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978-0-521-76475-9 - Capital Accumulation and Economic Growth in a Small Open Economy

Stephen J. Turnovsky

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Capital Accumulation and Economic Growth in a Small Open Economy

Economic growth is an issue of primary concern to policy makers in both developed and developing economies. As a consequence, growth theory has long occupied a central role in economics. In this book, Stephen J. Turnovsky investigates the process of economic growth in a small open economy, showing that it is sensitive to the productive structure of the economy. The book comprises three parts, beginning with models where the only intertemporally viable equilibrium is one in which the economy is always on its balanced growth path. Empirical evidence suggests relatively slow speeds of convergence so the second part of the book looks at several alternative ways in which transitional dynamics may be introduced. In the third and final part, the author applies the growth model to the issue of foreign aid, focusing specifically on whether aid should be untied or tied to the accumulation of public capital.

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Preface

This book is an extension of three lectures presented as the first set of “Centro Interuniversitario Crescita & Sviluppo Economico (CICSE) Lectures on Growth and Development” in Lucca, Italy, in July 2007. When I was invited to present this series, I was delighted that CICSE asked me to lecture on capital accumulation and economic growth in a small open economy. Both international macroeconomics and the theory of economic growth have interested me for a long period, so this seemed like a good opportunity to discuss them in a unified way. Over the past two decades economic growth has evolved into an enormous area of research, drawing increasingly on contributions from other areas of economics, as well as from other disciplines. The approach I adopt in these lectures is a traditional one, extending the standard models of capital accumulation to the open economy.

The lectures and this resulting short book draw heavily on research that I have undertaken in this area since the mid 1990s. At the appropriate places in each chapter, I have indicated the original source of the research from which the presentation has been adapted, although in many cases the material has been extensively revised. As will be seen from the appropriate references much of the research has been undertaken jointly and I am grateful to have had the opportunity to work with many talented coauthors over the years. I also want to express my appreciation to Stefan Schubert who worked through the manuscript and was helpful in eliminating errors and inconsistencies.

In developing the lectures and the book, I have tried to present the research in a progressive way. The first part (lecture) is devoted to setting out a basic canonical model and to analyzing the simplest version of it. This leads to a simple endogenous growth model, which has the characteristic that the only viable equilibrium is for the economy to always be on its balanced growth path. While this might serve as a convenient benchmark, it is obviously unrealistic, since empirical evidence suggests precisely the opposite, namely that most of the time economies are well away from their balanced growth

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paths. Hence the second part extends the model so that the long-run balanced growth equilibrium is reached only gradually along a transitional adjustment path. This structure can be accomplished in various ways, all of which involve augmenting the order of the underlying dynamics, and several alternative approaches are spelled out in Part II. The third part applies some of the models to an important practical subject, namely the granting of foreign aid. This is indeed a critical issue, having many dimensions. Within the framework we develop, we focus on a very specific, but widely debated, issue, namely the question of whether foreign aid should be “tied” to investment in infrastructure, say, or “untied,” allowing the recipient economy to use the resources as it wishes. But even within this restricted framework the answer to this question is complex and involves detailed knowledge of the structural characteristics of the recipient economy. Moreover, the applications of the model are sufficiently complex that we need to supplement the formal analytics with numerical simulations. And so a by-product of Part III is the illustration of the use of these numerical methods in simple growth models of this kind.

Finally, I wish to thank Neri Salvadori for his invitation to present the 2007 CICSE Lectures on Growth and Development. It is indeed an honor to inaugurate the lecture series. I hope that it will be the start of a successful series, providing an avenue whereby the presentation of diverse approaches to the study of growth theory will enhance our understanding of this most important topic.