment to illustrate the key concepts like the output and unemployment gaps (pp. 5–14), the Okun's Law relation linking the gaps (pp. 263–66), the structural budget deficit (pp. 134–38), the role of supply shocks and demand shocks in causing the diametrically opposite behavior of inflation in the 1970s and 1990s (pp. 257–63), and why the natural rate of unemployment declined in the 1990s (pp. 309–10).

Research results and data transformations are also used to illustrate changes in monetary policy lags and efficacy over time (pp. 457–60), apparent changes in the Fed's weights applied to inflation and output in the context of the Taylor Rule (pp. 467–70), the contradiction between the official measure of the U.S. saving rate and the vast increase in the wealth of U.S. households (pp. 506–12), and the role of computer price changes in amplifying the high-tech boom and bust of the late 1990s (pp. 533–38).

5. **The economy is open from the start.** Students come to their macroeconomics classroom concerned about the open economy. They carry iPods made in China, and they worry about whether their future jobs will be out-sourced to India and whether a further slump in the dollar will make future trips to Europe unaffordable. This text avoids the false distinction between the closed and open economy. As early as pp. 34–35, the linkage between saving, investment, government budget, and foreign lending or borrowing is emphasized by the label “magic equation” to dramatize the importance of a basic accounting identity. In the *IS-LM* model of aggregate demand, net exports can be a source of instability (pp. 72–73). Fiscal deficits can be financed by foreign borrowing, but international crowding out and growing international indebtedness reduce the future standard of living (pp. 138–45).

The emphasis on international macro is reinforced by International Perspective boxes which explore policy paralysis in Japan in the past decade, the motivation for massive dollar accumulation by Asian central banks, why the Great Depression was more severe in the U.S. than in Europe, how the euro eliminates monetary policy autonomy and constrains fiscal policy for individual European nations, and numerous other topical international comparisons.

A Tour of the Highlights

Introduction and Measurement

There are three strong points of the introductory Chapter 1. First is the unifying kick-off with the three major concepts of macro, followed by the early introduction of the concept of natural real GDP and the natural rate of unemployment linked to data on the past century. Finally, the section “Macroeconomics at the Extremes” illustrates the Great Depression, the German hyperinflation, and the growth explosion of Korea compared to the Philippines. Chapter 2 on measurement includes several flow diagrams with consistent use of color, a Case Study on the jobless recovery, and a useful topic box (p. 44) that shows how to calculate the annual growth rate of *anything* over any period, ranging from one day to five centuries.

The *IS-LM* Model and the Open Economy

Chapters 3 and 4 introduce the Keynesian expenditure model and the *IS-LM* model. The usefulness of the *IS-LM* model is motivated by a box on policy paralysis in the long slump in Japan (pp. 118–19). Chapters 5 and 6 discuss fiscal debt and deficits, national saving, and the links between international deficits, national saving, and the exchange rate. A centerpiece of Chapter 6 is the unifying idea of the “trilemma.”

Inflation and Unemployment

The next section covers flexible prices and the determinants of inflation. Chapter 7 derives the *AD* curve from the *IS-LM* model and motivates the short-run and long-run *AS* curves. The *AD-AS* model is then applied to controversies surrounding the Great Depression, including a new box on why the U.S. suffered a much deeper slump than Europe or Japan. Chapter 8 begins with an explicit derivation of the short-run Phillips Curve (*SP*) from the *AD-AS* model, and then builds a dynamic inflation model to illustrate the effects of demand and supply shocks, supported by case studies and examples. A core strength of the text since its inception has been the explicit *SP-DG* model of inflation, which is capable of explaining all the ups and downs of postwar inflation. This is presented using graphs in the body of Chapter 8 and as an explicit algebraic model in the Appendix to Chapter 8. The costs of inflation and unemployment in Chapter 9 conclude this section.

The Long Run

Chapter 10 on growth theory goes beyond traditional expositions by emphasizing the “puzzles that Solow’s theory cannot explain,” leading the way in Chapter 11 to explore more modern explanations of the failure of many poor nations to converge to the living standards of rich nations. This chapter also includes unique material on the U.S. productivity slowdown of 1973–95, the subsequent revival and “explosion” of productivity growth in 1995–2005, and the failure of Europe to grow in the past decade. The section on long-run issues concludes with a treatment of the public debt, theories of fiscal policy, and the debate about Social Security.

Stability and Instability in an Open Economy

Stabilization policy is the focus of Chapters 13 and 14, including basic material on money supply and theories of money demand, and an updated discussion of monetary policy discretion, rules, and the recent debate about inflation targeting vs. Taylor Rules that target both inflation and the output gap. The sources of *IS*-curve instability are then examined in Chapter 15 on consumption and Chapter 16 on investment. A novel feature of the consumption chapter is its focus on the contrast between the low U.S. saving rate and rising household wealth, and the investment chapter examines the role of instability in high-tech investment as a cause of the boom of the 1990s and slump after 2000.

Debates at the Macro Frontier

The book concludes with a two-chapter part on where we stand today. Chapter 17 on doctrinal disputes begins with the Friedman-Phelps-Lucas model of “fooling” or incorrect expectations and the real business cycle

model. These are criticized and contrasted with various new Keynesian models based on menu costs, efficiency wages, and other ideas. Chapter 18 explores “the effect of events on ideas,” tracing the economy’s evolution since 1923 and the effects of major events like the Great Depression, postwar inflation, and the twin peaks of inflation and unemployment on the rise and fall of alternative theories. The book concludes with a summary of what we know and the remaining puzzles.

New to the Tenth Edition

The Tenth Edition is the most substantive revision in years and reflects today’s macroeconomic debates and controversies. It features organizational improvements, the latest data, myriad new case studies and boxes, and an innovative full-color design.

Organizational and Substantive Changes

The chapters are in the same order as in previous editions, but there have been considerable changes within chapters. My goal has been to provide a more cohesive discussion of models so that students understand how the concepts relate to one another, and to motivate the discussion by providing more examples in the chapter introductions.

The most important organizational change is to move the derivation of the *IS* curve forward, from Chapter 4 to Chapter 3, so that its common elements with the Keynesian cross model can be emphasized. Chapter 4 begins with a new section explaining how the Fed controls the money supply (pp. 97–98) and develops the *IS-LM* model and its policy implications, including the strong and weak effects that were previously in Chapter 5. (The previous Appendix to Chapter 5 has been moved to Chapter 4.) Chapter 5 includes a new treatment of the theoretical links between the fiscal and foreign deficits, showing the effects of an increased fiscal deficit on domestic investment, domestic saving, and foreign borrowing in a small and large open economy on an investment-saving diagram.

Chapter 8 continues to develop a graphical model of the inflation-output tradeoff (amplified in algebraic form in the Appendix to Chapter 8). This is supplemented with a new concluding section showing how the inflation-output tradeoff directly implies the unemployment–inflation tradeoff, through the intermediate relation of Okun’s Law (the data graph on Okun’s Law is moved from Chapter 2 to Chapter 8, p. 265). The first half of Chapter 9 on the effects of inflation has been reorganized and rewritten for clarity, and the discussion of the causes of the decline in the natural rate of unemployment has been moved from Chapter 8 to Chapter 9 (pp. 309–10).

Greater emphasis is placed on connecting concepts across chapters. For instance, when discussing the standard Keynesian assumption of fixed prices, students see a connection between the *IS-LM* model when the assumption is adopted (Chapter 3, pp. 57–60) and the model when the fixed price assumption is abandoned in favor of flexible prices (Chapter 7, pp. 197–98).

Finally, chapters have been substantially updated to reflect the latest debates and issues, such as Social Security reform (pp. 404–09) and the ongoing debate between adherents of inflation targeting and Taylor-type Rules (Chapter 14).

New Case Studies, Boxes, and Applications

The following four elements reinforce the connection between theory and real-world applications.

- *Data graphs* are updated to provide vivid illustrations of the basic concepts, such as the volatility of real GDP growth (p. 58) and the relation between inflation and the output ratio (p. 233).
- *Case Studies* apply the theory immediately after it is introduced, for instance the definition that national saving must equal the sum of domestic and foreign investment (pp. 145–46).
- *International Perspective* boxes compare economic performance in the United States with selected foreign nations, including policy paralysis in Japan (pp. 118–19), and why the Great Depression was worst in the United States (pp. 224–25).
- *Topic boxes* provide illustrations that are not explicitly international, such as a new topic box on monetary policy in 2001–04 (p. 106), and the empirical performance of Tobin's q model (pp. 530–31).

New examples appear frequently throughout the book, a few of which include:

- Pages 263–68. This new section applies Okun's Law to show that the correlations between inflation and the output ratio derived earlier in the chapter work in the same way but in opposite directions for inflation and unemployment. The twin peaks of inflation and unemployment in 1974–81 and the valley of inflation and unemployment in 1997–99 are illustrated and explained.
- Pages 357–58. The failure of many poor nations to converge is illustrated on a new graph and in a new table updated from 1960–90 to 1960–2000, based on the latest Penn World Tables.
- Pages 467–70. A new Case Study asks whether the Fed's monetary policy during 1980–2005 resembled that predicted by a Taylor Rule. The surprising result is that the Fed's behavior implies a sharp change in the late 1980s from a high weight on avoiding inflation to a high weight on stabilizing output.

Pedagogy

New: The Use of Full Color

This is the first intermediate text to integrate color in a way that links theory to data in a meaningful way. This book has always been unique in its use of double-framed data graphs to show related concepts like inflation and the output ratio, or inflation and oil prices. Now, graphs throughout the book use shading in consistent colors to connect macro concepts and discussions.

This can be seen as early as the first chart on p. 6, where real GDP is red, as is any component of expenditure including consumption and investment. Accordingly, red denotes the IS curve and periods when actual output is above natural output (or actual unemployment is below natural unemployment). Blue is used to show the unemployment rate, as well as periods of depressed economic activity. Later, the initial IS curve (p. 84) uses red shading

for the area showing an excess demand for commodities and blue shading for an excess supply.

The use of color strengthens conceptual ties throughout the book. The supply curve of money, the *LM* curve, and plots of short-term interest rates are always shown in green. Government expenditures are red and revenues are green, a government surplus is shown by green shading and a deficit by red shading. The government debt and long-term interest rates appear in purple. Data on inflation and the *AD* curve are plotted in orange. The *SAS* and *SP* curves are plotted in blue. Long-run “natural” concepts like natural real GDP, the natural rate of unemployment, the *LAS* curve, and the *LP* curve are all plotted in black.

Color is also used consistently for country-specific data. The U.S. is always red, the U.K. (or EU) is blue, Canada is grey, Japan is orange, Germany is black, France is purple, and Italy is green.

Continuing Pedagogical Features

The Tenth Edition retains the main pedagogical features of the previous editions that aid student understanding.

- *Key terms* are introduced in bold type, defined in the margin, and listed at the end of each chapter.
- *Self-Test questions* appear at intervals within each chapter, so that students can immediately determine whether they understand what they have read.
- *Learning about Diagrams boxes*. Each of these boxes covers on a single page every aspect of the key schedules—*IS*, *LM*, *AS*, *AD*, and *SP*—and discusses why they slope as they do, what makes them rotate and shift, and what is true on and off the curves.
- *End-of-Chapter elements* include a summary, a list of key terms, a revised set of questions and problems, and answers to the self-test questions.
- The *Glossary* at the end of the book lists definitions to every key term, with a cross-reference to the sections where they are first introduced.
- *Data Appendixes* provide annual data for the U.S. back to 1875, quarterly data back to 1947, and annual data since 1960 for other leading nations. New to this edition, this data can now be downloaded from the book’s Companion Web site for use in your course. Appendix C lists data sources and Web sites that offer the latest data on key macroeconomic variables.
- *Data diagrams* have been replotted electronically to ensure accuracy, to incorporate the 2004 revisions in the National Income and Product Accounts, and to include annual and quarterly data to the end of 2004 and in some cases to March 2005.

Supplements

With each edition, the supplements get more robust with the aim of helping you to prepare your lectures and your students to master the material.

- *Instructor’s Manual Online*. Jan Ondrich (Syracuse University) revised the manual for this edition, providing chapter outlines, chapter overviews, a discussion of how the Tenth Edition differs from the Ninth Edition, answers to the end-of-chapter questions and problems, and additional questions that instructors may wish to use for homework assignments,

classroom discussion, or essay examination questions. The manual is available on the secure Addison-Wesley Web site (www.aw-bc.com/econ, keyword = Gordon).

- *Test Bank: Print and Computerized.* Completely revised by Andrew Foshee (McNeese State University), the Test Bank offers more than 2,000 questions specific to the book. Instructors can create tests using the bank of questions in a Word document, or by using the Computerized Test Bank software. Both versions are available on the Instructor's Resource Disk or the secure Addison-Wesley Web site (www.aw-bc.com, keyword = Gordon).
- *PowerPoint Files and Transparency Masters.* PowerPoint files contain the figures in the text. Instructors can use these to create PowerPoint lectures, or they can print out the slides for use as transparency masters. The PowerPoint files are available on the Instructor's Resource Disk or on the secure, Addison-Wesley Web site (www.aw-bc.com, keyword = Gordon).
- *Study Guide.* Prepared by Andrew Foshee (McNeese State University), this manual breaks each chapter into a series of key questions, with each question covering a specified topic. Students test their understanding by answering short-answer, numerical, and short essay questions, and problems that ask students to draw graphs and use current data.
- *Companion Web site.* The open-access Web site offers two new important resources. First, instructors and students can now download the robust data set that was created explicitly for this text, including the historical data and natural level of output. Second, students can now find online quizzes to practice the major concepts in every chapter. These questions were written by the author of the *Study Guide*, Andrew Foshee. In addition, the Web site offers an online glossary review and links to related sites for macroeconomic data and research. (www.aw-bc.com/Gordon)

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