

**CAUSALITY BETWEEN STOCK AND FOREIGN EXCHANGE MARKETS
IN SAUDI ARABIA AND INDONESIA (2002-2016)**

THESIS

**Presented as Partial Fulfillment of Requirements for the Degree of Sarjana
Economy (S1) in International Business Management Program Faculty of
Economics Universitas Atma Jaya Yogyakarta**



Compiled by:

Abdullah Abdulraoof Taha AL-Maqtari

Student ID: 131220139

**FINANCIAL MANAGEMENT
FACULTY OF ECONOMICS
UNIVERSITAS ATMA JAYA YOGYAKARTA**

2017

APPROVAL

I hereby recommend that thesis prepared under my supervision by

Abdullah Abdulraoof Taha AL-Maqtari

ID Number: 13122013

Thesis Entitled

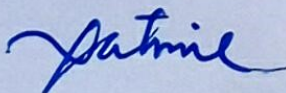
CAUSALITY BETWEEN STOCK AND FOREIGN EXCHANGE MARKETS IN
SAUDI ARABIA AND INDONESIA (2002-2016)

Be accepted in partial fulfillment of the requirements for the Degree of Sarjana
Economy (s1) in International Business Management Program

Faculty of Economics

Universitas Atma Jaya Yogyakarta

Advisor



A. Jatmiko Wibowo, SE., SIP., MSF.

Yogyakarta, December 14th, 2017

COMMITTEES' APPROVAL

This is to certify the thesis entitled
**CAUSALITY BETWEEN STOCK AND FOREIGN EXCHANGE MARKETS IN
SAUDI ARABIA AND INDONESIA (2002-2016)**

Written by:

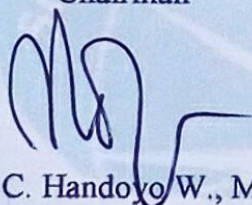
Abdullah Abdulraoof Taha Al-Maqtari

Student ID Number: 13 12 20139

has been defended and accepted on January 11th, 2018 towards fulfillment of the
requirement for the Degree of Sarjana Economy (SI) in International Business
Management Program Faculty of Economics, Universitas Atma Jaya Yogyakarta

EXAMINATION COMMITTEE

Chairman

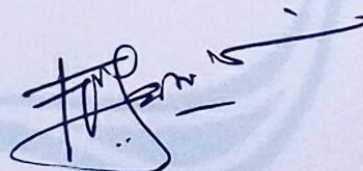


Dr. C. Handoyo W., MM.

Members



A. Jatmiko Wibowo, SE., MSF



Drs. Felix Wisnu I., MBA

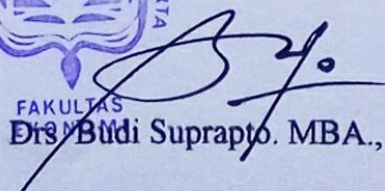
Yogyakarta, January 11th, 2018

Dean of Faculty of Economics

Universitas Atma Jaya Yogyakarta



FAKULTAS


Drs. Budi Suprpto, MBA., Ph. D.

AUTHENTICITY ACKNOWLEDGEMENT

I, Abdullah Abdulraoof Taha AL-Maqtari, hereby declare that I compiled the thesis with the following title:

**CAUSALITY BETWEEN STOCK AND FOREIGN EXCHANGE MARKETS
IN SAUDI ARABIA AND INDONESIA (2002-2016)**

Is my own thinking and writing, I fully knowledge that my writings do not contain others' or part(s) of others' writing except for those that have been cited and mentioned in references.

Yogyakarta, December 18th, 2017



Abdullah AL-Maqtari

ACKNOWLEDGMENT

First of all, I would like to thank Allah for all of his blessing, love, guidance, and opportunities that he has given to me so that I can finish my study in Atma Jaya Yogyakarta University. I would also like to thank Allah for all the people surrounding me who always help, support, pray, guide, and give all of the love to me in every obstacle that I face during my study for bachelor degree, therefore with the opportunity given, I would like to express my gratitude and appreciation to:

- My beloved Family:
 - to my parents Abdulraoof Taha & Huda Yassin, who give me all the love.
 - to my brothers Haroon, Hitham, Ali, Omar, Taha, and my beloved sister Halah
 - to all my uncles and aunties
- Mr. Alexander Jatmiko Wibowo, SE., SIP., MSF, as my lecturer of finance and my supervisor in guiding this thesis, thank you for all your time, guidance, support and advice in this thesis. God Bless you, Sir.
- All the family of Atma Jaya Yogyakarta, especially for
 - All of the lectures in Economy Faculty of Atma Jaya Yogyakarta University for the precious knowledge and opportunity in learning that has been given to me.
 - The family of Partnership and Promotion Office KKP for supporting me all time
 - The family of KPBB for helping me to be able to adapt and become part of the Indonesian society by teaching me Bahasa Indonesia and also the culture.
 - All of my friends in IBMP and IFAP in all batches I have studied with.
 - All people in the deviation of security, and cleaning service, for always being such great friends.
 - All my friends in group 14 Banjarn KKN 71
- All of the Yemeni friends in Indonesia
- To the huge family of KNB and Darmasiswa students
- To the only friend who could stick with me all this time Yusuf Balatas, thanks for being my brother
- thank you for all the people I cannot or forgot to mention. Thank you for everything.
- Last but not least, to all Indonesia, and its government, for giving me this chance to continue my study here as a KNB student

Regards

Abdullah AL-Maqtari

اهداء

استهل هذا الإهداء بالشكر والحمد والثناء على ربي ملك الملوك الذي احاطني برعايته ولطفه وكرمه منذ نعومة اظفاري بان حباني باناس كانوا لي عوناً وسنداً وخير الزاد في هذه الدنيا الى أن غادرت بلدي في رحلتي للحصول على درجة البكالوريوس من جامعة اتما جايا يوجياكارتا في اندونيسيا. اود ان اتقدم بالشكر والعرفان الى :

• عائلتي

والدي (عبدالرؤوف طه) معنى الحب والاصرار والتقاني. والدتي (هدى ياسين) من رافقتني منذ ان كنت جنين في كبدها ولا تزال ترافقني حتى اللحظة في فؤادي. هي تلك الشمعة التي تضيء قلبي ولا تنطفئ. اخي (هارون) معنى الاخلاص والمثابرة وسراجي المنير في الحياة. اخي (هيثم) معنى العدل والانصاف. اختي (هاله) معنى الرقة والحنان الذي لا ينتهي. اخي (علي) معنى عدم اليأس والاصرار رفيق دربي في اندونيسيا. اخي (عمر) معنى الابداع وتجربة كل جديد. اخي (طه) معنى الحبوكة انا فدالو... عائلتي العزيزة مهما استقضت في الكتابة فلن استطيع وصف ما اكنه لكم من حب ومشاعر جياشة. ليحفظكم المولى.

• الى ابناء وبنات جدي المرحوم (ياسين المقطري) وجدتي (زينب) حفظها الله، والذين كانوا اللبنة الاساسية في انفتاحنا على العالم و الفرص الموجودة فيه و اخص بالذكر خالي (عدنان) وخالي (صلاح) الذين لما يبخلو علينا بالدعم او بالنصيحة، وايضا خالي (عمار) الذي كان لنا نعم العون ونعم السند منذ اليوم الاول لي في اندونيسيا.

- الى المشرف على البحث الاستاذ (اليكساندر جاتميكو)، الذي اعطاني الثقة بنفسني للمضي قدما في هذا البحث
- الى جامعة اتما جايا يوجياكارتا بجميع العاملين فيها، الذين احاطوني بالحب والرعاية
- الى جميع من ساعدوني خلال فترة دراستي للبكالوريوس ولم تسعفني ذاكرتي لذكرهم
- الى اندونيسيا حكومة وشعبا، التي لولاها لما كنت على ما انا عليه اليوم

تقبلو تحياتي

عبدالله المقطري

TABLE OF CONTENTS

APPROVAL	I
COMMITTEES' APPROVAL	II
AUTHENTICITY ACKNOWLEDGEMENT	III
ACKNOWLEDGMENT.....	IV
LIST OF FIGURES	VIII
LIST OF TABLES.....	IX
LIST OF APPENDIXES.....	X
Abstract.....	XI
CHAPTER I.....	1
1.1. Research Background	1
1.2. Problem formulation.....	4
1.3. Scope of the study.....	4
1.4. Motivation of the Research.....	5
1.5. Objective of The Study	6
1.6. Contribution of the Study.....	6
1.7. Outline of the Study	7
CHAPTER II.....	8
2.1. Literature Review.....	8
2.1.1. "Causality"	8
2.1.2. Overview of financial markets.....	9
2.1.3. Capital market.....	10
2.1.4. Stock market	10
2.1.5. Stock market Index	11
2.1.6. Forex	13
2.1.7. Relationship Between Stock & Foreign Exchange Markets	13
2.2. Previous Research Findings:.....	14
2.3. Hypothesis.....	20
CHAPTER III	21
3.1. Method of Sampling, Type of Data and Data Gathering	21
3.1.1. Sample.....	21

3.1.2.	Type of Data:	21
3.1.3.	Data Gathering	22
3.2.	Research Variables and Period of the study	23
3.2.1.	Variables	23
3.2.2.	Period of the Study	25
3.3.	Method of Analysis	25
3.3.1.	Stationary:	26
3.3.2.	Structural breakpoint	28
3.3.3.	Granger Causality Test	29
3.3.4.	Correlation test	31
CHAPTER IV		32
4.1.	Research Findings	32
4.1.1.	Data Descriptions	33
4.1.2.	Descriptive Statistics	39
4.1.3.	Stationarity Test	40
4.1.4.	Structural breakpoint	42
4.1.5.	Granger Causality Test	46
4.1.6.	Correlation test	52
4.2.	Analysis of the Results	53
4.2.1.	Saudi Arabia	53
4.2.2.	Indonesia	59
CHAPTER V		64
5.1.	Conclusion	64
5.2.	Managerial Implication	66
5.3.	Limitations:	68
5.4.	Recommendations:	68
BIBLIOGRAPHY		69
APPENDIXES		72

LIST OF FIGURES

Figure 1 Source of obtaining stock market data.....	34
Figure 2 Source of obtaining foreign exchange market data	35
Figure 3: TASI Return On 2002-2016	46
Figure 4: SAR Return On 2002-2016	47
Figure 5: JKSE Return On 2002-2016	49
Figure 6: IDR Return On 2002-2016	50
Figure 7: Historical Price of Riyal	54
Figure 8: Tadawul Performance On 2000-2015	55
Figure 9: Historical Index Price of Tadawul Stock Market	56
Figure 10: Summary of Causality Between TASI & SAR	57
Figure 11: Historical Price of Rupiah	60
Figure 12: Historical Index Price of Indonesia Stock Exchange	61
Figure 13: Summary of Causality Between JKSE & IDR	62

LIST OF TABLES

Table 1 Summarize of Previous Research Findings	17
Table 2 Variables Symbols	23
Table 3 Raw Data of January 2002	36
Table 4 Processed Data of January 2002	38
Table 5 Descriptive Statistics.....	39
Table 6: Result of Augmented Dickey-Fuller Test	41
Table 7: Structural Breakpoint Test Result of JKSE	42
Table 8: Structural Breakpoint Test Result of IDR.....	43
Table 9: Structural Breakpoint Test Result of SAR.....	43
Table 10: Structural Breakpoint Test Result of TASI.....	44
Table 11: Structural Breakpoint Test Result of TASI On 2002-2005	45
Table 12: Structural Breakpoint Test Result of TASI On 2007-2016	45
Table 13: Engle-Granger Causality Test Result In Saudi Arabia	47
Table 14: Engle-Granger Causality Test Result in Indonesia	50
Table 15: Correlation test in Indonesia	52
Table 16: Correlation test in Saudi Arabia	53

LIST OF APPENDIXES

APPENDIX 1: DESCRIPTIVE STATISTICS AND GRAPHS.....	73
APPENDIX 2: STATIONARITY AUGMENTED DICKEY-FULLER TEST	83
APPENDIX 3: MULTIPLE BREAKPOINT TESTS	88
APPENDIX 4: GRANGER CAUSALITY TESTS	92
APPENDIX 5: CORRELATION TEST	96
APPENDIX 6: DATA OF JKSE, IDR, TASI, SAR IN RETURN.....	100



**CAUSALITY BETWEEN STOCK AND FOREIGN EXCHANGE MARKETS
IN SAUDI ARABIA AND INDONESIA (2002-2016)**

Compiled by:

Abdullah Abdulraoof Taha AL-Maqtari

Student ID: 131220139

supervisor

A. Jatmiko Wibowo, SE., SIP., MSF.

Abstract

The purpose of this research is to investigate the existence of a causal relationship between the stock and foreign exchange markets in Indonesia and Saudi Arabia during the period of 2002-2016. The main test employed in this research is the test of Granger causality, which will test the causal relationship between Tadawul stock market TASI and the foreign exchange market SAR in Saudi Arabia, and will test the causal relationship between Indonesia stock market JKSE and the foreign exchange market IDR in Indonesia. The result of causality test were as follow: in Indonesian, markets show unidirectional causality running from JKSE into IDR, this causality relationship disappear to show an inverse relationship from the foreign exchange IDR into Indonesia stock exchange JKSE, as result of the global financial crisis in the period of 2007-2008. For the Saudi's markets the whole sample didn't show causality in 5% confidence level except in the period of 2002-2005, this unidirectional causality was

running from Tadawul stock market TASI into the foreign exchange SAR, as result of the stock bubble which exploded in 2006, after that period the market show unidirectional causality running from the foreign exchange rate SAR toward the Tadawul stock market TASI but in 10% confidence level.

Keywords: Causality, stock markets, forex market, TASI, SAR, JKSE, IDR

