Preface

Any textbook or article on growth economics always excites me. I get to read how economists see and document the processes of growth. Somewhere in those observations lies the answers to how to become rich, or put in a different way, how to sustain our lifelong welfare. I am excited to write this text because I think the book can help contribute to our understanding of the sources of economic growth. Throughout the book, I have deliberately used Asian experiences, data, and observations because I am of the view that there are exciting things happening in the region from which we can possibly learn a great deal. In addition, it is now agreed that the short-medium term global growth and economic outlooks are largely dependent on the Asian economies. Discussing economic growth without making reference to the center of the recent growth pole is a gross mismatch.

OVERVIEW OF THE BOOK

Although economic growth is the core and amongst the oldest of the debates in Economics, there have been little advances in the growth theory since the classic works of Robert Solow in 1950s. In addition, the growth literature seems to be quite unsettled for a number of reasons: First, the changing economic circumstances brought about by major international events such as the great depression and global financial crises, etc. have constantly changed the thought processes of policy makers and researchers. While these economists target policies for long-run sustained growth in human welfare, such sudden shocks force them to delve into short-run stabilization policies. Second, applied growth economists and policy makers have twisted discussions in many directions possibly due to personal proliferation and institutional recognition. Third, glaring empirical evidences based on large cross-country studies have given researchers an upper edge for publishing because it is hard to argue against the facts. Fourth, the rise of the endogenous growth theory has further provided researchers with strong micro-foundations-based models upon which modeling the growth impact of almost anything seems possible. However,
Finally, the availability of extensive datasets (Penn-World Tables, IMF, and World Bank data sites) and the advancement of the empirical methodology by Robert Barro have been timely for these economists. A good majority of such studies have led to the rise of the controversial empirical growth literature by using model specifications, which are neither based on endogenous or exogenous theories of growth. Nonetheless, there are some highly influential studies that have provided valuable insights to both theoretical economists and policy makers. Whilst the latter variety is highly valuable, clear-cut answers to the context-specific determinants of growth, especially for developing countries and those that need a quick turn-around in growth rates, are rare.

The exposition in this text adds to the works of Solow by showing that his original model can be used for policy. An interesting feature of the text is a systematic use of 10 Asian economies datasets (China, India, South Korea, Hong Kong, Singapore, Taiwan, Malaysia, Indonesia, Thailand, and Philippines) based on which some important lessons for policy are derived. The book explores some of the important issues in prominent growth models and robustly estimates the effects of a few determinants of long-run growth in the sample of Asian economies. These determinants are human capital, investment rate, policy-related variables (government spending and inflation rate), and proxies for openness to trade and financial development. It uses empirical support from time series methods to show that, while some of these growth factors are country-specific and better estimated with the modified Solow model, panel estimates supplemented by the Extreme Bounds Analyses (EBAs) confirm the specification robustness of the modified Solow model against some usual alternative specifications. In addition, addressing for theoretical and empirical limitations together with endogeneity biases, these tests show that openness to trade, financial development, private investment, and policy-related variables are robust determinants of growth in the selected Asian economies. The analysis also shows that of these factors investment rate, good governance, and openness to trade explain about 90% of the Steady-State Growth Rate (SSGR) in these countries. Therefore, growth policy based on these factors is highly recommended. It also shows that their rate of growth would stabilize to around 3.2% in the long run. The exploratory exercises presented in the text suggest that similar analysis for other regions, which have had persistently low and volatile rates of growth, together with the tests based on a larger sample of countries and other plausible growth factors could be conducted. These would provide further support to the work presented here but, more importantly, allow the policy makers to design practical policies for achieving sustained rates of growth to register continued development of human welfare.
OBJECTIVES OF THE BOOK

Providing insights for developing pragmatic growth policies, especially on how to estimate the growth effects of variables and in choosing appropriate and robust specifications are the most important objectives of this book. It must be noted that policy makers and applied economists in the developing world neither have the luxury of time nor are acquitted with adequate technical or research support for designing appropriate growth policies. Therefore, a simpler and easy-to-follow reference will be highly useful. In addition, other academic researchers and graduate students will also benefit from this text. The book applies a new extension of the exogenous growth model of Solow recently developed by Rao and Singh to test the effects of the some growth enhancing factors in the Asian sample. Estimates of the growth effects with time series and panel datasets show that the Solow model can be modified and be used for growth and development policy. The tests also display the robustness of this extension and that of the selected variables. Whist being highly technical, the book also discusses issues in growth econometrics, including the theoretical underpinnings of growth models, and addresses some of the important challenges in empirical studies on economic growth.

TARGET AUDIENCES

Whilst the text is reader friendly, important target audiences are policy makers, applied growth economists, researchers, and graduate students in economics.

ORGANIZATION OF THE CHAPTERS

This text is organized as follows: The first chapter is a general overview of growth and development trends, issues, and experiences of the world economy. This introductory chapter sets the scene for the book and intends to provide a summary of what policy makers constantly deal with. It discusses how and why incomes and growth rates differ across the world. This chapter also discusses the convergence debate and summarizes some important findings on growth convergence.

Chapter 2 is an economic survey of growth experiences of the selected Asian economies over the last four decades. It discusses their growth trends, important drivers, and endowments that have shaped their economic performances. A brief summary of their expected short-medium term growth prospects is also provided.
This chapter, in a way, focuses the readers to the sample countries because the rest of the book is dedicated to deeper analysis of these economies’ economic performances.

Chapter 3 is based on the East Asian growth controversy, which had dictated heated debates on growth performances until mid-2000. The major points of contention were on the nature and sources of economic growth and whether their growth strategies (which gave rise to the newly industrialized economies) could be emulated in other economies around the world. This chapter presents a summary of their growth accounts. Although in a separate chapter later, I conduct updated growth accounting exercises that validate the arguments presented and accepted in the present literature.

Any textbook on economic growth without a survey of the major growth theories would be inadequate. Therefore, chapter 4 is dedicated to a theoretical survey of the two prominent theories – the Neoclassical Theory as advanced by Solow (with its extensions) and the Endogenous Growth Theories. Because the expositions of the latter are many, only a selected subset of these models is described. However, in order to show some of the strengths and weaknesses of these models, a prototype endogenous model is discussed. The survey suggests that while the new growth theory has provided useful insights for policy, estimating and using these models are data demanding and tedious. This does not undermine the new growth theory in any way but instead shows readers the variety of alternatives that are available.

Having discussed the two sets of the theoretical growth models, chapter 5 discusses the empirical growth literature, which is really very unsystematic and diverse. Therefore, I have chosen to study the empirical findings on a few selected determinants of growth, and these are human capital, trade openness, private investment, financial development, and policy-related variables (government spending and inflation rate). Global literature on these variables based on time series and cross sectional works is voluminous. Consequently, only important theoretical works and recent empirical findings relating to the Asian sample of countries are summarized. In addition, although the selected list of the variables is small, it serves the purpose for empirical testing done in the next few chapters.

The following three consecutive chapters are rigorously empirical. Chapter 6 presents the growth accounts of the sample countries. Such details are important for gaining first-hand insights on growth policy. While technically loaded methodologies could have been implemented, I have chosen to remain simple by using the primitive approach of growth accounting. However, the traditional approach has been adjusted for using human capital (as an additional input) following the cross-country study of Mankiw, Romer, and Weil in early 1990s. In addition, both estimated and stylized capital shares are used in line with Bosworth and Collins’s multi-country study. In summary, the results confirm the prominence of factor accumulation as the
most important source of growth in these countries and consequently, as suggested by the neo-classical growth theory, the lack of productivity advancements imply an eventual decline of the Asian growth rates in the future. This is in support of the debates proposed by the recent Nobel Laureate in Economics (Paul Krugman), amongst others.

An exposition of the new extension of the Solow model and its application with alternative datasets are in chapter 7. Adequate attention is paid to model specification, co-integration, unit roots, reverse causation, and dynamic estimates. This chapter is strategically important for policy makers who seek answers for country-specific growth policy. It also summarizes the empirical findings of the growth effects of the aforesaid variables with cross-country data sets. The empirical findings of this chapter provide answers to proximate causes of country-specific and regional rates of growth. Broadly, the obtained results confirm much of the theoretical assertions made regarding the sources of growth for these economies.

Chapter 8 compares the results of the empirical tests obtained with the new extension to those obtained with the other alternatives. These comparisons help derive important empirical issues together with the estimated growth effects. The results show that whilst country-specific findings do vary across countries, some broad similarities can also be observed. Estimates with cross-country datasets produced comparable results, but due to limitations in providing better proxy for the long-run rate of growth, those obtained with Barro-regression seem to have limitations. Alternative tests show convincing results. This chapter tests for the robustness of variables and of the specifications used. The results confirm that most of the variables selected are robust determinants of growth and that the new extension of the Solow model is robust as well. This type of test adds further confidence on the empirical estimates, and based on the results, it is concluded that while country-specific growth factors vary, the regional growth is due to investment, trade openness, and policy-related variables. The analysis also estimates that investment spending was the most important determinant of long-run rate of growth and that the regional growth rate will stabilize to about 3.2% in the long run.

Chapter 9 applies time series methods to estimate the impact of trade openness in China’s growth rate. The motivation of this chapter is two-fold. First, it applies the possibilities of the new extension to determine country-specific growth effects of trade openness and also it is a test of the growth effects of openness to trade for China. This chapter has a good survey of literature and concludes with a summary of empirical and theoretical findings for trade and growth nexus for China. The findings point to the view that trade openness seems to have had a permanent and positive growth impact.
Chapter 10 presents a summary of findings and the lessons learnt from the Asian growth experiences. Much of these are evident from the empirical tests, but a careful packaging of the findings is presented in this chapter. In essence, chapter 10 aims to provide answers to the sources of growth for the region and individual sampled countries as well. It also indicates where the economies might be heading in the long run. This chapter includes the lessons for policy for other developing economies and lists the limitations of the exploratory exercises presented in this text.

FUTURE DIRECTIONS

Currently, the world as a whole is seeking answers for macroeconomic stabilization. However, economic thinking will delve back to finding answers for long-run sustainable rates of growth in the future. This is because the recent global crisis has had serious implications on economic models and methodologies alike. In light of the twin objectives pursued in this text, it is envisaged that this book will provide some useful insights to applied growth economists and policy makers – in a way supporting the global quest for surviving and sustaining human welfare amidst the many raising challenges that seem to be sprouting everywhere across the world.

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