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***The Singapore Economy: An Econometric Perspective.* By Tilak Abeysinghe and Keen Meng Choy. New York: Routledge, 2009. Pp. 181.**

With the far-sighted economic policies that have transformed it into an Asian powerhouse, the Singapore economy has proven the success of a market-driven economy burgeoning on a rapid pace of development, high per capita income, a corruption-free environment, an educated and motivated workforce, and well-established legal and financial infrastructure. Even though the Singapore economy has attracted research interests in the fundamental economic and institutional factors that were driving its achievements, its idiosyncratic characteristics — the high degree of openness, tiny economy size, exponential increases in saving rates, huge reliance on foreign direct investment (FDI), and immense physical and human capital accumulation, among others — have been a “black box” in the existing studies. These features inflict technical complications on and hence necessitate the pioneering approaches to the research frameworks that see the Singapore economy through an “econometric lens”.

As the authors highlight in the book, the objectives of this book are to “introduce readers to how the Singapore economy works and to trace out the macroeconomic consequences of various government policies.” This book manages to materialize these objectives mainly through a novel approach to econometric modelling, namely the ESU01 model, developed for the Econometric Studies Unit (ESU) of the Department of Economics at the National University of Singapore in 2001.

The book starts with the overview of the ESU01 model. The crux of this econometric modelling is essentially a satellite paradigm that individually models Singapore’s economic blocks — consumption, investment, trade, labour market, and sectoral production — and links them simultaneously through nexuses of ancillaries and

identities. This modelling strategy has two main advantages. First and foremost, as this book explicitly manifests, the traditional econometric models do not fit Singapore’s experience well, and therefore researchers are compelled to approach the questions of econometric modelling in unconventional ways. Decomposition of the Singapore economy into key economic blocks allows one to successfully capture their own distinctive traits. Furthermore, the ESU01 model is extension-friendly in the sense that one can develop it either by improving the existing blocks without perturbing the other blocks or augmenting new blocks via additional ancillaries and identities, or both.

The second part, Chapters 2 to 7, is concerned with the modelling of the economic blocks (in Chapters 2 to 6) and bridging them altogether (in Chapter 7), by using a number of ancillaries and identities. This book interestingly addresses numerous anomalies of the Singapore economy. For instance, Chapter 2 cracks the factors behind Singapore’s steady decline in average propensity to consume (APC). This book argues: “As Singapore reaches a stage of development that is comparable to Switzerland’s, one would have expected her APC to stabilise. This, however, has not happened thus far.” This book also prominently shows that the standard consumption functions do not fit Singapore’s, and hence fail to explain the puzzles. The modified consumption function draws two conclusions. Firstly, “the decline in the visitor expenditures to income ratio has been a particularly important reason behind the fall in the measured APC during the 1990s.” In addition, “rising loans and withdrawals from the CPF to finance house and car purchases have played a crucial role in the [declining] evolution of Singapore’s APC”.

Another indispensable atypical attribute of the Singapore economy, which has been unexplored, and indeed often been forsaken, in the existing studies, is rigorously addressed in the modelling of the export functions in Chapter 4. Due to its small size and high degree of openness, Singapore’s exporters and multinational corporations (MNCs) are arguably a price taker with respect to the rest

of the world. This implies that the standard demand-supply dichotomy, by which export price and quantity are simultaneously determined, is not applicable for the Singapore economy and may ultimately bring about inconsistent estimates. This book tackles this intricacy by assuming perfectly elastic export demands, thereby solely estimating the supply function with exogenously given prices.

The third part, Chapter 8, has to do with the validation of the ESU01 model. In principle, a valid macroeconomic model should possess one appealing property: duplicability — the model solutions should be able to mimic the actual behaviours of macroeconomic variables. This book assesses the fitness of the ESU01 model based on this principle by employing three statistics — namely, the root mean square percentage error (RMSPE), mean absolute percentage error (MAPE) and Theil's *U*-statistic. In whole, its validity is remarkably satisfactory. As the authors note, “the statistic and dynamic projections are able to replicate the turning points in the data closely, without at the same time exhibiting oscillatory or unstable behaviour.” The rest of Chapter 8 pertains to the multiplier analysis from which the impacts of perturbing two exogenous variables, the foreign income and government spending, on key macroeconomic variables are derived. These econometric exercises illustrate the application of the ESU01 model and provide two noteworthy findings. Firstly, “a flourishing world economy is a definite boon for Singapore.” Last but not least, “the fiscal multiplier in Singapore is small....due to savings and import leakages abroad.”

The last part, Chapter 9, is to a large extent an extension of the multiplier analysis in Chapter 8. It illuminates how policy-makers and practitioners make use of the ESU01 model for policy evaluation. The authors employ the simulation techniques to answer three main questions: What are the impacts of a closed-door foreign worker policy on the Singapore economy? Is a switch from the discretionary monetary policies to an exchange rate policy rule beneficial for Singapore's demand management? What are the

growth rates of exogenous variables that enable Singapore's macroeconomic variables to grow at the targeted rates? The simulations yield the following results, respectively. Firstly, “if the government were to stop foreigners from coming here to work, the severe labour shortage that develops will raise domestic costs and prices substantially, with detrimental effects on exports and economic growth.” Secondly, “the exchange rate is not a potent tool for fine-tuning output growth because of its offsetting effects on export and import prices.” Lastly, “if world income grows by 4% and the current liberal policies to encourage FDI and foreign talent to the shores of Singapore are continued, the country can attain a real GDP growth rate that is higher than the global benchmark, notwithstanding its mature status.”

To summarize, the authors have elucidated a complete analysis of the ESU01 model. This book reflects their admirable and wholehearted efforts to open up the black box. By using comprehensive data retrieved from various sources and demonstrating several constructive applications, this book contributes to debates on econometric modelling, forecasting and policy evaluation, related to Singapore. This is, in short, the excellent, comprehensive reference that captures a wide range of audiences, including academics, policymakers, professionals, students, and anyone who is interested in the econometric aspects of this miracle economy.

Nevertheless, there remains room for improvement of this book. The econometric estimation employed throughout this book is confined mainly to the co-integration analysis, in which a co-integrating (long-run) relation is obtained by the bivariate autoregressive distributed lag (ADL) model and is tested by Johansen's maximum likelihood (ML) method, whereas the Error Correction Model (ECM) represents the short-run adjustment of macroeconomic variables. This forces the authors to assume that “all time series are generated from non-stationary $I(1)$ random processes.” This assumption, as is well known, is unappealing for some macroeconomic variables — in particular, interest rates and government budget deficits,

among others. The more apposite estimation methodology requires different econometric specifications and estimations. Despite this limitation, the ESU01 model is a groundbreaking attempt to model the Singapore economy, which sheds light on its future in-depth research.

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***East Asian Regionalism.* By Christopher M. Dent.** London and New York: Routledge, 2008, Pp. xx, 320.

In the book's preface the author informs his readers that the central theme of the volume "explores the various ways in which East Asian regionalism has deepened and continues to do so... The book has been designed with both tutors and students in mind, providing comprehensive overviews of the key themes from the multi-disciplinary perspectives of political economy" (p. xviii). Dent's primary but not exclusive reading audience are tutors and students and he points the work's most prominent features in their direction. *First*, at the end of each chapter there are study questions that may be used as the basis for classroom discussion and individual study. *Second*, the case studies that are presented at each chapter's conclusion can also be used for class discussion and individual study. *Third*, the tables and figures that are included are designed to help students to gain an understanding of recent economic, political and security trends that are taking place throughout East Asia. *Fourth*, the summaries and conclusions that follow the chapters are from four different but integrated intellectual perspectives — neo-realism, neo-liberalism, social constructivism and Marxian structuralism.

Dent's academic mosaic that moves through these eight sections: an introduction to the volume; East Asian geography; ASEAN and Southeast Asia as a sub-region within broader East

Asia; the broader APEC and Asia-Pacific region; important chapters on ASEAN Plus Three and its key role in financial regionalism; chapters on Free Trade Agreements, transnational issues; and a concluding section that presents a framework via which to analyse East Asian regionalism.

The chapters focusing on ASEAN and APEC are likely to be of enhanced interest to Southeast Asians because within them the author brings together the literature on the two institutions as he traces their formation, maturation, persistence, broadening and deepening in terms of membership, structure and agenda. For serious students of the region, this reviewer offers the suggestion that Dent's chapters on ASEAN could be read in conjunction with Denis Hew's *Brick by Brick: The Building of an ASEAN Economic Community* (2007). Together they show the linear, step by step approach that ASEAN has taken in response to changing regional economic and security conditions.

The author raises this key question: "What factors combine to broaden and deepen East Asian regionalism?" He offers an interesting answer to his question by presenting a new and original analytic framework through which Dent analyses the essence of East Asia's experience with regionalism. His answer centers two main factors. One factor is a set of inter-related forms of "coherence": *associative*, *integrational* and *organizational*. The basis for *associative* coherence "amongst people, groups and societies from different parts of the region often originated from the identification of common or inter-linked interests amongst them (e.g., on matters of commercial practice, cultural behaviour, environmental concerns, political ideology, socio-religious belief, etc.)." (p. 274) *Integrational* coherence "is essentially a technical-related concept that considers the mechanisms and modalities by which integrative links are being forged... Hence, the technical practices of both firms and governments are particularly relevant. For example, firms in East Asia are creating greater *integrational* coherence through developing numerous region-wide business mechanisms and processes." (p. 275) *Organizational* coherence