UNIVERSITI PUTRA MALAYSIA

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

MITRA SAEEDI

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By

MITRA SAEEDI

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July 2014
To my dear sister Elham
STOCK MARKET INTEGRATION AND ITS IMPLICATIONS FOR INTERNATIONAL TRADE, EXCHANGE RATES AND INTEREST RATES IN ASEAN-5 COUNTRIES

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MITRA SAEEDI

July 2014

Chairman: Professor Zulkornain Yusop, PhD
Faculty: Economics and Management

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

MITRA SAEEDI

Julai 2014

Pengerusi: Professor Zulkornain Yusop, PhD
Fakulti: Ekonomi dan Pengurusan

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 daripada 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.


Tersegmen daripada pasaran maju utama, negara ASEAN-5 diselidik bagi menentukan kemungkinan terdapat faktor kesan jangka panjang dan jangka pendek terhadap makroekonomi tempatan supaya membuat 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.

Members of the Thesis Examination Committee were as follows:

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Faculty of Economics and Management  
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Professor  
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Universiti Putra Malaysia  
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Faculty of Economics and Management  
Bogor Agricultural University  
Indonesia  
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**NORITAH OMAR, PhD**  
Associate Professor and Deputy Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date: 19 September 2014
This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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Professor  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Chairman)

**Law Siong Hook, PhD**  
Associate Professor  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Member)

**Wan Azman Saini Wan Ngah, PhD**  
Associate Professor  
Faculty of Economics and Management  
Universiti Putra Malaysia  
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<th>Signature:</th>
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<tbody>
<tr>
<td>Name of Chairman of Supervisory Committee:</td>
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<tr>
<th>Signature:</th>
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<tbody>
<tr>
<td>Name of Member of Supervisory Committee:</td>
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<td>Wan Ngah</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>i</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>vi</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xiii</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xiv</td>
</tr>
</tbody>
</table>

CHAPTER

1 INTRODUCTION

1.1 Background of the Study | 2 |
1.2 Definition of Stock Market Integration | 4 |
1.2.1 The Completeness of International Capital Market | 4 |
1.2.2 The Return Equalization | 4 |
1.2.3 Sourcing the Domestic Investment | 5 |
1.3 Problem Statement | 5 |
1.4 Objectives of the Study | 8 |
1.5 Significance of the Study | 8 |
1.6 Motivation of the Study | 9 |
1.7 Organization of the Study | 10 |

2 ASEAN-5 AND MAJOR DEVELOPED STOCK MARKETS | 11 |
2.1 The MSCI Europe Index | 11 |
2.2 The Nikkei 225 Stock Average | 12 |
2.3 The Standard and Poor's 500 Composite Index | 13 |
2.4 ASEAN-5 (An Overview) | 14 |
2.4.1 The Indonesian Stock Exchange | 15 |
2.4.2 The Kuala Lumpur Stock Exchange | 16 |
2.4.3 The Philippine Stock Exchange | 17 |
2.4.4 The Stock Exchange of Singapore | 19 |
2.4.5 The Stock Exchange of Thailand | 20 |

3 LITERATURE REVIEW | 23 |
3.1 Stock Market Integration | 23 |
3.2 Stock Market Integration in East and South-East Asian Countries | 31 |
3.3 Stock Market Integration and International Trade | 38 |
3.4 Stock Markets, Exchange Rate, and Interest Rate | 40 |

4 THEORETICAL FRAMEWORK AND METHODOLOGY | 51 |
4.1 The Theory of Stock Market Integration | 51 |
4.2 Cointegration Hypothesis | 52 |
4.2.1 Contagion Effect
4.2.2 Economic Integration
4.2.3 Stock Market Characteristics
4.2.4 Common Groups of Investors
4.2.5 Stock’s Multiple Listing
4.2.6 Dominant Economic Power
4.3 Trade Relation Hypothesis
4.4 Arbitrage Pricing Theory
4.5 Model Specification and Econometric Tools
  4.5.1 Stationarity and Unit Root Tests
  4.5.2 Autoregressive Model
  4.5.3 Autoregressive Distributed Lag (ARDL) Cointegration Test
  4.5.4 Asymmetric ARDL Cointegration Approach
  4.5.5 Johansen Maximum Likelihood (ML) Procedure
  4.5.6 Granger Causality Test
  4.5.7 Impulse Response Functions and Generalized Impulse Response Functions
  4.5.8 Generalized Variance Decompositions
  4.5.9 The Bootstrap
4.6 Data
5 RESULTS AND DISCUSSION
  5.1 International Cointegration of ASEAN-5
      5.1.1 Bivariate Cointegration
      5.1.2 Multivariate Cointegration
  5.2 Granger Causality Test
  5.3 Trade Relation Hypothesis
  5.4 Relationship among Stock Markets of ASEAN-5, Interest Rates and Exchange Rates
6 SUMMARY, CONCLUSION, AND RECOMMENDATIONS
  6.1 Summary of the Study
  6.2 Conclusion
  6.3 Recommendations
      6.3.1 Policy Implications
      6.3.2 Limitations of the Study
      6.3.3 Future Studies
REFERENCES
APPENDIX
BIODATA OF STUDENT
LIST OF PUBLICATIONS