UNIVERSITI PUTRA MALAYSIA

TERM STRUCTURE, INFLATION, AND ECONOMIC GROWTH IN SELECTED EAST ASIAN COUNTRIES

ELGILANI ELTAHIR ELSHAREIF.

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TERM STRUCTURE, INFLATION, AND ECONOMIC GROWTH
IN SELECTED EAST ASIAN COUNTRIES

By

ELGILANI ELTAHIR ELSHAREIF

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

October 2007
SPECIALY DEDICATED TO
My beloved mother, Alshahida Fatima; my father, Eltahir; my lovely wife, Rufida; and my lovely daughter, Lina; and my beloved sons, Mohamed and Munzir; and my supportive brothers and sisters
Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

TERM STRUCTURE, INFLATION, AND ECONOMIC GROWTH IN SELECTED EAST ASIAN COUNTRIES

By

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October 2007

Chair: Associate Professor Tan Hui Boon, PhD

Faculty: Economics and Management

The issue of term structure of interest rates has been a much-researched area in economics and finance in several developed economies for over a century. It is argued that the term spread between long and short rates contain useful information about future interest rates, inflation, and real economic activity which is of great importance to policy makers.

This study attempts, first, to determine whether there is a time-varying risk premium in the short-term interest rate, and secondly, to provide an in-depth study on the term structure of interest rates and its impacts on the movements of short-term interest rates, inflation rates and real output in the five selected East Asian countries via an extended model of Expectation Hypothesis Theory of Term Structure. The five selected Asian countries are Japan, South Korea, Malaysia, Thailand and the Philippines. These objectives are achieved through the employment of the Generalized Method of Moment and Ordinary Least
Square with Newey-West standard errors and Heteroskedasticity and autocorrelation consistent covariance correction.

One interesting finding of this analysis is that there is a small risk premium in the short-term interest rates of Japan and Thailand, whereas there is none in those of Korea, Malaysia and the Philippines. This implies the stability of the short-term interest rates in the latter. In all the five cases, regardless of a time-varying risk premium in the interest rate, the term spreads of all these countries seem to contain useful information for predicting movements in the short-term interest rates. On the other hand, for the case of predicting the path of inflation rate, only three countries, namely, Japan, Korea and Malaysia, indicate a possible increase in future inflationary pressure. The two other countries, the Philippines and Thailand, did not benefit any useful information regarding the future inflation rates from term spreads. Similarly, the term spread also does not provide any relevant information on the real output of Malaysia, the Philippines and Thailand. However, it does provide relevant information for the case of Japan and Korea.

The estimated results and findings of this study provide some very useful insight on the information contained in interest rate term spreads of the five countries. This useful information on interest rate, inflation and economic activity can benefit both the government and private sectors of the five countries.
in developing macroeconomic policies and gaining competitiveness in the global market.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

TERMA STRUKTUR, INFLASI, DAN PERTUMBUHAN EKONOMI DALAM NEGARA ASIA TIMUR TERPILIH

Oleh

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Oktober 2007

Pengerusi: Profesor Madya Tan Hui Boon, PhD

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Isu berkenaan terma struktur kadar faedah merupakan isu yang sering dikaji di dalam bidang ekonomi dan kewangan di kebanyakan negara maju sejak se abad yang lalu. Banyak perdebatan telah berlaku dalam membincangkan samada julat terma antara kadar faedah jangka panjang dan pendek mengandungi maklumat mengenai kadar faedah masa hadapan, inflasi dan aktiviti benar ekonomi, yang merupakan maklumat penting kepada pembuat-pembuat polisi.

Kajian ini bertujuan, pertamanya untuk menentukan samada terdapat premium risiko masa berubah dalam kadar faedah jangka pendek, dan keduanya, untuk memberikan kajian mendalam ke atas terma struktur kadar faedah dan
kesannya ke atas pergerakan kadar faedah jangka pendek, kadar inflasi, dan pengeluaran sebenar bagi lima (5) negara Asia Timur terpilih dengan menggunakan model tambahan kepada Teori Hipotesis Jangkaan terma struktur. Kelima-lima negara yang terpilih tersebut adalah Jepun, Korea Selatan, Malaysia, Thailand, dan Filipina. Objektif-objektif ini dicapai dengan menggunakan Kaedah Am Masa dan OLS dengan piawaian kesilapan Newey dan pembetulan HAC.

Salah satu penemuan menarik dari analisis ini ialah terdapat premium risiko yang kecil di dalam kadar faedah jangka pendek untuk Jepun dan Thailand, tetapi tiada premium risiko di dalam kadar faedah jangka pendek untuk Korea Selatan, Malaysia dan Filipina. Ini menunjukkan bahawa kadar faedah jangka pendek untuk Korea Selatan, Malaysia dan Filipina adalah stabil. Tanpa mengira sama ada terdapat premium risiko masa berubah dalam kadar faedah jangka pendek, julat terma untuk kesemua negara tersebut seperti mengandungi maklumat berguna untuk meramalkan pergerakan kadar faedah jangka pendek. Di sebalik itu, bagi tujuan meramalkan kadar inflasi, hanya tiga (3) negara, iaitu Jepun, Korea Selatan, dan Malaysia menunjukkan kemungkinan peningkatan tekanan kadar inflasi di masa hadapan. Bagi Jepun dan Filipina pula, kajian ini menunjukkan bahawa tidak terdapat maklumat berguna untuk meramalkan pergerakan kadar faedah jangka pendek dari julat terma untuk kedua-dua negara ini. Julat terma juga tidak memberikan apa-apa...
maklumat berguna terhadap pengeluaran benar untuk Malaysia, Filipina dan Thailand tetapi terdapat maklumat berguna untuk Jepun dan Korea Selatan.

Keputusan-keputusan empirikal dan penemuan-penemuan dari kajian ini telah memberikan satu pengertian yang mendalam tentang maklumat-maklumat yang terkandung di dalam julat terma kadar faedah bagi lima (5) negara yang terpilih. Maklumat-maklumat berguna ke atas kadar faedah, inflasi dan aktiviti ekonomi ini boleh memberikan manafaat kepada pihak kerajaan dan sektor swasta di kelima-lima negara yang terpilih dalam membangunkan polisi-polisi makroekonomi dan meningkatkan daya persaingan dalam pasaran global.
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I certify that an Examination Committee has met on 25th October 2007 to conduct the final examination of Elgilani Eltahir Elshareif on his Doctor of Philosophy thesis entitled “Term Structure, Inflation, and Economic Growth in Selected East Asian Countries” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the student be awarded the degree of Doctor of Philosophy.

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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, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.

ELGILANI ELTAHIR ELSHAREIF

Date: 15 November 2007
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