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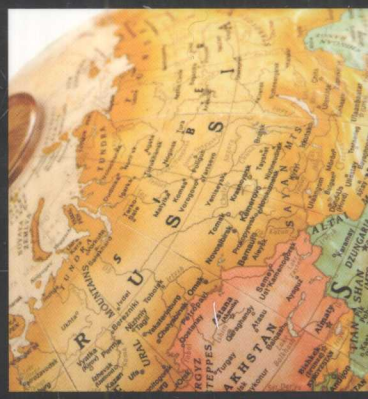
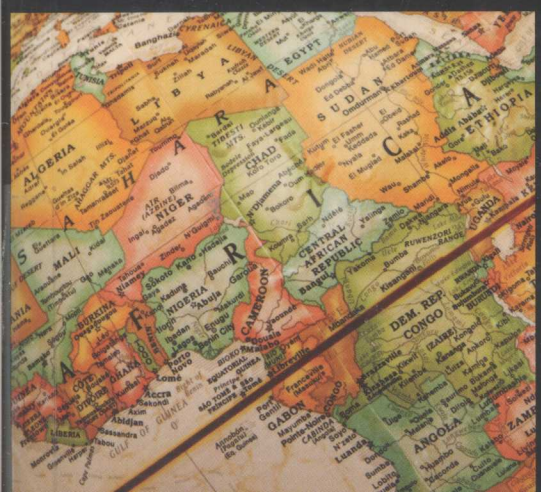


MACROECONOMICS IN EMERGING MARKETS

Peter J. Montiel



Macroeconomics in Emerging Markets

Second Edition

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Macroeconomics in Emerging Markets

Second Edition

The macroeconomic experience of emerging and developing economies has been quite different from that of industrial countries. Compared to industrial countries, emerging and developing economies have tended to be much more unstable, with more severe boom-bust cycles, episodes of high inflation, and a variety of financial crises. This textbook describes how the standard macroeconomic models that are used in industrial countries can be modified to help understand this experience and how institutional and policy reforms in emerging and developing economies may affect their future macroeconomic performance. The second edition differs from the first in offering

- extensive new material on themes such as fiscal institutions, inflation targeting, emerging-market crises, and the Great Recession
- numerous application boxes
- end-of-chapter questions
- references for each chapter
- more diagrams, less taxonomy, and a more reader-friendly narrative
- enhanced integration of all parts of the work

Peter J. Montiel is Farleigh S. Dickinson Jr. '41 Professor of Economics at Williams College, Williamstown, Massachusetts. He formerly taught at Florida International University, Amherst College, and Oberlin College. Professor Montiel held positions as senior policy advisor at the International Monetary Fund (IMF) and as chief of the Macroeconomics and Growth Division of the Policy Research Department of the World Bank. He has served on the editorial boards of several professional journals and is a past associate editor of *World Development.* He is the author of nine books, including, most notably, the three editions of *Development Economics* (with Pierre-Richard Agénor), and of a large number of articles in professional journals. Professor Montiel has been a visiting scholar at the IMF, the World Bank, the Inter-American Development Bank, the University of Manchester, the University of Helsinki, and the Monetary Authority of Singapore.

To Jana, Ruthie, and Alex

Preface

Since the publication of the first edition of *Macroeconomics in Emerging Markets* in 2003, I have used the book in my master's-level courses at Williams College and have lectured from it to a wide range of policy audiences, particularly at international financial institutions. In doing so, I became aware of several potential opportunities for improving the book that held the promise of both rendering it more user-friendly for students and substantially increasing its current policy relevance. This new edition incorporates changes that are intended to clarify and enrich the exposition in the first edition and to introduce a substantial amount of new material. The changes relative to the first edition are of six types, as follows.

1. CLEARER LANGUAGE, MORE DIAGRAMS, LESS TAXONOMY

The first edition was closely written, and frankly, many of my students found it to be terse in places. The new edition reflects a substantial amount of rewriting to make the language less terse where that seemed indicated and to develop ideas in a more gradual, step-by-step fashion. As part of this process, this new edition makes more extensive use of diagrams than the first, and the diagrams are presented more clearly (e.g., by including arrows to denote the direction of curve shifts).

An important expositional change involves the development of the baseline short-run macroeconomic model in Part 2. That model is a very rich one. It can be used to analyze the effects of shocks to the economy that are either anticipated or unanticipated and that emerge under various assumptions about the home country's degree of integration with world financial markets as well as about the alternative monetary policy regimes that the country may be operating. All of these are important considerations in the real world. Consideration of the various combinations of these factors that may arise in practice gave the analysis of the model in the first edition something of a taxonomic flavor and was sometimes confusing to students. To clarify the development of the baseline short-run model,

the second edition develops the model under a single reference case (featuring anticipated shocks, imperfect capital mobility, and domestic credit targeting) that can readily be modified to consider alternative assumptions about the degree to which the domestic economy is integrated with international financial markets and about the monetary policy regime that it operates.

To clarify the model, I have also changed the description of financial market equilibrium. In the new edition, domestic financial market equilibrium is described by analyzing the domestic bond market rather than the money market. The financial-market equilibrium (FM) curve of the first edition is therefore replaced by a new bond-market equilibrium (BB) curve. Though the two approaches are equivalent, and the money market approach is undoubtedly more familiar to instructors, I have found that this change greatly simplifies the analysis for students because it allows the model to be developed without having to keep track of the effects of capital flows on the money supply, which can be complicated under imperfect capital mobility. In the new edition, the role of capital flows can be given a simple graphical interpretation. The intent of the change is to make the development of the baseline model itself much cleaner and less cluttered.

II. APPLICATION BOXES

The first edition contained empirical applications that reported on econometric research into various topics considered in the book. These have been retained, and several new ones have been added. In addition, however, the new edition contains a generous sprinkling of boxes focusing on more immediate and topical *policy* applications intended to help the material come to life for both students and instructors.

III. END-OF-CHAPTER QUESTIONS

To facilitate the use of the book as a textbook, I have included end-of-chapter questions in all but the first and last chapters of the new edition. The end-of-chapter questions are of two types: review questions and exercises. The review questions are intended to call attention to the most important concepts in each chapter. The purpose of the exercises is to induce students to think more deeply about the material by asking them to apply it in a nonmechanical way, often by analyzing hypothetical real-world situations. Answers to the exercises are available for instructors at www.cambridge.org/us.

IV. REFERENCES FOR EACH CHAPTER

In addition to end-of-chapter questions, each chapter contains suggested additional readings in "References and Further Reading" sections. These reflect a mix of policy applications, empirical work, references to the original papers from which the

analysis of each chapter was developed (which are cited in the text of each chapter), and directions to more advanced work for the interested student.

V. BETTER INTEGRATION OF THE ANALYTICAL FRAMEWORK OF PART 2 WITH THE REST OF THE BOOK

The first edition did not sufficiently exploit the connection between the analytical model developed in Part 2 of the book and the rest of the material. The new edition does not lay aside the analytical model after Part 2 but rather continually revisits the model throughout the rest of the book. First, new chapters explore how the model needs to be modified to study floating exchange rates and a bank-based domestic financial system. Second, the model is explicitly used to explore some of the macroeconomic implications of the issues treated in Parts 3–7. For example, it is applied to an exploration of the macroeconomic consequences of the emergence of a sovereign risk premium (in Part 3), to an evaluation of the arguments in support of fixed or floating exchange rates (in Part 5), to an examination of how exchange rate bands work (also in Part 5), and to the study of the macroeconomic effects of the various types of emerging-market crises (in the new Part 7).

VI. NEW MATERIAL

Finally, I have used the opportunity provided by a second edition not only to update the existing material in the first edition but also to incorporate additional material into the book, some of which should have been in the first edition and some of which I have become aware of since writing that edition. The most important additions are as follows.

VI.1. The Introduction of Sticky Nominal Wages

The first edition described the nominal wage as fully flexible and explained deviations of real output from potential as the result of unanticipated shocks using a Lucas-type supply function. In the new edition, that function is treated as a special case of a more general model in which the supply wage may be sticky in the short run, allowing for the possibility of Keynesian unemployment in response to anticipated negative aggregate demand shocks.

VI.2. The Incorporation of Exchange Rate and Inflation Expectations

To understand how sustained inflation can arise in an emerging-market economy that maintains an officially determined exchange rate, Chapter 8 extends the short-run model to the medium run. To do so in an internally consistent fashion, inflation expectations are now incorporated into the GM and BB curves more explicitly than was done in the first edition of the book. To avoid new complications when these

curves are first derived, however, I initially assume no inflation and then introduce it only in Chapter 8.

VI.3. Fiscal Institutions

The first edition contained a discussion of alternative means for emerging-market economies to produce a credible fiscal adjustment and to implement a sustainable fiscal policy. However, it did not deal with the political economy of fiscal policy formulation and the possible role of fiscal institutions and/or fiscal rules in securing a sustainable fiscal policy. These issues have received a substantial amount of attention in emerging-market economies in recent years, and they are included in this edition, thus rounding out the book's treatment of alternative means to achieve fiscal credibility. The new Chapter 11 is devoted to these issues.

VI.4. Monetary Transmission with Banks

Because most students from industrial countries are familiar with the intermediate-level IS-LM model, which analyzes monetary transmission in a world in which there are no banks and in which financial assets consist only of currency and interest-bearing securities, Part 2 of the book develops the benchmark model under a similar setup. However, banks are important players in most emerging-economy financial markets, and there are interesting issues posed for the channels of monetary transmission when financial intermediation is dominated by banks. The first edition contained a thorough discussion of the role of banks as financial intermediaries but did not revisit the issue of monetary transmission in the presence of banks. This edition remedies that omission by incorporating banks into the benchmark model in Chapter 23, thus providing a fairly realistic description of monetary transmission in developing and emerging economies.

VI.5. Floating Exchange Rates

Part 5 in the first edition contained an extensive discussion of exchange rate management, but the first edition did not provide a floating exchange rate version of the benchmark model. Because many emerging-market economies indeed maintain floating exchange rate regimes, the new edition provides a floating exchange rate version of the benchmark model in Chapter 17.

VI.6. Inflation Targeting

Inflation targeting has become the dominant monetary policy regime in emerging-market economies in recent years. The first edition of the book, however, did not include an extensive discussion of this topic. The new edition contains a separate

chapter on the topic (Chapter 15), building on the analysis of monetary policy credibility presented in the first edition.

VI.7. Varieties of Emerging-Market Crises

A new Part 7 is devoted to various types of emerging-market financial crises. There was some material on crises in the first edition, but I have chosen to bring it together into a separate part of the book both to call attention to the importance of the topic and to give it a unified treatment. Accordingly, the second edition contains chapters on sovereign debt crises (Chapter 25), banking crises (Chapter 26), and exchange rate (currency) crises (Chapter 27) as well as a chapter on the lessons that the many crises of the last two decades have taught us about macroeconomic management in emerging and developing economies (Chapter 28).

VI.8. The Great Recession

At the time of writing (2010), the international economy is undergoing its most significant downturn since the Great Depression. Though emerging and developing economies have by no means avoided the crisis, the experience of several such economies has been more favorable this time around than in past international crises. This provides an opportunity to explore how the institutional and policy reforms explored in this book have contributed to these countries' resiliency in the face of the crisis. The book's final chapter takes up this issue.

A large number of students who have passed through the master's program at the Williams College Center for Development Economics have helped me develop the material in this book, and I am grateful to all of them. I am especially grateful for comments and excellent research assistance from George Bakradze, Mamadou Barry, Pablo Cuba, and Daniel Hernaiz.

Contents

PART 1

The Macroeconomic Framework

1

Introduction and Overview

As of 2009, the International Monetary Fund (IMF) had 192 member countries or territories. In each of these, as well as in several other countries or territories that are not members of the IMF, policy makers face the continuous need to make decisions about macroeconomic policies – decisions about fiscal policy, monetary policy, and exchange rate policy as well as about many other policies that affect the aggregate economy. The vast majority of the countries in which these decisions are made are developing countries – countries with incomes per person that are much lower than those in the advanced economies of North America, Western Europe, and East Asia. What this means is that most macroeconomic policy decisions around the world are actually made in the context of developing economies.

Though people may be the same everywhere, the economies in which they live are not. Among other things, economies differ with respect to their macroeconomic institutions, their production structures, and their economic links with the rest of the world. These factors, as well as many others that distinguish developing economies from advanced industrial economies, affect the way that economies work at the macroeconomic level. Moreover, developing countries themselves are far from homogeneous. Most important, a relatively small subgroup of such countries, typically at middle-income levels, has achieved *emerging-market* status – a term that is used to denote economies that have become closely linked financially with international capital markets. In both emerging-market economies and other developing countries, the economic environment in which macroeconomic decisions are made is quite different from the environment typically described in standard macroeconomic textbooks for advanced industrial countries.

This book is about macroeconomic analysis in emerging and developing countries. Although many of the analytical tools that we will use here are similar to those applied in industrial countries, a focus on macroeconomics in emerging and developing economies requires a change in emphasis along several directions. For example, in both emerging and developing economies, fiscal policy is often the

source of macroeconomic shocks, and the solvency of the public sector (its ability to service its debt) is sometimes in question, a fact that has important macroeconomic implications. Such countries tend to be very open commercially but imperfectly (and sometimes sporadically) open financially. Similarly, only a small minority of emerging and developing economies maintains freely floating exchange rates, and the structure of financial markets in almost all of these economies is heavily dominated by commercial banks rather than securities markets. Finally, most of these countries enjoy very limited macroeconomic credibility, and their macroeconomic experience over the past several decades has been punctuated by severe instability and various types of crises, with problematic effects for their long-run growth prospects.

All these issues will be addressed in this book. As a point of departure, this chapter provides some background about the macroeconomic environment in which emerging and developing countries operate and describes some features of such economies that need to be taken into account when trying to understand how these economies work at the macroeconomic level.

I. COUNTRY CLASSIFICATIONS

When we draw distinctions, such as those referred to earlier, among different types of countries – that is, advanced industrial countries, emerging-market countries, and developing countries – to which countries are we referring exactly? One way to identify the specific countries that we might want to place in each of these groups is to make use of the classification systems employed by international organizations.

Three of the most commonly used classifications are those of the United Nations (UN), the World Bank (WB), and the IMF. The classification systems used by these institutions differ from each other because each system is designed to address the corresponding institution's specific operational needs. The UN, for example, works with economic groupings in which developing countries are classified into four main categories: least developed countries, landlocked developing countries, small-island developing countries, and transition countries (countries that recently undertook the transition from centrally planned to market economies). These categories do not exclude each other, so a country can belong to more than one category. The WB's analytical income categories, on the other hand, are based on the WB's operational lending categories, with countries divided into four groups according to their 2006 gross national income per capita: low income, lower middle income, upper middle income, and high income. The high-income category is in turn subdivided into high-income Organization for Economic Co-operation and Development (OECD) member countries and high-income non-OECD countries. Finally, the IMF's *World Economic Outlook* report divides the world into two major groups: (1) advanced economies and (2) emerging markets and developing countries. This last category is also classified according to analytical criteria that reflect the composition of

Table 1.1. *Country Classifications in Three International Organizations*

United Nations (for Developing Countries)	World Bank (Based on 2006 GNI Per Capita)	International Monetary Fund
Least developed countries	High income ($11,116 or more)	Advanced economies
Landlocked developing countries	Upper middle income ($3,596–$11,115)	Emerging-market and developing countries (subcategories by analytical group)
Small island developing states	Lower middle income ($906–$3,595)	
Transition countries [(1)]	Low income ($905 or less)	

[(1)] Countries in transition from centrally planned to market economies.

countries' export earnings, their net debtor-creditor positions, and whether they are part of the Heavily Indebted Poor Countries joint IMF-WB initiative. These classifications are summarized in Table 1.1.

We can use these classification systems to determine which specific countries fall into the advanced, emerging-market, and developing categories. Using the WB's criterion for identifying advanced countries and the IMF's criterion for separating emerging-market economies from among the remaining group of developing countries yields 34 advanced economies, 24 emerging economies, and 134 developing countries.[1] However, among the advanced economies in the WB classification, the four Asian tigers of Korea, Hong Kong, Singapore, and Taiwan are typically considered emerging economies because they reached their high-income levels relatively recently and still share many macroeconomic features with other emerging economies. Reclassifying these four countries as emerging-market economies yields the country classification presented in Table 1.2. Notice that of the 192 countries classified in the table, only 30 are advanced industrial countries. Thus the vast majority of countries (162 out of 192) are actually emerging and developing countries. Of these, 28 are emerging economies, including the large and systemically important Brazilian, Russian, Indian, and Chinese economies (collectively known as BRIC) as well as several other economies – such as Argentina, Chile, Mexico, Indonesia, Korea, and Turkey – whose recent macroeconomic histories have received a substantial amount of international attention.

II. ECONOMIC STRUCTURE AND MACROECONOMIC PERFORMANCE

Of course, the observation that macroeconomic policy decisions are primarily made in an emerging-market and developing-country context would not be very significant analytically if that context were quite similar to that for which most

[1] Emerging-market economies are developing economies that are included in the Morgan Stanley Capital International Index.