COPYRIGHT[©] INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

EFFICIENCY AND BOARDROOM ATTRIBUTES OF INSURERS AND TAKAFUL OPERATORS IN MALAYSIA

BY

NURUL AFIDAH BINTI MOHAMAD YUSOF

A thesis submitted in fulfilment of the requirement for the degree of Doctor of Philosophy in Islamic Banking and Finance

IIUM Institute of Islamic Banking and Finance International Islamic University Malaysia

JULY 2017

ABSTRACT

The topic of corporate governance remains an important area of studies within the dynamic changes of business landscape. This is proven through its numerous, long trail of discussions. In this case, corporate governance issues that constantly emerge in various different forms need to be reviewed from time to time. In the present study, the role of board of directors, being one of the essential mechanisms of corporate governance, had been examined in relation to firm efficiency. The insurance and takaful industry in Malaysia was selected as the research setting. The objective of this study is fourfold. First, it aims to measure the efficiency of insurers and takaful operators in Malaysia. Second, it examines the relationship between boardroom attributes and firm efficiency. Third, it examines the relationship between Shariah Committee (ShC) competency and firm efficiency of takaful operators. Finally, this study explores the self-perception of ShC members of takaful operators in terms of their independence in carrying out their duties and obligations. The agency theory and resource dependence theory were incorporated as a conceptual framework of this study. In total, 30 insurance companies and 11 takaful operators were taken as samples for each of three consecutive years under study: 2012, 2013 and 2014. The Data Envelopment Analysis (DEA) method was used to measure firm efficiency. Analysis and comparison were made between the insurers and the takaful operators, as well as between different lines of business (general, life/family and composite). Next, the relationships between different variables of boardroom attributes, namely (i) board independence (ii) board size (iii) frequency of board meetings, and firm efficiency were examined using Ordinary Least Squares (OLS) regression method. The relationship between board independence and firm efficiency was further examined with two board demographic variables adopted as the moderating variables, namely gender and nationality. Meanwhile, an additional governance variable, ShC competency, had also been examined in the case of takaful operators. Finally, a controversial issue regarding the independence of ShC members was explored through interviews with six selected ShC members of takaful operators and one member of Shariah Advisory Council (SAC) of Bank Negara Malaysia (BNM). The results indicated that insurers were generally more efficient than takaful operators. In terms of line of business, it was found that life insurers were relatively more efficient than general insurers, and composite takaful operators are more efficient than family takaful operators. Meanwhile, board independence and board size had significant positive relationship with firm efficiency of the insurers. Additionally, for insurers, nationality had a significant negative moderating effect on the board independencefirm efficiency relationship. However, the boardroom attributes including ShC competency was found to be not significantly related to firm efficiency of the takaful operators. Finally, the interviews with Shariah Committee members revealed that it was unanimously agreed that there was no pressure, neither from the board of directors nor the management, upon the Shariah Committee members when making any decisions related to Shariah matters. In summary, the Shariah Committee is independent from the board and management in carrying out their duties and obligations. The findings of this study are hoped to benefit the industry players, business stakeholders, policymakers, and academics.

ملخص البحث

يستحوذ موضوع حوكمة الشركات على أهمية كبيرة بين الدراسات، وذلك ضمن التغيرات الديناميكية في قطاع الأعمال، وقد ثبت ذلك من خلال العديد من المناقشات الطويلة. وفي هذه الحالة، إن قضايا حوكمة الشركات التي تظهر باستمرار في أشكال مختلفة تحتاج إلى إعادة النظر من وقت لآخر. تم في هذه الدراسة دراسة دور مجلس الإدارة، باعتباره أحد الآليات الأساسية لحوكمة الشركات، وعلاقته بكفاءة الشركات. وقد تم اختيار صناعة التأمين التقليدي والتأمين التكافلي في ماليزيا كمركز للبحث. تتكون أهداف هذه الدراسة من أربعة محاور، أولاً، نهدف إلى قياس كفاءة شركات التأمين التجاري ومقارنتها مع التأمين التكافلي في ماليزيا. ثانياً، نبحث في العلاقة بين صفات مجلس الإدارة وكفاءة الشركات. ثالثاً، ندرس العلاقة بين كفاءة الهيئة الشرعية وكفاءة شركات التكافل. ورابعاً وأخيراً، تحاول هذه الدراسة استكشاف الإدارك الذاتي لأعضاء الهيئة الشرعية في شركات التكافل فيما يتعلق باستقلاليتهم في أداء واجباتهم وإلتزاماتهم. وقد أدرجت نظرية الوكالة ونظرية الاعتماد على الموارد كإطار نظري لهذه الدراسة. حيث تم في المجموع دراسة 30 شركة تأمين تقليدي و 11 شركة تأمين تكافلي كعينات، خلال فترة ثلاث سنوات متتالية وهي 2012 و 2013 و 2014. تم استخدام طريقة تحليل محفظة البيانات (DEA) في قياس كفاءة الشركات. تم إجراء تحليل ومقارنة بين شركات التأمين التقليدي وشركات التأمين التكافلي، وكذلك بين مختلف مجالات أنواع العمل (سواء كانت تأمين عام، تأمين على الحياة / تأمين على الأسرة أو التأمين المركب). بعد ذلك تم دراسة العلاقة بين المتغيرات المختلفة لصفات مجلس الإدارة وهي (1) استقلالية مجلس الإدارة (2) حجم مجلس الإدارة (3) تردد اجتماعات مجلس الإدارة، وكفاءة الشركة باستخدام طريقة المربعات الدنيا السائدة (OLS). وتم أيضاً دراسة العلاقة بين استقلالية مجلس الإدارة وكفاءة الشركات بمتغيرين ديموغرافيين تم اعتمادهما باعتبارهم متغيرات معتدلة، وهما الجنس والجنسية. بالإضافة إلى دراسة متغير يؤثر على الحوكمة، وهو كفاءة أعضاء الهيئة الشرعية في شركات التأمين التكافلي. وأخيراً، تم بحث قضية مثيرة للجدل تتعلق باستقلالية أعضاء الهيئة الشرعية من خلال إجراء مقابلات مع ستة أعضاء من الهيئات الشرعية في شركات التأمين التكافلي وعضو واحد في المجلس الاستشاري الشرعي (SAC) للبنك المركزي الماليزي (BNM). وأشارت النتائج إلى أن شركات التأمين التقليدية هي أكثر كفاءة من نظيراتها شركات التأمين التكافلي بشكل عام. وذلك من حيث أنواع العمل، حيث وجدت الدراسة أن شركات التأمين على الحياة أكثر كفاءة نسبياً من شركات التأمين العامة، و إن شركات التكافل المركب تعد أكثر كفاءة من شركات التكافل العائلي. وفي الوقت نفسه، كان لإستقلالية مجلس الإدارة وحجم مجلس الإدارة علاقة تؤثر بشكل إيجابي في كفاءة شركات التأمين. بالإضافة إلى ذلك، فيما يتعلق بشركات التأمين، فقد كان لعامل الجنسية تأثير سلبي في استقلالية وكفاءة مجلس الإدارة. ومع ذلك، فقد أظهرت نتيجة البحث أن صفات مجلس الإدارة، بما فيها كفاءة أعضاء الهيئة الشرعية لا تؤثر في كفاءة شركات التأمين التكافلي. وأخيراً، فقد أظهرت نتائج المقابلات مع أعضاء الهيئات الشرعية أنه لا يوجد أي ضغط، سواء من مجلس الإدارة أو الإدارة، على أعضاء اللجنة الشرعية عند اتخاذ أي قرارات تتعلق بالأمور الشرعية. نستنتج مما سبق، إن اللجنة الشرعية مستقلة عن مجلس الإدارة والإدارة في القيام بواجباتها والتزاماتها. ونأمل أن تتم الاستفادة من نتائج هذه الدراسة من قبل الخبراء في الصناعة وأصحاب المصلحة في الأعمال التجارية، وصناع القرار، والأكاديميين على حد سواء.

APPROVAL PAGE

The thesis of Nurul Afidah binti Mohamad Yusof has been approved by the following:

Hafiz Majdi Ab. Rashid Supervisor

Muslim Har Sani Mohamad Internal Examiner

Ku Nor Izah Ku Ismail External Examiner

Zurina Shafii External Examiner

Momoh Jimoh E. Salami Chairperson

DECLARATION

I hereby declare that this thesis is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Nurul Afidah binti Mohamad Yusof

Signature.....

Date

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

EFFICIENCY AND BOARDROOM ATTRIBUTES OF INSURERS AND TAKAFUL OPERATORS IN MALAYSIA

I declare that the copyright holder of this thesis are jointly owned by the student and IIUM.

Copyright © 2017 Nurul Afidah binti Mohamad Yusof and International Islamic University Malaysia. All rights reserved.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below

- 1. Any material contained in or derived from this unpublished research may be used by others in their writing with due acknowledgement.
- 2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
- 3. The IIUM library will have the right to make, store in a retrieved system and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialization policy.

Affirmed by Nurul Afidah binti Mohamad Yusof

Signature

Date

This thesis is dedicated to my beloved husband and parents

ACKNOWLEDGEMENTS

In the name of Allah, the Most Gracious and the Most Merciful. Alhamdulillah, all praise to Allah for the strength He has bestowed and His blessings in completing this thesis. I would like to express my deepest gratitude to my supervisor, Associate Professor Dr. Hafiz Majdi Ab. Rashid for his guidance, patience, and immense knowledge which have helped me throughout the research and writing of this thesis. I also wish to extend my appreciation to Dr. Sheila Nu Nu Htay who has helped and guided me in the beginning of my research process.

I would also like to thank my best friend whom I've known since the first day of my Ph.D journey, Memiyanty Abdul Rahim, for her continuous support in every possible way. Special thanks to my support group friends from the IIiBF and KENMS, namely Harena, Hasnida, Fariza, Norzitah, Ezza, and others. I have enjoyed all of our discussions and I really appreciate all the shared resources given throughout the process of completing this thesis.

My sincere appreciation goes to Dr. Romzie Rosman from Universiti Islam Malaysia (UIM) who has helped and guided me with a certain aspect of the research analysis. In addition, I must also acknowledge the significant contributions made by the six Shariah Committee members of takaful operators and one Shariah Advisory Board member of Bank Negara Malaysia who have been willing to spend their time and energy to participate in the interviews for my thesis. Their comments and insights on the discussed issues have been very enlightening. Their names, however, have to be kept anonymous.

Last but not the least, I would like to thank my family: My husband, Dr. Azra'i Abdullah, for his full support and for relentlessly providing me with the motivation I needed to keep going and complete the thesis; my parents, En. Mohamad Yusof Abu Bakar and Pn. Hasnah Iskandar for their prayers; and my sisters, Nurul Iskiah and Nurul Izyana, whom I always turn to for some fresh air after hours of studying.

Thank you. May Allah repay your kindness. InshaaAllah.

TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	
Approval Page	
Declaration	V
Copyright	vi
Dedication	vii
Acknowledgements	viii
List of Tables	xiii
List of Figures	XV
List of Graphs	xvi
List of Abbreviations	xvii
CHADTED ONE. INTRODUCTION	1
CHAPTER ONE: INTRODUCTION	
1.1 Background of the Study	
1.2 Problem Statement	
1.3 Research Objectives and Questions	
1.4 Scope and Research Method	
1.5 Significance of the Study 1.6 Structure of the Thesis	
1.6 Structure of the Thesis	14
CHAPTER TWO: BACKGROUND OF THE INSURANCE AND	
TAKAFUL INDUSTRY IN MALAYSIA	15
2.1 Introduction.	
2.2 Historical Development of the Insurance Industry in Malaysia	
2.3 Historical Development of the Takaful Industry in Malaysia	
2.4 Lines of Business in the Insurance and Takaful Industry	
2.5 Comparison of the Insurance and Takaful Services	
2.6 Re-Insurance and Re-Takaful Industry in Malaysia	
2.7 Regulatory and Supervisory Framework of Insurance and Takaful	
Industry in Malaysia	28
2.7.1 The Financial Services Act 2013 (FSA 2013) and the Islamic	
	29
Financial Services Act 2013 (IFSA 2013)	29
Financial Services Act 2013 (IFSA 2013) 2.7.2 Guidelines on Directorship for Takaful Operators	
Financial Services Act 2013 (IFSA 2013) 2.7.2 Guidelines on Directorship for Takaful Operators (BNM/RH/GL/004-1)	
Financial Services Act 2013 (IFSA 2013) 2.7.2 Guidelines on Directorship for Takaful Operators	31
 Financial Services Act 2013 (IFSA 2013) 2.7.2 Guidelines on Directorship for Takaful Operators (BNM/RH/GL/004-1) 2.7.3 Prudential Framework of Corporate Governance for Insurers (BNM/RH/GL/003-2) 	31 32
 Financial Services Act 2013 (IFSA 2013)	31 32 33
 Financial Services Act 2013 (IFSA 2013) 2.7.2 Guidelines on Directorship for Takaful Operators (BNM/RH/GL/004-1) 2.7.3 Prudential Framework of Corporate Governance for Insurers (BNM/RH/GL/003-2) 	31 32 33 34
Financial Services Act 2013 (IFSA 2013) 2.7.2 Guidelines on Directorship for Takaful Operators (BNM/RH/GL/004-1) 2.7.3 Prudential Framework of Corporate Governance for Insurers (BNM/RH/GL/003-2) 2.7.4 Fit and Proper Criteria (BNM/RH/GL/018-5) 2.8 Development of Corporate Governance Codes	31 32 33 34 34
 Financial Services Act 2013 (IFSA 2013)	31 32 33 34 34 37
 Financial Services Act 2013 (IFSA 2013)	31 32 33 34 34 37 39
 Financial Services Act 2013 (IFSA 2013)	31 32 33 34 34 37 39

Financial Institutions (AAOIFI)	
2.9.2.2 Islamic Financial Services Board (IFSB)	
2.9.2.3 Bank Negara Malaysia (BNM)	
2.9.3 Shariah Committee	
2.10 Chapter Summary	
CHAPTER THREE: LITERATURE REVIEW	50
3.1 Introduction.	
3.2 Evidence on the Efficiency of Insurers and Takaful Operators	
3.3 Evidence on the Relationship between Boardroom Attributes and	
Firm Performance	
3.3.1 Board Independence and Firm Performance	
3.3.2 Gender and Firm Performance	
3.3.3 Nationality and Firm Performance	
3.3.4 Board Size and Firm Performance	
3.3.5 Frequency of Board Meeting and Firm Performance	
3.4 Evidence on the Relationship between the Shariah Committee an $\mathbf{E}^{\mathbf{i}}$	
Firm Performance	
3.5 Literature on the Independence of Shariah Committee	
3.6 Chapter Summary: Gap in the Literature	
CHAPTER FOUR: RESEARCH THEORETICAL AND CONCEPTU	JAL
FRAMEWORK	
4.1 Introduction	
1.2 Theoretical Framework	
4.2 Theoretical Framework	
4.2.1 Agency Theory	78
4.2.1 Agency Theory 4.2.2 Resource Dependence Theory	
4.2.1 Agency Theory4.2.2 Resource Dependence Theory4.2.3 Justification of the Chosen Theories	
 4.2.1 Agency Theory 4.2.2 Resource Dependence Theory 4.2.3 Justification of the Chosen Theories 4.3 Research Conceptual Framework 	
4.2.1 Agency Theory4.2.2 Resource Dependence Theory4.2.3 Justification of the Chosen Theories	
 4.2.1 Agency Theory 4.2.2 Resource Dependence Theory	
 4.2.1 Agency Theory 4.2.2 Resource Dependence Theory	
 4.2.1 Agency Theory	
 4.2.1 Agency Theory 4.2.2 Resource Dependence Theory	
 4.2.1 Agency Theory	
 4.2.1 Agency Theory	78 79 80 81 83 83 83 85 88 89
 4.2.1 Agency Theory	
 4.2.1 Agency Theory	78 79 80 81 83 83 85 88 89 91 91 91 92 93 93
 4.2.1 Agency Theory	78 79 80 81 83 83 83 83 83 89 91 91 91 92 93 93 93 95
 4.2.1 Agency Theory	78 79 80 81 83 83 83 83 83 89 91 91 91 92 93 93 93 95
 4.2.1 Agency Theory	78 79 80 81 83 83 85 88 89 91 91 91 91 92 93 93 93 93 95 7

5.2.4 Summary of the Research Objectives, Research Questions,	
and Research Hypotheses	101
5.3 Research Design	
5.3.1 Sample Data	
5.3.2 Statistical Methods and Tools	
5.3.3 Data Envelopment Analysis (DEA)	
5.3.4 Ordinary Least Squares (OLS)	
5.3.5 Interview	
5.4 Development of Statistical Model	
5.4.1 Regression Models	
5.4.2 Variables	
5.4.2.1 Dependent Variable	
5.4.2.2 Independent, Moderating and Control Variables	
5.5 Chapter Summary	127
CHAPTER SIX: RESULTS	129
6.1 Introduction	
6.2 Part 1: The Results on the Efficiency of Insurers and Takaful	127
Operators in Malaysia	129
6.2.1 The Efficiency of Insurers and Takaful Operators	
6.2.1.1 Estimation of the Efficiency Level (<i>TECRS</i> ,	150
TEVRS, SE)	131
6.2.2 The Efficiency of the Insurers and Takaful Operators	
according to line of business (General, Life/Family,	
Composite)	134
6.2.2.1 Insurers	
6.2.2.2 Takaful Operators	
6.3 Part 2: The Results of the Multiple Regression Analysis on the	
Relationship of Independent Variables and Firm Efficiency	142
6.3.1 Classical Assumptions in Liner Regression Model	
6.3.1.1 Multicollinearity	
6.3.1.2 Normality of the Error Terms	
6.3.1.3 Autocorrelation	
6.3.2 Data Analysis and Findings	
6.3.2.1 Descriptive Statistics	
6.3.2.2 Insurers	
6.3.2.3 Takaful Operators	
6.3.3 Additional Data Analysis on Gender and Nationality	
6.4 Part 3: The Independence of the Shariah Committee Members	133
6.4.1 Shariah governance from the perspective of the Shariah	154
Committee members	154
6.4.2 Shariah Committee vis-à-vis the BOD in the Shariah	155
Governance Framework	155
6.4.3 The perception of Shariah Committee members of their own	
independence despite being nominated and remunerated by	1 50
the board	159
6.4.4 Representative from the board or top management in the	1.00
Shariah Committee meetings	163

6.4.5	Involvement of the Shariah Committee member in the product	
	development process	165
6.4.6	Recommendation for a Shariah Committee member to be	
	appointed as a board member	167
6.4.7	Disclosure in the Shariah Committee report	170
	Summary of Hypothesis Testing Results	
	er Summary	
CHAPTER SEV	EN: DISCUSSION ON FINDINGS	174
7.1 Introdu	uction	174
7.2 Part 1:	Efficiency of the Insurance and Takaful Industry in Malaysia	174
7.3 Part 2:	The Relationship between Boardroom Attributes and Firm	
Efficie	ency of the Insurers and Takaful Operators in Malaysia	183
7.3.1	Board Independence and Efficiency	183
7.3.2	Board Size and Efficiency	184
7.3.3	Frequency of Board Meetings and Efficiency	186
7.3.4]	Board Independence as Moderated by Gender and Efficiency	188
7.3.5	Board Independence as Moderated by Nationality and	
	Efficiency	190
7.4 Part 3:	The Role of Shariah Committee in the Takaful Industry in	
	sia	
7.4.1	Shariah Committee Competency and Efficiency	193
7.4.2	The Perceived Independence of the Shariah Committeee	
	Members	194
7.5 Chapte	er Summary	195
	HT: SUMMARY OF THE RESEARCH, LIMITATIONS	
	TIONS FOR FUTURE RESEARCH	
	ary of the Research	
	bution of the Research	
	tions of the Research	
8.4 Sugge	stions for Future Research	206
BIBLIOGRAPH	IY	209
APPENDIX 1	DUTIES, RESPONSIBILITIES & ACCOUNTABILITY	
	OF THE SHARIAH COMMITTEE	
APPENDIX 2	INTERVIEW QUESTIONS	
APPENDIX 3	ADDITIONAL STATISTICAL TEST RESULTS	231
APPENDIX 4	ADDITIONAL TESTS FOR THE EFFECTS OF	
	GENDER AND NATIONALITY	233

LIST OF TABLES

Table 2.1	Key Indicators for Takaful Industry in Malaysia	21
Table 2.2	Differences between Insurance Services and Takaful Services	25
Table 5.1	Summary of the Research Objectives, Research Questions, and Research Hypotheses	102
Table 5.2	Summary of sample data for efficiency measures	106
Table 5.3	List of insurers and takaful operators	107
Table 5.4	Summary of sample data for regression analysis	108
Table 5.5	List of interviewees	117
Table 5.6	List of the selected input and output for the Data Envelopment Analysis	121
Table 5.7	Operationalisation of the independent, moderating and control variables	123
Table 5.8	Operationalisation of the variables in the Shariah Committee competency index	126
Table 6.1	Top-5 and Bottom-5 of the efficiency scores	131
Table 6.2	Descriptive Statistics of Efficiency Level	132
Table 6.3	Mann-Whitney Test result for the <i>TECRS</i> , <i>TEVRS</i> and <i>SE</i> between the insurance and takaful industry	134
Table 6.4	Descriptive statistics of <i>TECRS</i> and <i>TEVRS</i> based on line of insurance business	136
Table 6.5	ANOVA table – Insurers	137
Table 6.6	Test of Homogeneity of Variances – Levene Statistic (Insurers)	137
Table 6.7	Robust Tests of Equality Means – Welch test	138
Table 6.8	Post-Hoc test (Games-Howell)	138
Table 6.9	Post-Hoc test (Tukey)	139
Table 6.10	Descriptive statistics of <i>TECRS</i> and <i>TEVRS</i> based on line of takaful business	140

Table 6.11	Test of Homogeneity of Variances - Levene Statistic (Takaful	
	Operators)	140
Table 6.12	ANOVA table – Takaful Operators	141
Table 6.13	Pearson Correlation (Insurers - TECRS)	144
Table 6.14	Pearson Correlation (Takaful - TECRS)	144
Table 6.15	Collinearity Statistics	145
Table 6.16	One-Sample Kolmogorov-Smirnov Test	146
Table 6.17	Durbin-Watson test	147
Table 6.18	Descriptive Statistics	149
Table 6.19	Coefficients and Model Summary (Insurers)	150
Table 6.20	Coefficients and Model Summary (Takaful Operators)	151
Table 6.21	Comparison of the Regression Models	153
Table 6.22	Summary of Hypothesis Testing Results	172

LIST OF FIGURES

Figure 4.1	Research Conceptual Framework	82
Figure 6.1	Shariah Governance Framework Model for Islamic Financial	
	Institutions	156

LIST OF GRAPHS

Graph 6.1	Insurers: Normal P-Plot of Regression Standardised Residual	145
Graph 6.2	Takaful Operators: Normal P-Plot of Regression Standardised	
	Residual	146

LIST OF ABBREVIATIONS

APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BOD	Board of Directors
BNM	
	Bank Negara Malaysia
CAGR	Compound Annual Growth Rate
CEO	Chief Executive Officer
CRS	Constant Returns-to-Scale
DEA	Data Envelopment Analysis
FSA	Financial Services Act 2013
IFIs	Islamic Financial Institutions
IFSA	Islamic Financial Services Act 2013
OLS	Ordinary Least Squares
OECD	Organisation for Economic Co-operation and Development
PTE	Pure Technical Efficiency
SAC	Shariah Advisory Council
SE	Scale Efficiency
SGF	Shariah Governance Framework
ShC	Shariah Committee
SOX	Sarbanes-Oxley Act
ТО	Takaful Operators
U.S.	United States of America
VRS	Variable Returns-to-Scale

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

This study generally covers three main areas, i.e. efficiency of the insurers and takaful operators, board of directors as a corporate governance mechanism, and finally the role of Shariah Committee as the Shariah supervisory body at the respective takaful operators.

First, efficiency is generally the measurement of how the observed use of resources are compared to its optimal use in producing outputs of a given quality (Bhagavath, 2006). In the context of this study, the efficiency of the insurers and takaful operators are measured by taking management expenses as well as fees and commission expenses as the input, while gross premium/contribution and net investment income as the output. Intuitively, it looks at how much the insurers and takaful operators have spent for these two types of expenses in order to yield the gross premium/contribution and net investment income.

Second, corporate governance is certainly a topic that has been heavily discussed in both the academic and the corporate world. Despite numerous discussions, the complexity of current business and economic developments demands continuous review of corporate governance issues. The corporate governance issues basically arises due to the separation of ownership and management. As highlighted in their seminal work entitled 'The modern corporation and private property', Berle and Means (1932) raised the potential complications which may arise due to the separation of ownership from control in large organisations in the U.S. and how it may heighten the tendency for managers to run the business in a manner which is detrimental to shareholders' wealth.

Pursuant to this, several corporate governance mechanisms have been developed in order to ensure good corporate governance and accountability. They can generally be divided into internal and external mechanisms. The internal mechanisms include the board of directors, management compensation, ownership structure, debt and dividend policy, et cetera (Baysinger and Hoskisson, 1990; Hermalin and Weisbach, 2003; Liu, 2002). On the other hand, the external mechanisms include the threat of takeovers (Fama and Jensen, 1983a, 1983b; Jensen and Meckling, 1976), competition in product and factor markets (Hart, 1995; Jensen and Meckling, 1976), as well as the legal environment and investor protection (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 2000). In this study, the focus is given to the board of directors as a corporate governance mechanism where the boardroom attributes of the insurers and takaful operators in Malaysia are examined.

Third, particularly for the takaful operators, this study extends the focus of corporate governance from the board of directors to also include the role of Shariah Committee as the Shariah supervisory body in Islamic Financial Institutions (IFIs). Its role is examined from the aspect of competency¹ and independence².

In view of the foregoing discussion, this study measures the efficiency of insurers and takaful operators in Malaysia, and subsequently seeks to examine its relationship with the boardroom attributes of these firms. Additionally for the takaful

¹ Section IV of the Shariah Governance Framework 2011 highlights the topic of competency. It aims to ensure that any person bearing responsibilities outlined in the Shariah governance framework for an IFI shall possess the necessary competency and continuously enhance their knowledge and understanding on the Shariah as well as keep abreast on the latest developments in Islamic finance.

² Section III of the Shariah Governance Framework 2011 highlights the topic of independence. It aims to safeguard the independence of the Shariah Committee in ensuring sound Shariah decision-making and emphasises the role of the board of directors in recognising the independence of the Shariah Committee.

operators, this study examines the relationship between Shariah Committee competency and firm efficiency. This study also attempts to get more insights on how Shariah Committee members perceive their own independence from the board of directors and management in carrying out their duties and obligations.

1.2 PROBLEM STATEMENT

Although the highlight of the 2008 financial crisis was mainly on the banking industry, the insurance industry has also been put under the spotlight, especially when the world's largest insurance company collapsed and was bailed out by the U.S. government (Schich, 2010). This emphasises the significance of the insurance industry in the financial services, and that it is as important as its counterpart, i.e. banking industry. In the Malaysian context, the significance of the insurance industry to the nation's economy is evident. In 2014, it constituted approximately 33% of the Finance and Insurance segment in the Services sector, which in turn is the largest contributing sector to the GDP, i.e., 53.4% (Department of Statistics Malaysia, 2015). Furthermore, being one of the branches of the fast-growing area of Islamic finance, it would be interesting to study the takaful industry, where research is still in its infancy as compared to the Islamic banking. As highlighted by Tan Sri Dr. Zeti Akhtar Aziz, the former governor of Bank Negara Malaysia (BNM), there are strong linkages, interdependence and synergies between all sectors in Islamic finance which warrants the development of all such sectors, and not just the Islamic banking industry.

It is sad to note that Malaysia had failed to achieve its target for the takaful contributions to make up at least 20% of the total insurance premiums by 2010.³ In fact, the latest figure published by BNM for the year 2015 stated that market share

³ "BNM Issues 4 More Takaful Licences", The Edge Financial Daily, 2 Sept 2010. <www.theedge malaysia.com-highlights-172883-bnm-issues-4-more-takaful-licences.htm> Accessed on 13 Feb 2013.

stood at only 12.9%.⁴ To make matters worse, the statistics indicate that the percentage was at its peak in 2012 at only 14.3% before it dropped to 14.1%, 12.5% and 12.9% for the three subsequent years thereafter.

In order to improve, it is best to first measure and identify the current performance standing of the industry. In measuring performance, it is noted that efficiency is a critical aspect for the financial services sector (Norashikin, Syed Othman Alhabshi and Obiyathulla Bacha, 2012). However, the usage of the unidimensional performance measures, e.g. financial ratios, to assess a firm's efficiency is found to be not adequate (Kweh and Noor Azlinna, 2015). Therefore, the use of multi-criteria technique is suggested in order to measure the performance of the industry. Thus, it provides an empirical question to evaluate the efficiency of the insurers and takaful operators by using the multi-criteria performance measurement technique such as Data Envelopement Analysis (DEA).

It is particularly interesting to study the insurance industry in Malaysia because the country runs a dual insurance system whereby the conventional insurers and takaful operators operate in parallel. This situation leads to intense competition between the two businesses especially in terms of their product development and sales revenue (Berkem, 2014; Norashikin et al., 2012). In fact, Noreen and Khan (2014) highlighted that the intense competition had given rise to the importance of the efficiency aspect of performance in the insurance and takaful industries. In addition, studies such as Muhamad Abduh, Mohd Azmi and Raudhah (2012), Norashikin, Syed Othman Alhabshi and Obiyathulla Bacha (2011) and Norma (2012) indicate that there is a significant difference between the efficiency of insurers and takaful operators.

⁴ Table A2: Key Financial Indicators – Islamic Banking and Takaful Sector in the Financial Stability and Payment Systems Report by Bank Negara Malaysia. Retrieved from http://www.bnm.gov.my/files/publication/fsps/en/2015/zcp07_table_A.02.pdf> Accessed on 28 April 2016.

Given the dual system, it is therefore not only important to measure the efficiency of each of the conventional insurers and takaful operators, but it is also interesting to make the comparison between the two.

In a research by Zagorchev and Gao (2015), it is highlighted that governance structures of the financial institutions have a strong impact on firm performance. It indicates how important corporate governance is in determining the stability and progress of financial institutions. Considering the dynamic and complexity of corporate environment today, it further reinforces the importance of the study in the relationship between corporate governance and efficiency of the insurers and takaful operators in order to evaluate their sustainability in the long run. As highlighted by Abdul Kader, Adams, Hardwick and Kwon (2014), insurers could achive operational efficiency and hence economic performance when supported by a sound corporate governance. In particular, the relationship between the two is important for the insurers to manage their asset-liability and ownership structure, as well as the claims handling (Huang, Lai, McNamara and Wang, 2011; Wang, Jeng and Peng, 2007). Abdul Kader et al. (2014) added that the corporate governance – efficiency relationship in the takaful industry is particularly essential because for the board of directors, their fiduciary duty is not only towards the shareholders and takaful participants, but they are also supervised by the Shariah Committee and the relevant industry regulators with regards to their Shariah compliance practice.

The researcher acknowledges the abundance of its literature including those surrounding the role of the board of directors (BOD) in steering the organisation. However, it is still lacking in the discussion of certain industries. It is important to understand that every industry has its own specific characteristics and needs. Therefore, we cannot expect any one-size-fits-all governance mechanism to be applied

5

across all industries. While there have been quite a number of literature in the corporate governance of insurance industry, that is not the case for takaful. It is also noteworthy that most corporate governance literature has focused on listed companies, probably due to the easy data accessibility. Meanwhile, there is not much literature on the corporate governance of the non-listed companies. It is important to highlight that the corporate governance issues involving listed and non-listed companies may differ from each other. For instance, unlike their listed counterparts whose activities are closely monitored by the stock exchange institutions and rating agencies, the non-listed companies have fewer market mechanisms to help uphold their governance practice (Merchant, 2009). In the case of this study, note that the Malaysian insurers and takaful operators are mostly not publicly listed (except for Syarikat Takaful Malaysia). Pursuant to the preceding discussion, the Malaysian insurance and takaful industries fit as the setting of this study because they accommodate the two gaps, i.e. lack of corporate governance discussion in the industry (particularly takaful) and in non-listed companies.

For the final area of this research, the role of Shariah Committee as the additional supervisory entity alongside the board of directors to specifically oversee the Shariah related matters is looked into. Being Islamic financial institutions (IFIs), the most distinct characteristic of takaful operators as compared to their conventional counterpart is the element of Shariah compliance that is attached to every technical aspect of the takaful transactions. Being bound to strict Shariah parameters, the researcher believes that it is important for the IFIs to pay attention to this particular aspect of their operations. While many literature look into the relationship between Shariah Committee and the disclosure level in annual reports, there is limited research done on how Shariah Committee contributes to firm performance. Through a survey by Mollah and Zaman (2015), it is found that in examining the relationship between Shariah supervision and firm performance, there are four issues that need to considered. They are the independence of Shariah board, the competency of Shariah board, Shariah board transparency and disclosures, as well as the legal status of the Shariah board's prononouncements.

In this study, the focus is given to the role of the Shariah Committee from two perspectives, i.e. competency and independence. Shariah Committee competency is expected to contribute to reliable Shariah supervision and subsequently improving the efficiency of IFIs (Rahajeng, 2013). However, to the best of the researcher's knowledge, the relationship between the two has yet to be tested. As for the Shariah Committee independence, Abdul Kader et al. (2014) highlighted the concern regarding the independence of Shariah board given the fact that they are appointed and remunerated by the managers of the takaful operators. Similar concern regarding the independence issue is also shared with Zulkarnain, Shamser and Mohamad Eskandar Shah (2015). Therefore, it would be interesting to examine these two aspects of Shariah Committee in the setting of this study.

1.3 RESEARCH OBJECTIVES AND QUESTIONS

The objectives of this study are: (1) to measure the efficiency of the insurers and takaful operators in Malaysia; (2) to examine the relationship between boardroom attributes and firm efficiency of the insurers and takaful operators in Malaysia; (3) to examine the relationship between Shariah Committee competency and firm efficiency of the takaful operators in Malaysia; and (4) to explore the self-perception of the Shariah Committee members of takaful operators on their independence in carrying out their duties and obligations.