



UNIVERSITI PUTRA MALAYSIA

FINANCIAL CONVERGENCE IN THE ASIA PACIFIC

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FEP 2013 3



FINANCIAL CONVERGENCE IN THE ASIA PACIFIC

By

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

February 2013

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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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 β -convergence; the cross country financial convergence to a common equilibrium by employing σ -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

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Februari 2013

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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 persekitaran 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 $-\beta$; corak pertumpuan kewangan keratan lintang ke arah equilibria yang sama dengan menilai pertumpuan $-\sigma$; 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.

Keputusan kajian 'regresi Barro' menyokong pertumpuan sektor kewangan Asia Pasifik secara 'mutlak' dan 'bersyarat'. Penilaian pertumpuan stokastik ke arah kadar purata pembangunan kewangan kumpulan negara-negara yang dianalisa menunjukkan 'pencapaian' dan sedikit bukti 'mengejar kadar saksama' (catching-up) walaupun setelah faktor 'kepelbagaian' dalam negara masing-masing diambilkira. Negara-negara Asia Pasifik yang lebih membangun dari segi pembangunan sektor kewangan secara relatif menunjukkan corak penggabungan kelompok ke arah negara-negara berpendapatan tinggi dibandingkan dengan negara-negara Asia Pasifik yang sektor kewangannya kurang membangun.

Keputusan kajian mencadangkan pembangunan sektor kewangan adalah penting untuk pertumbuhan ekonomi Asia Pasifik terutama kepada negara-negara Asia Pasifik berpendapatan sederhana dan rendah. Negara-negara yang mempunyai sektor kewangan lebih membangun secara relatif mampu 'mengejar kadar saksama' ke arah kelompok negara-negara berpendapatan tinggi manakala peluang bagi negara-negara berpendapatan rendah atau miskin yang mempunyai sektor kewangan yang kurang membangun secara relatif untuk 'mengejar secara saksama' pula kurang. Kadar proses pertumpuan di kalangan negara-negara yang bersektor kewangan kurang membangun secara relatif adalah sangat perlahan. Keputusan kajian juga menyokong model pertumbuhan 'centre-periphery'. Dengan itu, sebab perbezaan ekonomi dalaman-rantau yang semakin meluas dan berterusan terjawab. Berkemungkinan ia adalah kerana kesan pengelompokan atas dorongan kos sektor kewangan yang rendah dan pulangan bertambahan tinggi di negara-negara Asia Pasifik melalui faktor geografi, politik dan lain-lain.

ACKNOWLEDGEMENTS

Alhamdulillah to the Almighty, *Al-Malikul-Mulk* (Master of the Kingdom), for making this a reality, a dream comes true. Although I knew in theory that one day it would be finished, I have to admit that I wondered many times whether that day would ever arrive in practice. But it has arrived. And now I look back on a process in which I have learned so much, worked with very inspirational people and have been surrounded by wonderful friends and family. I would like to take this opportunity to thank them.

First and foremost, I would like to express my gratitude to my supervisor, Professor Dr. Muzafar Shah Habibullah, the person who always inspires me. It was really a great experience to be working with him, who has helped me to fulfil my potential and giving me the opportunity to achieve my dream. I am very thankful for his guidance and support throughout my studies.

I would also like to express my utmost gratitude to Universiti Putra Malaysia and its staff, and the Malaysian Government, for their financial support and the opportunity to finish my PhD.

Working on a PhD dissertation for many years in a row requires patience not only from me, but also from my friends and family. I have realised that I am truly blessed with so many good and dear friends – too many to be able to address individually in this short text. A few of these do, however, deserve to be mentioned by name. Dear Dr. Hirnissa, thanks for all the help, care and

concern. Thank you Dr. Baharum for the indirect contribution, the encouragement and moral support you have given me ever since my Masters studies.

I would like to address a special word of thanks to my loving parents, Che Jah Mohd Tahir and Ibrahim Hashim, for having faith in me when I needed it the most. I am very thankful to have them and all the endless support and encouragement for me to succeed, this far. I would also take this opportunity to thank my brother and sister-in-law, Mohd Izdihar and Diella. You have not only had complete faith in me and my abilities, but have been supportive in many other ways as well. Thank you for looking after my children and house. I could never, ever have finished this dissertation without my family around.

A final word of thanks goes to my wonderful husband, Shamsul Nahar. Thank you for your thoughtfulness, support, tolerance and forgiveness throughout the good and bad times during the studies. I can never express my love and respect to you for all the sacrifices you have made for me and the family. Most importantly, I thank you for your continuous *dua*' and for the patience you have had these past years and for always, always being there for me, day and night. I am also thankful for the family we have built together and the beautiful children we bear. I will feel incomplete if I don't mention their names: Adam Ahmad, Audi Arif and Aydin Adel. I am everything I am today because they love me!

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.

JULIANA IBRAHIM

Date: 1 February 2013

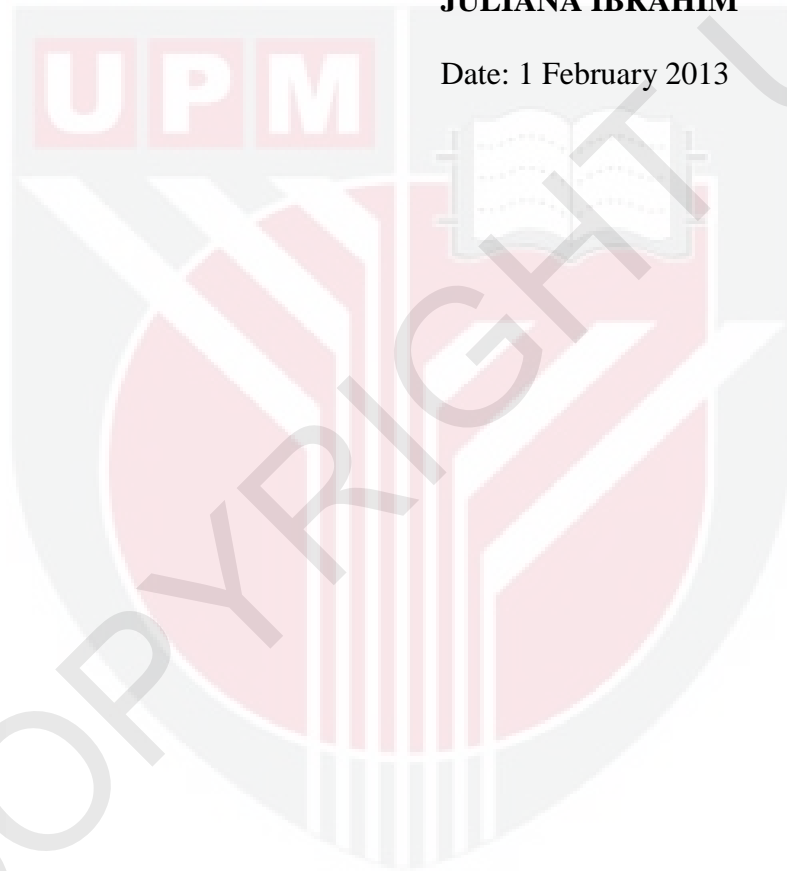


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