Preface

In recent studies, the importance of financial markets has been highlighted, and financial systems have been ascribed an increasing influence over real sector development. However, most of these discussions fail to adequately integrate this relationship into a general and theory-based macro-economic model. The research questions that arise are: “Whether financial development affects real economic activities?” and “Does the structure of the financial system matter for economic growth outcome?” Thus, the main objective of this research book is to explore the interaction between financial market development and the indicators of real economy (such as investment, savings, unemployment, productivity growth, etc.) in applied context of macro-theory of economic growth for selected open economies.

To identify appropriate and accommodative theories of economic growth, the book touches a wide range of issues related to orthodox and heterodox theories of economic growth, financial development, financial fragility, macroeconomic modelling, and data handling issues. We focus on the impressive transformation process that growth theories have gone through over the past several decades without overlooking the existing gaps in relation with financialisation of current models and lack of integration of financial sector into real sector macro models.

The book chooses three countries as case studies, including Hong Kong, South Korea, and the UK, and it investigates how financial systems differ across these cases given the significant differences in their market structures. The market structure for financial system and services differ between these three cases, with the most striking difference being the degrees of public sector ownership and control and stock market activities, so none of these selected markets represent homogeneity in relation to their financial sectors. The book examines channels through which the financial markets of these economies affect the real economy using time series data by applying advanced econometric techniques. One result is that almost half of this book is devoted to application of econometric theory and data characteristics to examine formal economic theory. All of the techniques illustrated in the book need
to be explicitly programmed. Accordingly, the econometric analysis and graphics in this book is carried out using EViews software. This book presents hands-on examples for a wide range of econometric techniques, from stationarity analysis to system of simultaneous equations using time series data and post-Keynesian macroeconomic model. Throughout this book, we have tried to return to the research objectives introduced in chapter 1 as often as possible.

The literature presented in this book suggests that money supply, credit availability, and stock market capitalisation are among the most important indicators of financial market development, which can help financial systems preserve overall stability to an extent. We contributed to this body of literature by undertaking important empirical research using these indicators to identify the resilience and health of financial systems if they face a sudden external shock or a financial crisis.

This book is unique in terms of integrating the concept of the theory of financial intermediaries with the post-Keynesian macroeconomic modeling. This integration accounts for the role of the banking system, credit market, and stock market capitalisation in stimulating the aggregate demand. In addition, the results of the empirical analysis provide insights into the macro-economic functioning of selected countries considering their productive but uneven financial market structures, different levels and degrees of government ownership, and state control on the financial systems.

Against this background, the book starts with emphasising the fact that while recent studies suggest that financial intermediation affects growth through various channels, a great deal of research fails to effectively examine this relationship within a general macroeconomic framework. Chapter one focuses on the absence of such attempts and provides a brief definition of financial sector development, concluding that the financial sector can be called developed if the efficiency, stability, and competitiveness of the sector improve. Consequently, research questions arise, and the main objectives of the research are discussed. The significance of this study is addressed in terms of integrating the financial sector with the real sector in a comprehensive macroeconomic model in post-Keynesian tradition, and in terms of econometric techniques that enable the research to address simultaneity issues among variables.

Chapter two moves on to early studies that highlighted the importance of finance and its importance on some growth aspects. Releasing the process of finance in different schools—neo-classical, monetarist, and Keynesians—is discussed in this chapter as well. Other issues on governing the credit and capital markets from a Keynesian point of view and Marx’s ideas on the financial variables are deliberated. Post-Keynesian logic concerning the system of credit money and the accountability of commercial banks for the creation of money and credit are presented. Features
and the rationale of the McKinnon and Shaw’s school on the importance of credit market and financial institution in the growth process are explored in detail.

The theory of financial intermediation is discussed in chapter three. The most common indicators of financial development are introduced along with the review of some empirical analyses. Later in the chapter, a conceptual distinction between bank-based and market-based financial markets is made. Bank-based market is an outcome of the positive role of banks in development and growth. The chapter describes how in such financial systems banks can finance development more effectively than markets in developing economies and, in the case of state-owned banks, how market failures can be overcome and allocation of savings can be undertaken strategically.

The purpose of chapter four is to review the post-Keynesian macroeconomic theories and models. In general, post-Keynesian growth theories argue that economic growth is demand-driven in the short-run and medium-run, and that investment acts as a generator to promote the other sectors within the economy and enhances economic growth. Since expectations are very important in investment decisions, post-Keynesian economists argue that profit shares should enter into the macro models to capture the role of expectations. Against this background, this chapter starts with an extensive discussion on the nature and characteristics of investment function in different approaches. Later in the chapter, the incorporation of financial variables such as interest rate, capacity utilisation, and profit rates into post-Keynesian growth models and distributions are deliberated. In line with the goal of our research, which is extending a model to take into account financial variables, the desired empirical and theoretical approach in this book is Kaleckian-Post-Keynesian models of growth and distribution. Accordingly, a Kaleckian-Post-Keynesian model incorporating financial sector and interest rates is introduced, and the characteristics of this approach are conferred.

Chapter five moves on to specify characteristics of the financial markets of three remarkable cases studies, namely South Korea, Hong Kong, and the United Kingdom. This chapter investigates how financial systems differ, and how are they similar across these countries. Hong Kong and the United Kingdom have comparatively large, active banking systems. On the particular measure of stock market development, Hong Kong and the United Kingdom are classified as well developed; South Korea has an active but small stock market. In terms of overall financial sector efficiency, all three countries stand out and are ranked very highly. The chapter concludes that despite differences, there is an important similarity between R-banking and A-banking: in both systems, financial intermediaries are privately owned. This results in competition among agents to provide financial resources to firms. Consequently, no single agent will control whether a given investment project may go
forward, increasing the probability that, ultimately, good projects will be selected by the mechanisms of the financial system, while the good projects are selected by the government authorities in the hard budgeting type of market.

Chapter six extends a particular Kaleckian-Post-Keynesian model to include the financial sector; the model consists of behavioural functions for investments, saving, and international trade defining the goods market and the producer’s equilibrium curve, which relates capacity utilisation to the distribution of income. Producer's equilibrium is not only determined only by the pricing behaviour of firms but also by a reserve army effect in a Marxian sense, reflecting the bargaining power of the workers. Interest rate is an exogenous variable for the investment process and is determined by the policy of the central bank and by the liquidity preference of commercial banks and monetary wealth holders. The chapter justifies the exogenous inclusion of financial development indicators into investment, savings, and productivity growth equations followed by the theory of financial intermediation, which fundamentally is the main contribution of this research to the literature and empirical works. The methodological approach adapted in this research is a Structural Vector Autoregression (SVAR) model that is used to examine the relationship between exogenous financial development indicators and a system of equations for key macroeconomic growth indicators, using quarterly data for periods ranging from 1990 to 2010. This was done in a series of steps and pre-analysis testing, such as stationarity, cointegration to determine the existence of long-run relationships between the variables, and Granger causality.

Chapter seven is devoted to definitions of the model variables and the process in which the data were generated. The data were obtained from the various issues of the International Financial Statistics (IFS-IMF), International Labour Organisation (ILO), World Bank Database (WDI), and Asian Development Bank (ADB) for the period of 1990:Q1 to 2010:Q4 for South Korea. All data have been seasonally adjusted, and in the case where some variables were only available on an annual basis, the quarterly data were generated using different techniques. The model variables from the system of equations, including investment, savings, income distribution, unemployment, productivity growth, and net export as endogenous variables and interest rate, capacity utilization, and indicators of financial development (monetisation ratio, domestic credit, and stock market capitalisation) as exogenous variables, as already has been explained in a previous chapter. This chapter further tests stationarity on all the variables, and then it moves on to test for cointegration applying Johansen-Juselius approach for each of the equations in the model for all three countries separately. To evaluate whether including certain variables in the VAR makes sense, a Granger causality test is carried out in this chapter as well.
Chapter eight starts with explanation about the mechanism of setting up an unrestricted VAR and presents VAR residual tests for every equation in the system for each country separately. Later in the chapter in order to be able to plot impulse response functions based on the orthogonal shocks, a Structural VAR model is estimated by taking into account short-run restrictions – the ordering of which was derived from Kaleckian-Post-Keynesian theory. The initial assumption is that the financial development variables are exogenous to the movements in growth variables. However, the imposition of exogeneity condition was tested (using the block exogeneity Wald test) in chapter seven to ensure its compatibility with our macroeconomic data.

To avoid any serious misspecification, short-run restrictions are imposed by adopting Choleski decomposition to investigate the contemporaneous relationship between the variables. The results of SVAR allow us to conclude that the post-Keynesian model seems to perform well and in line with the theoretical model. Chapter eight continues the analysis by investigating impulse responses. Since SVAR is built on the Choleski decomposition ordering, where the ordering of the variables entering the model plays a significant role, the impulse response functions are scaled by the inverse of the Cholesky factor of the residual covariance matrix to orthogonalise the impulses. The impulse response analysis in this chapter incorporates the effect of different financial regimes which shed more light on the determinants of accumulation, savings, and productivity.

In addition, this chapter investigates the effect of variance decomposition of the indicators of financial development in the case study countries that would better account for the link between financial variables and other key macroeconomic variables, and separates the variation in the indicators of financial development into the component shocks to the model. According to our empirical findings, the stock market capitalisation contribution to overall economic development progressively exceeds that of other indicators of financial development adopted in this study (monetisation ratio and domestic credit). The effects from financial development on investment savings and productivity growth have been almost observed in all cases. However, two indicators used to measure financial development, the monetisation ratio and the domestic credit availability, both as a share of GDP, have failed to show any clear effect in the United Kingdom adopting the SVAR method of estimation.

Chapter nine summarises the key research findings and discusses the possible channels through which financial sector development could potentially affect the economic growth process. The chapter further highlights contributions of this research to growth studies, discusses policy implications arising from the findings of this research, and provides directions for future research and analysis. The research ends with concluding remarks.
WHO SHOULD READ THIS BOOK?

The intended audience for this book is the faculty, top experts in macroeconomic modelling, and higher degree research students who are interested in a broader knowledge of modern theories of economic growth and distribution. Particularly, the book may be useful for researchers who require an intermediate and upper-intermediate understanding about statistical and econometric tools, which are frequently employed in the area of finance and macro-econometrics.

Since the book reviews and covers a fairly large body of literature on financial markets and their roles in the development of real economy, it can be used for postgraduate courses covering the history of economic thoughts with a focus on issues such as capital controversy, financial markets, and economic growth. Selected chapters of this book can be used in advanced courses with a focus on Keynesian and post-Keynesian theories of growth and distribution.

Although the motivation for modelling in this book is derived from post-Keynesian growth theory and the theory of financial development, the empirical testing of these theories using time series estimation techniques may prove useful for postgraduate research students and researchers dealing with time series data from many other disciplines and schools of thought.

In order to fully comprehend the analytical materials presented in this book, readers are recommended to have introductory knowledge of time series econometrics. However, this is not essentially a prerequisite, since these materials are explained systematically in relevant chapters.

FINAL WORD

In spite of all my efforts, errors have indubitably crept into the text; if this edition is of any guide, the numbers may be embarrassingly large. I would be grateful for suggestions for improving the organisation, style, and clarity of the manuscript.
THIS BOOK AT A GLANCE

Content Level: Research, Applied research

Key Words: Financial market development, Post-Keynesian Theories of economic growth and income distribution, Time series data analysis, Structural Vector Autoregression model, Impulse response analysis, variance decomposition

Related Courses: Advance Macroeconomics, Intermediary to Advance Econometrics

Highlights: This book:

◦ Presents advanced quantitative approaches to dynamic modelling of simultaneous equations systems.
◦ Provides insight into the working and interaction of Kaleckian post-Keynesian macro-dynamic contemporaneous feedback effects.
◦ Proposes theoretical, empirical, and numerical treatment of large macroeconomic databases.

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