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**THE EFFECT OF INTELLECTUAL CAPITAL ON  
MALAYSIAN BANKS FINANCIAL PERFORMANCES:  
COMPARATIVE STUDY ON CONVENTIONAL AND  
ISLAMIC BANKS**



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August 2016**

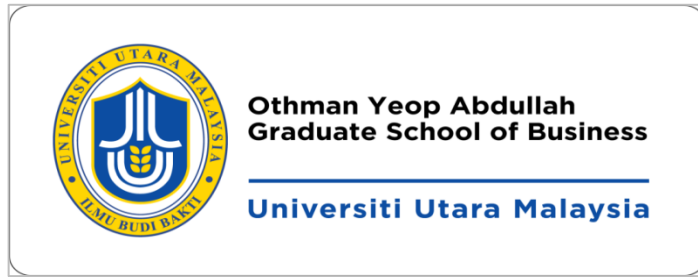
**THE EFFECT OF INTELLECTUAL CAPITAL ON MALAYSIAN BANKS  
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CONVENTIONAL AND ISLAMIC BANKS**



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**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
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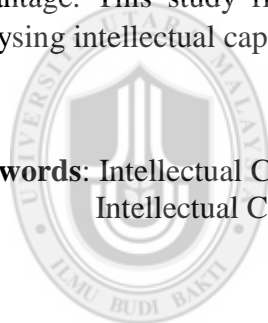


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## ABSTRACT

In ultra competitive banking industry nowadays, banks could not solely rely on monetary capital for competitive advantage. In this respect, intellectual capital (intangible asset) emerged as viable resources for banks. AFAS (ASEAN Framework Agreement on Services) which will commence in 2020 has put prominence on intellectual capital. This research aims to examine relationship between intellectual capital and financial performances of 32 Malaysian banks (conventional and Islamic) for eight years from 2008 to 2015. In this respect, comparative study between conventional and Islamic banks are undertaken. Value added intellectual coefficient (VAIC) technique is utilised to compute banks' value added performances. Profitability proxies such as return on asset, return on equity, and data envelopment analysis' efficiency are used. The banks intellectual capital (human capital, structural capital) and physical capital (capital employed) effect on banks financial performances had been computed by utilisation of panel data estimation method. The results of this research study showed relationships between intellectual capital and banks financial performances between Malaysian conventional and Islamic banks are varied. Moreover, study findings implied intellectual capital is crucial for banks competitive advantage. This study findings can assist banks decision makers and investors in analysing intellectual capital position of Malaysian financial institutions.

**Keywords:** Intellectual Capital, Return on Asset, Return on Equity, Value Added Intellectual Coefficient

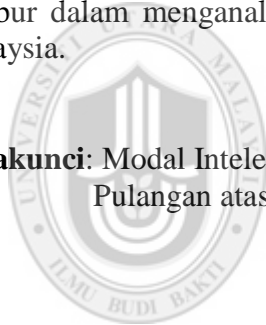


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## ABSTRAK

Dalam industri perbankan yang sangat kompetitif pada masa kini, bank tidak boleh hanya bergantung pada modal kewangan untuk memperoleh kelebihan daya saing. Dalam hal ini, modal intelek (aset tidak ketara) muncul sebagai sumber yang penting untuk bank. AFAS (Perjanjian Rangka Kerja Perkhidmatan ASEAN) yang akan bermula pada tahun 2020 telah menonjolkan kepentingan modal intelek. Objektif kajian ini adalah untuk mengkaji hubungan antara modal intelek dan prestasi kewangan 32 bank Malaysia (konvensional dan Islam) selama lapan tahun daripada tahun 2008 hingga 2015. Dalam hal ini, kajian perbandingan di antara bank konvensional dan Islam telah dijalankan. Teknik nilai pekali intelek tambahan (VAIC) telah digunakan untuk mengira nilai prestasi tambahan bank. Proksi-proksi keuntungan seperti pulangan atas aset, pulangan atas ekuiti, dan kecekapan analisis kecekapan telah digunakan. Kesan modal intelektual bank (modal insan, struktur modal) dan modal fizikal (modal kewangan) terhadap prestasi kewangan bank telah dikira dengan menggunakan kaedah anggaran data panel. Keputusan kajian ini telah menunjukkan hubungan antara modal intelek dan prestasi kewangan antara bank konvensional dan Islam di Malaysia adalah berbeza. Selain itu, keputusan kajian telah menunjukkan modal intelek adalah penting untuk kelebihan daya saing bank. Keputusan kajian ini akan dapat membantu bank dan pelabur dalam menganalisis kedudukan modal intelek dalam institusi kewangan di Malaysia.

**Katakunci:** Modal Intelek, Nilai Pekali Intelek Tambahan, Pulangan atas Aset, Pulangan atas Ekuiti



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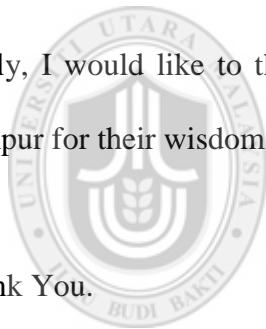
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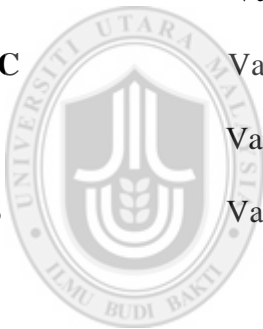
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## LIST OF ABBREVIATIONS

<b>AFAS</b>	ASEAN Framework Agreement on Services
<b>AFTA</b>	Association of Southeast Asian Nations Free Trade Area
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>BCC</b>	Banker, Charnes and Cooper Model
<b>BIMB</b>	Bank Islam Malaysia Berhad
<b>BMMB</b>	Bank Muamalat Malaysia Berhad
<b>BNM</b>	Central Bank of Malaysia
<b>CE</b>	Capital Employed
<b>CEE</b>	Capital Employed Efficiency
<b>DEA</b>	Data Envelopment Analysis
<b>DFI</b>	Development Financial Institutions
<b>DFIA</b>	Development Financial Institutions Act
<b>EFF</b>	Efficiency
<b>FSMP</b>	Financial Sector Master Plan
<b>GDP</b>	Gross Domestic Product
<b>GLC</b>	Government Linked Companies
<b>GLS</b>	Generalised Least Squares
<b>HC</b>	Human Capital
<b>HCE</b>	Human Capital Efficiency
<b>IBS</b>	Islamic Banking Scheme
<b>IFSB</b>	Islamic Financial Services Board
<b>IV</b>	Independent Variables
<b>LEV</b>	Leverage

<b>MYR</b>	Malaysia Ringgit
<b>OLS</b>	Ordinary Least Squares
<b>PLS</b>	Profit and Loss Sharing
<b>ROA</b>	Return on Asset
<b>ROE</b>	Return on Equity
<b>SAB</b>	Shari'ah Advisory Body
<b>SAC</b>	Shari'ah Advisory Council
<b>SC</b>	Structural Capital
<b>SCE</b>	Structural Capital Efficiency
<b>SE</b>	Standard Error
<b>VA</b>	Value Added
<b>VAIC</b>	Value Added Intellectual Coefficient
<b>VIF</b>	Variance Inflation Factor
<b>VRS</b>	Variable Return to Scale



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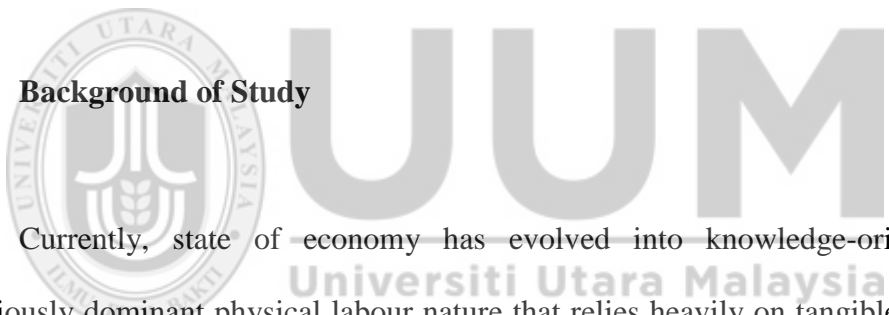
# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

This introductory chapter aims to provide an overall picture of area of study. The chapter is organised into eight sections. It essentially describes research study' background, problem statement, research questions, research objectives, significant of study, scope and limitations, and thesis organisation. Finally, chapter summary is presented.

### 1.1 Background of Study



Currently, state of economy has evolved into knowledge-oriented from previously dominant physical labour nature that relies heavily on tangible asset. This scenario places more importance towards knowledge, skilled employees and information technology systems. Thus, according to Guthrie and Petty (2000), most developed economies in the world had put prominence on intangible asset (service-oriented field) in relative to physical-oriented industry such as commodity and manufacturing. This is evident as service industries significantly dominating developed countries' gross domestic product (GDP).

According to Cardinal (2001), it is inevitable for firms to face competitive environment nowadays as a result of rapid globalization and technology improvement. This scenario has placed significant importance on intellectual capital (intangible asset).



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## APPENDICES

### APPENDIX A

#### List of Malaysian Banks

##### Commercial Banks

Name	Ownership
1. Affin Bank Berhad	Local
2. Alliance Bank Malaysia Berhad	Local
3. AmBank (M) Berhad	Local
4. Bangkok Bank Berhad	Foreign
5. Bank of America Malaysia Berhad	Foreign
6. Bank of China (Malaysia) Berhad	Foreign
7. Bank of Tokyo-Mitsubishi UFJ (Malaysia) Berhad	Foreign
8. BNP Paribas Malaysia Berhad	Foreign
9. CIMB Bank Berhad	Local
10. Citibank Berhad	Foreign
11. Deutsche Bank (Malaysia) Berhad	Foreign
12. Hong Leong Bank Berhad	Local
13. HSBC Bank Malaysia Berhad	Foreign
14. India International Bank (Malaysia) Berhad	Foreign
15. Industrial and Commercial Bank of China (Malaysia) Berhad	Foreign
16. J.P. Morgan Chase Bank Berhad	Foreign
17. Malayan Banking Berhad	Local
18. Mizuho Bank (Malaysia) Berhad	Foreign
19. National Bank of Abu Dhabi Malaysia Berhad	Foreign
20. OCBC Bank (Malaysia) Berhad	Foreign
21. Public Bank Berhad	Local
22. RHB Bank Berhad	Local
23. Standard Chartered Bank Malaysia Berhad	Foreign
24. Sumitomo Mitsui Banking Corporation Malaysia Berhad	Foreign
25. The Bank of Nova Scotia Berhad	Foreign
26. The Royal Bank of Scotland Berhad	Foreign
27. United Overseas Bank (Malaysia) Bhd.	Foreign

## Investment Banks

Name	Ownership
1. Affin Hwang Investment Bank Berhad	Local
2. Alliance Investment Bank Berhad	Local
3. AmInvestment Bank Berhad	Local
4. CIMB Investment Bank Berhad	Local
5. Hong Leong Investment Bank Berhad	Local
6. KAF Investment Bank Berhad	Local
7. Kenanga Investment Bank Berhad	Local
8. MIDF Amanah Investment Bank Berhad	Local
9. Maybank Investment Bank Berhad	Local
10. Public Investment Bank Berhad	Local
11. RHB Investment Bank Berhad	Local

## Islamic Banks

Name	Ownership
1. Affin Islamic Bank Berhad	Local
2. Alkhair International Islamic Bank Bhd	Foreign
3. Alliance Islamic Bank Berhad	Local
4. Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	Foreign
5. AmBank Islamic Berhad	Local
6. Asian Finance Bank Berhad	Foreign
7. Bank Islam Malaysia Berhad	Local
8. Bank Muamalat Malaysia Berhad	Local
9. CIMB Islamic Bank Berhad	Local
10. Deutsche Bank Aktiengesellschaft	Foreign
11. Hong Leong Islamic Bank Berhad	Local
12. HSBC Amanah Malaysia Berhad	Foreign
13. Kuwait Finance House (Malaysia) Berhad	Foreign
14. Maybank Islamic Berhad	Local
15. OCBC Al-Amin Bank Berhad	Foreign
16. PT. Bank Syariah Muamalat Indonesia, Tbk	Foreign
17. Public Islamic Bank Berhad	Foreign
18. RHB Islamic Bank Berhad	Local
19. Standard Chartered Saadiq Berhad	Foreign

## Development Financial Institutions

Name	Ownership
1. Bank Kerjasama Rakyat Malaysia Berhad	Local
2. Bank Pembangunan Malaysia Berhad	Local
3. Bank Pertanian Malaysia Berhad (Agrobank)	Local
4. Bank Perusahaan Kecil & Sederhana Malaysia Berhad (SME Bank)	Local
5. Bank Simpanan Nasional	Local
6. Export-Import Bank of Malaysia Berhad (EXIM Bank)	Local





## APPENDIX B

### List of 32 Malaysian Commercial Banks (Conventional and Islamic) utilised in Research Study

#### Conventional Banks

Name	Ownership
1. Affin Bank Berhad	Local
2. Alliance Bank Malaysia Berhad	Local
3. AmBank (M) Berhad	Local
4. Bangkok Bank Berhad	Foreign
5. CIMB Bank Berhad	Local
6. Citibank Berhad	Foreign
7. Deutsche Bank (Malaysia) Berhad	Foreign
8. Hong Leong Bank Berhad	Local
9. HSBC Bank Malaysia Berhad	Foreign
10. J.P. Morgan Chase Bank Berhad	Foreign
11. Malayan Banking Berhad	Local
12. OCBC Bank (Malaysia) Berhad	Foreign
13. Public Bank Berhad	Local
14. RHB Bank Berhad	Local
15. Standard Chartered Bank Malaysia Berhad	Foreign
16. The Royal Bank of Scotland Berhad	Foreign
17. United Overseas Bank (Malaysia) Bhd.	Foreign

#### Islamic Banks

Name	Ownership
1. Affin Islamic Bank Berhad	Local
2. Alkhair International Islamic Bank Bhd	Foreign
3. Alliance Islamic Bank Berhad	Local
4. Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	Foreign
5. Asian Finance Bank Berhad	Foreign
6. Bank Islam Malaysia Berhad	Local
7. Bank Muamalat Malaysia Berhad	Local
8. CIMB Islamic Bank Berhad	Local
9. Hong Leong Islamic Bank Berhad	Local
10. HSBC Amanah Malaysia Berhad	Foreign
11. Kuwait Finance House (Malaysia) Berhad	Foreign
12. Maybank Islamic Berhad	Local
13. OCBC Al-Amin Bank Berhad	Foreign
14. RHB Islamic Bank Berhad	Local
15. Standard Chartered Saadiq Berhad	Foreign



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