

**FORMATION OF A MONETARY UNION AMONG ASEAN+3**

**By**

**AIMY MD. YUSOF**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,  
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**Chairman:** Associate Professor Azali Mohamed, Ph.D.

**Faculty:** Economics and Management

Following the successful establishment of the European Union (EU) in 1993, questions have been raised to whether we should have a monetary union in East Asia. Are we ready to form such regional integration? In Europe, they have previously used a set of convergence criteria, known as the Maastricht Convergence Criteria, as a benchmark to measure a candidate country's competency prior to joining the EU. The criteria set involves inflation rate, interest rate, exchange rate, deficit/GDP ratio and debt/GDP ratio.

Therefore, by applying the same set of criteria to our East Asian economies, this study hopes to find some evidence supporting the readiness of our economies to form a monetary union. This study also offers empirical analysis that examines whether these criteria are statistically significant to serve as a benchmark in measuring the performance of individual country. Eight countries from the ASEAN+3 cooperation are chosen to represent the East Asian region. They are China, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore and Thailand. Firstly, each criterion is tested individually for every country to determine which criterion is statistically significant

in measuring the country's economic growth. Secondly, the criteria set is examined against each country to see if it is capable of measuring the general performance of the economy. Results from both examinations reveal that there is little statistical support to the significance of the criteria set applied to the selected ASEAN+3 countries and only certain criteria are statistically significant individually, with results varying from one country to another. Even the coefficient signs differ from the European case, in which all coefficients are expected to be negative. This shows that in contrast to Europe, certain criteria have the inverse relationship with economic growth in the Asian region.

In conclusion, this study offers evidence that by the standard of the Maastricht Convergence Criteria, ASEAN+3 is not yet ready to form a monetary union.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Master Sains

**PEMBENTUKAN SEBUAH KESATUAN MONETARI  
DI KALANGAN ASEAN+3**

**Oleh**

**AIMY MD. YUSOF**

**September 2004**

**Pengerusi:** **Profesor Madya Azali Mohamed, Ph.D.**

**Fakulti:** **Ekonomi dan Pengurusan**

Semenjak Kesatuan Eropah (EU) berjaya ditubuhkan pada tahun 1993, ahli ekonomi mula mempersoalkan sama ada Asia Timur wajar membentuk sebuah kesatuan monetari yang serupa di rantau ini. Adakah kita sudah bersedia untuk bergabung di bawah satu kesatuan? Di Eropah, satu set kriteria telah dipilih sebagai pengukur prestasi ekonomi bagi calon yang ingin menyertai kesatuan tersebut. Set kriteria ini dikenali sebagai Kriteria Gabungan Maastricht (Maastricht Convergence Criteria) yang meliputi kadar inflasi, kadar faedah, kadar pertukaran mata wang asing, nisbah defisit/KDNK dan nisbah hutang/KDNK.

Oleh yang demikian, dengan mengaplikasikan set kriteria tersebut ke atas negara-negara di Asia Timur, kajian ini diharap dapat membuktikan sama ada rantau ini sudah bersedia untuk menubuhkan sebuah kesatuan monetari seperti di Eropah. Hasil penyelidikan ini juga menawarkan analisis empirikal yang mengkaji sama ada setiap kriteria itu mempunyai kepentingan statistik untuk mengukur tahap ekonomi sesebuah negara secara individu dan sama ada terdapat bukti yang menyokong kepentingan set kriteria tersebut untuk digunakan sebagai garis panduan dalam mengukur prestasi

ekonomi secara keseluruhan. Lapan buah negara daripada kesatuan ASEAN+3 dipilih untuk mewakili rantau Asia Timur. Negara-negara tersebut ialah China, Indonesia, Jepun, Korea, Malaysia, Filipina, Singapura dan Thailand. Langkah pertama ialah untuk mengkaji kepentingan setiap kriteria secara individu dalam mengukur tahap pertumbuhan ekonomi sesebuah negara. Langkah kedua pula ialah untuk mengkaji kepentingan statistik set kriteria tersebut dalam mengukur prestasi sesebuah ekonomi itu secara am. Hasil kajian mendapati bahawa tiada bukti statistik yang kukuh untuk menyokong kepentingan set kriteria yang digunakan dalam mengukur kesediaan negara-negara ASEAN+3 ke arah membentuk sebuah kesatuan monetari. Hanya sebahagian sahaja daripada kriteria tersebut yang menunjukkan kepentingan statistik di mana keputusan analisisnya berbeza antara sebuah negara dengan negara yang lain. Tambahan pula, tanda pekali pada pembolehubah dalam model ekonometrik adalah dijangka menunjukkan tanda negatif dalam kajian di Eropah. Tetapi kajian ke atas data ekonomi di rantau Asia Timur menunjukkan bahawa sebahagian kriteria mempunyai hubungan yang positif dengan pertumbuhan ekonomi di rantau ini.

Secara keseluruhan, kajian ini menawarkan bukti empirikal yang menyokong bahawa berdasarkan set kriteria Maastricht, negara-negara Asia Timur khususnya negara-negara ASEAN+3 masih belum bersedia untuk menujuhkan sebuah kesatuan monetari.

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I certify that an Examination Committee has met on 2 September 2004 to conduct the final examination of Aimy Md.Yusof on her Masters of Science thesis entitled "Formation Of A Monetary Union Among Asean+3" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

**Zakariah Abdul Rashid, Ph.D**

Professor

Faculty of Economics and Management

Universiti Putra Malaysia

(Chairman)

**Mastura Yahya, Ph.D**

Lecturer

Faculty of Economics and Management

Universiti Putra Malaysia

(Member)

**Taufiq Hassan, Ph.D**

Lecturer

Faculty of Economics and Management

Universiti Putra Malaysia

(Member)

**Hassanudden Abdul Aziz, Ph.D**

Associate Professor

Kulliyah of Economics and Management Science

International Islamic University Malaysia

(Independent Examiner)

---

**ZAKARIAH ABDUL RASHID, Ph.D,**

Professor/ Deputy Dean

School of Graduate Studies

Universiti Putra Malaysia

Date:

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Masters of Science. The members of Supervisory Committee are as follows:

**Azali Mohamed, Ph.D**

Associate Professor

Faculty of Economics and Management

Universiti Putra Malaysia

(Chairman)

**Muzafar Shah Habibullah, Ph.D**

Professor

Faculty of Economics and Management

Universiti Putra Malaysia

(Member)

**Ahmad Zubaidi Baharumshah, Ph.D**

Professor

Faculty of Economics and Management

Universiti Putra Malaysia

(Member)

---

**AINI IDERIS, Ph.D,**

Professor/Dean

School of Graduate Studies,

Universiti Putra Malaysia

Date:

## **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 declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

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**AIMY MD. YUSOF**

Date:

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