

FISCAL POLICIES AND GROWTH IN THE WORLD ECONOMY

THIRD EDITION

1996

by

**Jacob Frenkel, Assaf Razin
with the collaboration of Chi-Wa Yuen**

Preface to the 3rd Edition

A few major episodes that occurred since the publication of the previous editions of our book have brought to a sharp focus key issues of open economy macroeconomics: the European currency crisis of 1992 ("Black Wednesday"), the problem of sustainability of current account deficits (in the wake of the "Mexican Peso Crisis"), and the devolution of states after the Cold War (the "New Map" of Central and Eastearn Europe). These major developments pose a major challenge to existing theories of international economics.

The traditional Mundell-Fleming approach was found useful in explaining the ERM crisis, which followed the big fiscal expansion in the aftermath of German unification. It requires, however, an extension in the stochastic dimension to be confronted with time series data. In this vein, we introduce the extended stochastic Mundell-Fleming model in this edition.

The intertemporal approach was found useful in explaining recent current account crises in countries persistently plagued by deficits. To study these problems in the presence of sizable shocks, however, a stochastic extension of the intertemporal model that can be matched with real

world data is called for. Accordingly, an extended stochastic trade balance model and a stochastic growth model (very much in the real business cycle tradition) are incorporated into this edition.

The breakup of countries into states and regions in Central and Eastern Europe bring out the possibility of capital controls and deviations from tax harmonization across different economic entities that used to be under the control of a single sovereignty. In particular, reinstated barriers to capital mobility can undermine the process of growth. A new feature that we introduce in this edition is concerned with the interaction among convergence in levels and rates of growth of income across countries, international taxation, and capital mobility.

Through the 1992 'single market' initiative, on the other hand, Western Europe has reached almost complete integration in capital markets. Risk-adjusted and currency-adjusted rates of return on capital are, to a large extent, equalized. However, labor markets are still very much segmented across these countries. Compared with the US as a benchmark, a key difference for the European single market lies in the degree of labor mobility and the speed of adjustment of the labor markets to regional disturbances. It remains as a challenge for the European Union to design policies to facilitate the movement of labor across different regions. Per capita income levels are significantly different between North and South Europe. Labor mobility may act as a channel through which convergence in income levels can be achieved faster than through mobility in capital and goods and services alone. The new part devoted to growth in the world economy provides an analysis of the role of labor mobility and tax harmonization in international convergence.

Stochastic dynamic (rational expectations) equilibrium models have become the workhorse of macroeconomic analysis, thanks to the development and adoption of new computational methods. These methods enable us to study the complex interplay between exogenous stochastic processes and the endogenous macro variables that are driven by them. They are now also becoming an important tool of analysis in open economy macroeconomics. Given the spectacular advances in computer technology, computational costs are no longer an obstacle to numerical analysis. In this vein, we introduce in this new edition a brief guide to the numerical solution of a typical dynamic macro problem in a user-friendly way, with the objective of allowing the reader to learn and apply them quickly to his/her own research agenda. A diskette containing the main solution routines and some sample programs in GAUSS is included.

Our objective remains the same as in the previous editions: to provide a unified treatment of major topics in open economy macro and public economics by presenting two approaches. Part I overviews recent developments in the world economy, with special emphasis on fiscal restructuring among industrial countries in the 1980s and the 1990s. Part II provides a comprehensive exposition of the traditional approach, in ascending order of complexity ranging from the simple income-expenditure model to the more advanced stochastic Mundell-Fleming model. A treatise of the intertemporal approach, covering the simple deterministic two-period models for both single and multiple goods, and stochastic infinite horizon models, is presented in Part III. Part IV analyzes fiscal policies in the global economy. Topics include government spending, budget deficits, and similarities and differences among different instruments of international taxation. Economic growth in the world economy is the subject matter of Part V. We distinguish between exogenous growth and endogenous growth models, and analyze the

interactions among international convergence (in levels and growth rates of income), capital and labor mobility, and taxation. Part VI provides a theoretical overview and a summary of the evolution of economic thought in the areas of *Fiscal Policies and the World Economy*.

Some of the new material in this edition draws on our previous work. Section 1.4 draws on Bartolini, Razin, and Symansky (1995); Chapter 7 on Razin (1995); Chapter 13 on Razin and Yuen (1995d); Chapter 14 on Razin and Sadka (1995); and Chapter 15 on Razin and Yuen (1995b,1995c). We are indebted to Leonardo Bartolini, Efraim Sadka, and Steve Symansky for agreeing to include in the book sections drawing on our joint work.

We would also like to thank Sergio Rebelo for allowing us to use the KPR (King, Plosser, and Rebelo (1988)) code as subroutines in some of our computer programs.

By covering a full line of topics in open economy macro and public economics, the book has been used successfully in graduate and senior undergraduate courses in international economics and public finance, and has been translated to Japanese and Spanish. As in the previous edition, we include at the end of each part a set of old and new problems and exercises. A new companion manual, *Problems and Solutions in Intertemporal Open-Economy Macroeconomics*, by Thomas H. Krueger, Jonathan D. Ostry, and Chi-Wa Yuen, contains a detailed analysis and solutions to the exercises.

Finally, while the previous editions reflected the effort of the first two authors alone, this new edition is the result of collaboration among the three of us.

J.A.F. and A.R., with C-W.Y.

August 1995