FINANCIAL CONVERGENCE IN THE ASIA PACIFIC

By

JULIANA IBRAHIM

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

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DEDICATION

To my loving parents, Che Jah Mohd Tahir and Ibrahim Hashim, it is your unconditional love that made me who I am today.
Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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Chairman: Professor Muzafar Shah Habibullah, PhD

Faculty: Economics and Management

The issues pertaining to the convergence of the financial sector as a result of economic co-operations and integrations in the emerging countries especially Asia Pacific emerge and yet to be explored. This is due to theoretical and empirical work on finance and growth which provide strong evidence that financial development is conducive to economic growth. There are many theory and empirical applications on per capita income convergence. However, there is neither a theory of financial system convergence, nor of an ‘optimum’ financial system. The issues whether the Asia Pacific countries have achieved a certain degree of convergence in their financial sector will provide some insights into research questions which are particularly relevant both theoretically and policy reasons. Convergence is important in alleviating poverty and potential financial crisis, and sustaining the growth momentum in the region. At the same time, as the Asia Pacific’s financial sector converges, it is seen as a contribution to the global economy. The answer to convergence also relates to the validity of the centre-periphery growth model.
This study evaluates the convergence patterns of the Asia Pacific financial developments from the financial sector perspective and examines how the countries are performing financially, relative to one another. For comparison purposes, by employing ‘Barro regressions’ model and Bernard and Durlauf (1995)’s stochastic convergence model, this study evaluates Asia Pacific’s financial sector cross-sectional and time series convergence from the period 1980 until 2009 for all three income groupings by examining: the cross country financial convergence to the common steady-state or individual steady-state level through $\beta$-convergence; the cross country financial convergence to a common equilibrium by employing $\sigma$-convergence; the financial convergence of the individual Asia Pacific country to its group’s mean level by considering bi-variate stochastic convergence; and group (regional) financial convergence towards their group’s mean level by estimating stochastic panel convergence. Simultaneously, hierarchical agglomerative cluster analysis is performed to identify the existence of club convergence among the countries.

The Barro-regression results support absolute and conditional financial convergence for the Asia Pacific. Meanwhile, when examine individual stochastic convergence towards their average financial development levels, evidence of divergence can be found for almost all of the countries, with little evidence of convergence as catching-up for a small number of countries in the Asia Pacific, even after taking into account their heterogeneity factors. Based on the hierarchical cluster results, it is shown that the countries in the Asia Pacific are forming separate convergence clubs, based on their income per capita performance. The countries with a relatively well-developed financial
system seems to be converging and forming the club with richer countries compared to the countries with relatively under-developed financial sector.

This suggests that regional convergence of the financial sector is important for the growth of the Asia Pacific countries, particularly important especially to the middle- and low-income countries. After taking into account the heterogeneity factors of the Asia Pacific countries, it can be concluded that those countries with a relatively well-developed financial sector tend to catch-up with the richer countries, but poor countries with a relatively under-developed financial sector are less likely to catch-up. Hence, convergence process in the relatively lower-income countries might be very slow. This result supports the centre-periphery growth model. It explains the reason as to why intra-regional differences persist or even widen over time due to agglomeration effects driven by maybe low financial sector’s costs and strong economies of scale (increasing returns) in the Asia Pacific countries which might be due to geographical, political or other factors.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERTUMPUAN KEWANGAN DI ASIA PASIFIK

Oleh

JULIANA IBRAHIM

Februari 2013

Pengerusi: Professor Muzafar Shah Habibullah, PhD

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Isu berkaitan pertumpuan (convergence) sektor kewangan hasil dari kebangkitan kerjasama dan integrasi ekonomi di negara-negara membangun terutama Asia Pasifik masih memerlukan kajian terperinci. Ini kerana adanya bukti teori dan aplikasi empirik yang kuat menyokong pembangunan kewangan sebagai persekutuan yang sesuai untuk pertumbuhan ekonomi. Walaupun kini terdapat pelbagai teori dan aplikasi empirik berkaitan pertumpuan pendapatan per kapita, namun masih tiada kedapatan teori pertumpuan sistem kewangan mahupun teori sistem kewangan yang optimum. Tahap pertumpuan sektor kewangan Asia Pasifik mampu memberi kesedaran berkaitan teori dan kesan polisi. Ia juga penting bagi membantu mengurangkan kadar kemiskinan dan potensi krisis kewangan negara, dan mengekalkan momentum pertumbuhan ekonomi serantau. Pada masa yang sama, pertumpuan sektor kewangan juga boleh memberi sumbangan positif kepada ekonomi global di samping kesahan kepada model pertumbuhan ‘centre-periphery’.
Kajian ini menilai corak pertumpuan pembangunan kewangan di Asia Pasifik antara satu sama lain dari perspektif sector kewangan. Penilaian sektor kewangan Asia Pasifik dari segi kajian keratan lintang (cross-sectional) dan jilid masa (time-series) dengan penggunaan model ‘regresi Barro’ dan model pertumpuan stokastik akan dilakukan dengan memeriksa: corak pertumpuan kewangan keratan lintang ke arah keadaan mantap (steady-state) yang sama atau ke arah keadaan mantap individual dengan mengkaji pertumpuan – β; corak pertumpuan kewangan keratan lintang ke arah equilibria yang sama dengan melihat pertumpuan – σ; pertumpuan stokastik kewangan negara individu ke arah kadar purata kumpulan melalui dwi-variat; dan pertumpuan kewangan kumpulan ke arah kadar purata kumpulan secara pertumpuan panel. Pada masa yang sama, kelab pertumpuan di antara negara-negara Asia Pasifik yang dikaji juga akan dikenalpasti melalui analisa hierarki kelompok.

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I certify that a Thesis Examination Committee has met on 1 February 2013 to conduct the final examination of Juliana Ibrahim on her thesis entitled “Financial Convergence in the Asia Pacific” in accordance with the Universities and University College Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The committee recommends that the student be awarded the Doctor of Philosophy.

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This thesis submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, or is not concurrently, submitted for any other degree at Universiti Putra Malaysia or any other institutions.

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JULIANA IBRAHIM

Date: 1 February 2013
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