



UNIVERSITI PUTRA MALAYSIA

REAL AND MONETARY CONVERGENCE OF ASEAN-5 PLUS THREE

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By

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in Fulfilment of the Requirement for the Degree of Doctor of Philosophy**

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Specially Dedicated to :
Dah Jih and Chian Chyn,
the love of my life.



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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January 2007

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Asia consists of numerous countries that vary in population, culture, land area and economic resources. However, within the disparity and diversity of the Asian economies, there are some common grounds that have sparked off regional co-operation. The purpose of this thesis is to evaluate the level of economic convergence of the combinations of ASEAN-5 (namely, Indonesia, Malaysia, the Philippines, Singapore and Thailand), Japan, China and Korea economies, a fundamental source of regional co-operation. The empirical findings suggest that GDP, CPI and interest rates of ASEAN-5, Japan, China and Korea are all cointegrated, signifying synchronisation and initial convergence within the region, a positive indication for closer economic co-operation with lesser adverse impact on any individual economy. Subsequently, three possible economic alliances are identified as ASEAN-5, ASEAN-5, Japan, China and Korea, as well as ASEAN-5, Japan and China. The tests on dynamic properties of GDP of ASEAN-5, GDP of ASEAN-5, Japan and China, CPI of ASEAN-5, Japan,



China and Korea, and interest rates of ASEAN-5, demonstrate significant macroeconomic linkages among these economies, validating a possible economic co-operation.

Apparently, managing the interest rates is a policy tool to keep in check the economy's price level, the CPI. Since managing CPI would be the concern of most economy to contain inflation, the convergence of CPI among ASEAN-5 + 3 through government intervention, is expected.

Furthermore, a relatively short impulse response of ASEAN-5's interest rates implies monetary co-ordination within the region. Since GDP represents overall macroeconomic activities within an economy, it provides a relatively good implication on the readiness of economies to be integrated. Hence, based on these empirical findings, the first phase of a serious economic integration would be ASEAN-5, to be ready in approximately 4 to 5 years' time. The second phase should include other economies like Japan, China and perhaps in a later stage, to also include Korea. Besides, the time varying analysis validates these suggestions by revealing gradual convergence for all economies under study.

Nonetheless, in order to form a union, ASEAN-5 has to revamp its current financial systems as well as to formulate reasonable and workable economic integration guidelines. Setting clear, consistent and simplified trade procedures and regulations, as well as extending mutual trade collaboration are necessary. Moreover, the



underlying incentive structure behind the process of integration should also be made known to all ASEAN economies and not be wiped out with some other trade and non-trade barriers. As for newer ASEAN members like Vietnam, Laos, Myanmar and Cambodia, ASEAN-5 could draft special preferential trade guidelines to boost trade among ASEAN members in preparation to include all ASEAN members into AFTA. However, the realisation of a serious integration may take longer than expected due to the lack of political commitment, economic stability, unpredictable natural disasters and its aftermath, as well as the inevitable spread of deadly diseases.



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**PERKAITAN EKONOMI BENAR DAN KEWANGAN NEGARA-NEGARA
ASEAN-5, JEPUN, CHINA DAN KOREA**

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Negara-negara Asia mempunyai kepadatan penduduk, kebudayaan, keluasan geografi dan sumber ekonomi yang berbeza-beza. Namun begitu, di sebalik perbezaan yang nyata, negara-negara Asia mempunyai ciri-ciri persamaan yang boleh menggalakkan kerjasama ekonomi di rantau Asia. Thesis ini bertujuan untuk menyelidik tahap perkaitan ekonomi dan kewangan kombinasi negara-negara ASEAN-5 (iaitu Indonesia, Malaysia, Filipina, Singapura dan Thailand), Jepun, China dan Korea kerana perkaitan keadaan ekonomi merupakan asas kejayaan kerjasama serantau. Hasil keputusan penyelidikan terhadap GDP, CPI dan kadar bunga menunjukkan bahawa negara-negara ASEAN-5, Jepun, China dan Korea adalah berhubung-kait diantara satu sama lain. Malah, didapati juga bahawa negara-negara ASEAN-5, negara-negara ASEAN-5, Japan, China and Korea, serta negara-negara ASEAN-5, Japan, China dan Korea, bersesuaian secara empirikal, untuk mengiatkan kerjasama



serantau. Analisis empirikal seterusnya juga menunjukkan bahawa GDP ASEAN-5, GDP ASEAN-5, Jepun dan China, CPI ASEAN-5 +3, dan kadar bunga ASEAN-5 mempunyai perhubungan jangka masa panjang dan mengesahkan kebolehan kerjasama serantau.

Kadar bunga biasanya menjadi alat kawalan kadar inflasi sesuatu ekonomi. Dengan itu, sememangnya dijangkakan bahawa kerajaan di negara-negara ASEAN-5 + 3 akan mencampur tangan dalam kawalan kadar inflasi ekonomi masing-masing melalui perubahan kadar bunga. Dengan itu, tidak hairanlah apabila didapati bahawa jangka hayat kejutan terhadap kadar bunga negara-negara ASEAN-5 adalah yang paling pendek, satu implikasi kerjasama polisi kewangan secara tidak langsung di antara ASEAN-5.

Oleh yang demikian, keputusan daripada analisis GDP telah dijadikan asas merumuskan keputusan penyelidikan ini, di mana, ASEAN-5 dijangka akan menerajui kerjasama serantau secara serius dalam jangka masa lebih kurang 4 sehingga 5 tahun. Fasa kedua kerjasama serantau pula akan melibatkan negara-negara Jepun dan China, sebelum mengambil kira penglibatan negara Korea.

Demi kejayaan kerjasama ekonomi, negara-negara ASEAN-5 perlu menggembeling system kewangannya dan mengemaskinikan panduan kerjasama perdagangan yang bersesuaian, melalui penggubalan panduan dan peraturan perdagangan yang jelas, konsisten serta mudah dilaksanakan. Tambahan pula, struktur insentif kerjasama dan

penyatuan ekonomi perlulah jelas dan diterangkan kepada kesemua anggota ASEAN. Ianya tidak seharusnya dikompromi dengan halangan-halangan perdagangan dan bukan perdagangan lain yang akan menjejaskan perdagangan dan kerjasama serantau. Negara-negara ASEAN-5 juga harus memberi bimbingan kepada anggota-anggota baru negara-negara ASEAN, iaitu Vietnam, Laos, Myanmar dan Cambodia, sebagai satu langkah menyediakan mereka untuk pembentukan AFTA. Nasihat serta bimbingan yang boleh diberikan oleh ASEAN-5 kepada Vietnam, Laos, Myanmar dan Cambodia, adalah termasuk penggubalan panduan dan peraturan perdagangan istimewa untuk menggalakkan perdagangan di kalangan ASEAN. Namun begitu, penyatuan ekonomi-ekonomi ASEAN-5 + 3 mungkin memakan masa yang lebih lama disebabkan kurangnya komitmen politik, kestabilan ekonomi, kerosakan alam semesta serta merebaknya wabak penyakit yang di luar jangkaan.



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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declared that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

ONG HWAY BOON

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CHAPTER 1

INTRODUCTION

1.1 Introduction

A stable and sustainable economic growth, along with low manageable inflation and unemployment rates are aspirations of many economies. The European Union (EU), currently has a composition of 25 member countries, aims to achieve all that through ongoing monetary and economic co-operation, a strategy to head towards free as well as open trade and investment. Being relatively small in size individually, economic and monetary co-operation within the European region provides greater international trade and investment opportunities, which in turn, creates jobs, enables greater consumption demand and ensuring economic growth. Free and open trade helps to lower the costs of production and reduce prices of goods and services. In contrast, protectionism keeps prices high and fosters inefficiencies.

On witnessing the progressive monetary co-operation of the European Monetary Union (EMU), any leader of substantial calibre would want to do the same for his or her country in order to strengthen its economic presence in the international arena. The idea to form an economic block within the East Asian region was formally put forward by the former Prime Minister of Malaysia, Tun Dr Mahathir Mohamad in late 1990. His proposal to form an East Asian Economic grouping, which was modified to



the East Asia Economic Caucus (EAEC), in alliance to the Asia-Pacific Economic Co-operation (APEC), was nothing but rational.

The EAEC was intended to integrate nations within the East Asian region to encourage trade, increase exchange of money, people and information, (including ideas, culture and language). The EAEC aims to promote trade and economic growth within East Asia. After all, the United States was able to form the North American Free Trade Area (NAFTA), a sub-regional arrangement of APEC, why not EAEC?

The EAEC did not materialise. The first unforeseen obstruction was the exclusion of the US in the EAEC. Since the United States (US) was not an Asian country, naturally it was not included in EAEC. Therefore, the US disapproved of EAEC. Secondly, Japan, which would not compromise its close alliance with the US, was not supportive of the idea of forming an economic bloc without the participation of the US. Besides, there was no consensus among the Association of Southeast Asian Nations (ASEAN) members on the leadership of EAEC (Naoko, 2002).

APEC, on the other hand, established in 1989, was to further enhance economic growth and prosperity for the region and to strengthen the Asia-Pacific community. Its notable vision is the 'Bogor Goals' of free and open trade and investment in the Asia-Pacific by 2010 for industrialised economies and 2020 for developing economies. These goals were jointly agreed upon by leaders of member economies at the APEC 1994 meeting in Bogor, Indonesia.



However, by itself, APEC consists of a vast list of 21 member economies of Australia, Brunei Darussalam (hereafter known as Brunei), Canada, Chile, The People's Republic of China (hereafter known as China), Hong Kong China, Indonesia, Japan, South Korea (hereafter known as Korea), Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, The Republic of the Philippines (hereafter known as Philippines), The Russian Federation, Singapore, Taiwan, Thailand, US and Vietnam. The EMU took more than half a century to adopt euro among 12 of its then 15 member economies in 1999. APEC with its current 21 members of diverse economic, political and social background can therefore expect a longer and intricate progress in achieving notable economic co-operation.

As such, to complement, rather than substitute APEC, an East Asian regional co-operation within APEC would be a sensible approach to quicken the pace of strengthening economic co-operation and to achieve the Bogor goals. Moreover, in October 2004, APEC leaders agreed that Regional Trade Agreements (RTAs) and Free Trade Agreements (FTAs) play a constructive role in accelerating liberalisation in the region, thus contributing to the achievement of the Bogor goals and advancing to the World Trade Organisation (WTO) process. They are also committed to greater transparency in RTAs and FTAs to facilitate public understanding of the scope and effect of these agreements.

To put it bluntly, the suspension of EAEC was in fact due to poor timing. The East Asian regional arrangement, a replica of the former EAEC, is now a sound proposal because the timing is right.

Moreover, the 1997 Asian financial crisis had cause several economies in East Asia to plunge into recession. It has triggered the need and desire for closer regional co-operation, much more than before. The effect of the crisis itself has accelerated discussions, negotiations and agreements of FTA and RTA within the East Asian region (Elliott and Ikemoto, 2004). Besides, from the financial crisis, East Asian realised that they could not rely on the US for assistance (Nasution, 2005), but themselves. In a way, the US now has no reason to stand against an East Asian regional co-operation.

East Asian economies that are actively working towards an East Asian regional co-operation are Japan, China, Korea and the five founding ASEAN members, Indonesia, Malaysia, Philippines, Singapore and Thailand (hereafter known as ASEAN-5). Regional co-operation of ASEAN-5 with Japan, China and Korea, are known as ASEAN-5 + 3. Based on more recent research reports, there has been no study that examined the compatibility, specifically, the convergence of the Japanese, Chinese and Korean economies with ASEAN-5 economies, an utmost economic co-operation condition. Many studies agreed that a regional co-operation within the region, namely East Asia within APEC, would quicken the pace of economic integration in the Asia-