



UNIVERSITI PUTRA MALAYSIA

**STOCK MARKET INTEGRATION AND ITS IMPLICATIONS FOR
INTERNATIONAL TRADE, EXCHANGE RATES AND
INTEREST RATES IN ASEAN-5 COUNTRIES**

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By

MITRA SAEEDI

**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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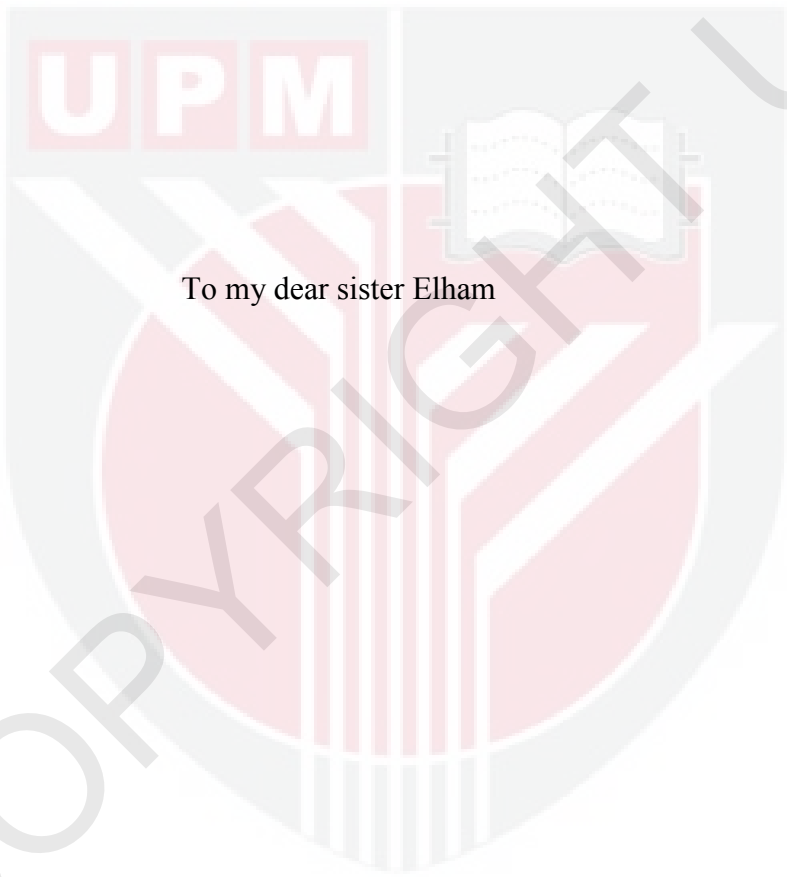
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To my dear sister Elham

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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MITRA SAEEDI

July 2014

Chairman: Professor Zulkornain Yusop, PhD
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This research investigates the linear and asymmetric cointegration among the stock markets of ASEAN-5 (Association of Southeast Asian Nations, the five original member countries namely Malaysia, Indonesia, Singapore, the Philippines, and Thailand) and those of Europe, Japan, and the United States. Diversification plays an important role in the investment decision. Having the knowledge of the interdependence and integration of stock markets, investors try to diversify their assets internationally as long as the returns of the stocks in their portfolio from different markets are less than perfectly correlated with the national market. Testing for the asymmetric cointegration prevents problems that may result in misleading inference in symmetric cointegration test which ignores the intrinsic nonlinearities.

This study is the first to examine the existence of asymmetric cointegration among the stock markets. It also contributes to the prior research by examining the importance of trade in explaining the interdependence among the stock markets of interest (trade relation hypothesis) and the possible long run and short run relationship among the two important monetary macroeconomic factors, interest rates and exchange rates, and the stock prices of ASEAN-5.

The empirical analysis applies Autoregressive Distributed Lag and Asymmetric Autoregressive Distributed Lag cointegration tests over the period of 1990 to 2010. The results show no evidence of linear or asymmetric long run relationship among the stock markets. The Granger causality approach shows that the causality runs from European stock market to the stock markets of Indonesia and Thailand. Therefore, according to the results, there is a potential opportunity of portfolio diversification for the investors and portfolio managers from the major developed markets in the long run. The generalized variance decompositions and the correlation test with bootstrap procedure are employed to test the trade relation hypothesis. Based on the findings, the trade relation hypothesis fails to be a general rule in ASEAN-5 countries.

Being segmented from the major developed markets, ASEAN-5 countries are examined for the possible long run and short run effects of local macroeconomic factors so the policy makers can adopt proper monetary policy to boost up their stock

market performance attracting more international funds. Collectively, the results show no long run relationship among the interest rates and exchange rates and stock prices in ASEAN-5; however, from the generalized impulse response functions immediate and quick negative responses of the ASEAN-5 stock markets to innovations in the interest rates and exchange rates are felt. The findings of the study carry important implications for Policymakers, investors, portfolio managers, and scholars interested in ASEAN-5.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
Sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**INTEGRASI PASARAN SAHAM DAN IMPLIKASI ITS UNTUK
PERDAGANGAN ANTARABANGSA, KADAR PERTUKARAN DAN
KADAR FAEDAH DALAM ASEAN-5 NEGARA**

Oleh

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Kajian ini menyiasat kointegrasi linear dan simetri antara pasaran saham ASEAN-5 (Persatuan Negara-negara Asia Tenggara, iaitu lima negara anggota asal yang terdiri daripada Malaysia, Indonesia, Singapura, Filipina, dan Thailand) dengan Eropah, Jepun, dan Amerika Syarikat. Pempelbagaian berperanan penting dalam keputusan pelaburan. Dengan pengetahuan kesalingbergantungan dan integrasi pasaran saham, pelabur cuba untuk mempelbagaikan aset mereka di peringkat antarabangsa selagi pulangan saham dalam portfolio mereka dari pasaran yang berlainan adalah kurang daripada korelasi sempurna dengan pasaran negara. Ujian untuk kointegrasi asimetri mencegah masalah yang mungkin mengakibatkan kekeliruan dalam ujian kointegrasi simetri yang mengabaikan intrinsik tak linear.

Kajian ini adalah kajian pertama yang menyelidik kewujudan kointegrasi simetri antara pasaran saham. Ia juga menyumbang kepada penyelidikan yang terdahulu dengan mengkaji kepentingan perdagangan dalam menerangkan kesalingbergantungan antara pasaran saham yang berkepentingan (hipotesis hubungan perdagangan) dan hubungan jangka panjang dan pendek yang mungkin terjalin antara dua faktor makroekonomi kewangan penting, kadar faedah dan kadar pertukaran, serta harga saham ASEAN-5.

Analisis empirikal menggunakan ujian kointegrasi Autoregressive Distributed Lag dan Asymmetric Autoregressive Distributed Lag untuk sepanjang tempoh tahun 1990 hingga 2010. Keputusan menunjukkan tiada bukti terdapat hubungan jangka panjang linear atau asimetri antara pasaran saham. Pendekatan kebersebaban Granger menunjukkan bahawa kebersebaban berlaku dari pasaran saham Eropah hingga pasaran saham Indonesia dan Thailand. Oleh itu, keputusan menunjukkan bahawa terdapat potensi peluang mempelbagaian portfolio bagi pelabur dan pengurus portfolio dari pasaran maju utama dalam jangka masa panjang. Varians terurai umum dan ujian korelasi dengan prosedur bootstrap digunakan untuk menguji hipotesis hubungan perdagangan. Berdasarkan hasil kajian, hipotesis hubungan perdagangan gagal diterima sebagai peraturan am di negara-negara ASEAN-5.

Tersegmen daripada pasaran maju utama, negara ASEAN-5 diselidik bagi menentukan kemungkinan terdapat faktor kesan jangka panjang dan jangka pendek terhadap makroekonomi tempatan supaya pembuat dasar dapat menerima pakai dasar monetari

yang wajar untuk meningkatkan prestasi pasaran saham mereka agar dapat menarik lebih banyak dana antarabangsa. Secara kolektif, keputusan menunjukkan tiada hubungan jangka panjang antara kadar faedah, kadar pertukaran dan harga saham di ASEAN-5, namun, dari fungsi impuls respon umum, respon negatif serta-merta dan segera daripada pasaran saham ASEAN-5 terhadap inovasi, kadar faedah dan kadar pertukaran dapat dirasai. Hasil kajian memberi implikasi yang penting kepada pembuat dasar, pelabur, pengurus portfolio dan ahli sarjana yang berminat dalam ASEAN-5.



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I certify that a Thesis Examination Committee has met on 8 July 2014 to conduct the final examination of Mitra Saeedi on her thesis entitled " Stock Market Integration and its Implications for International Trade, Exchange Rates and Interest Rates in ASEAN-5 Countries" in accordance with the Universities and University Colleges 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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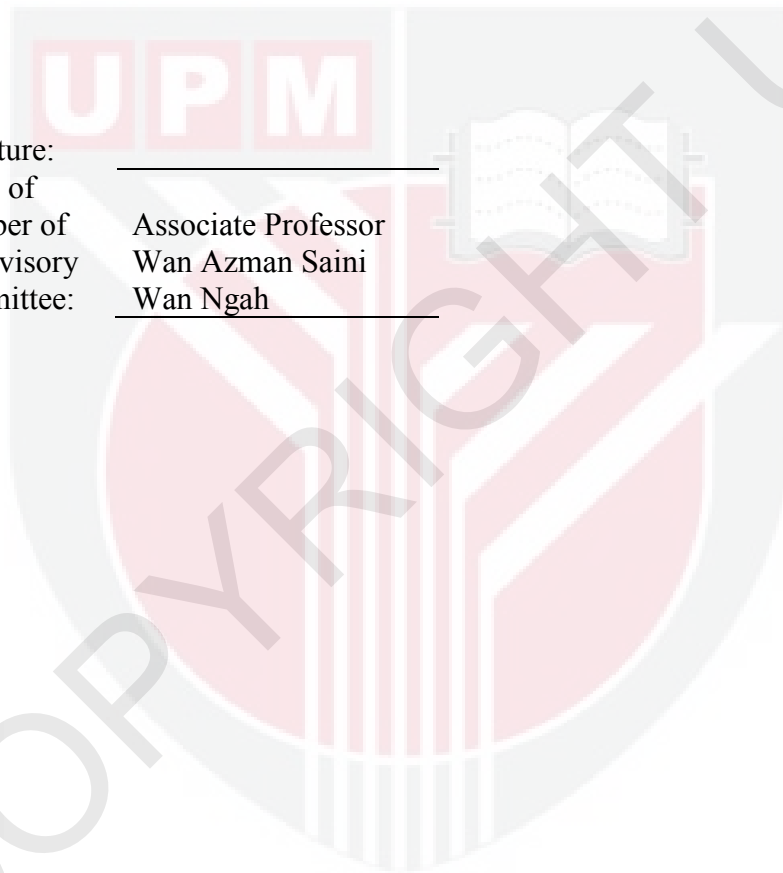


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