

**EFFECTS OF FINANCIAL LIBERALISATION ON THE
FINANCIAL STABILITY: A COMPARATIVE
ANALYSIS BETWEEN ISLAMIC BANKS AND
CONVENTIONAL BANKS IN MALAYSIA**

BY

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ABSTRACT

As a financial intermediary the banking sector plays a critical role mobilizing funds between the surplus and shortage units . However, the global financial market has experienced a marked change as a result of the shift from financial repression to financial liberalisation. Such a shift led to the flow of capital across borders and the financial sector development. Competition and deregulation of interest rate are the two mechanisms of financial liberalisation. The effect of financial liberalisation on financial stability can be passed through or mediated by these two mechanisms. In Islamic banks, the mediating effects may differ from those of conventional banks due to the *Shariah* constraints. A liberalised banking sector prompted commercial banks to intensify risk-taking activities, which ultimately could affect the financial stability adversely vis-a-vis the survival of smaller banks. This study, therefore aimed to analyse the mediating role of competition and interest rate in the relationship between financial liberalisation and financial stability in Malaysian conventional and Islamic banks. As the sample period of this study covered the periods of two financial crises, namely the 1997 Asian Financial Crisis and 2008 Global Financial Crisis this study further investigated such mediating relationships prior, during and after the said financial crises. Using the PLS-SEM method, the empirical results showed that financial liberalisation significantly affected financial stability of conventional and Islamic banks. Likewise, competition and interest rate significantly mediated the link between the financial liberalisation and financial stability. Meanwhile, competition was the only significant mediator between financial liberalisation and financial stability before and during the 2008 Global Financial Crisis. This research extended the financial liberalisation theory, structure-conduct-performance theory, competition fragility view and competition stability view in predicting financial stability by investigating the mediating role of the two financial liberalisation mechanisms. This study found that the competition fragility view holds conventional and Islamic banks when competition mediates the relationship that will affect financial stability. The government need to intervene to preserve the financial stability when there is a competition . It also can be concluded that this study has an implication for policy makers and the banking industry. As for Islamic banks, they need to preserve their stability in the financial liberalisation setting with the mediation for both competition and interest rate. Lastly, competition and interest rate needs to be set at the best possible level so that financial stability can be well preserved especially for Islamic banks that are abide by the *Shariah*. An area of novelty offered by the study lies in examining the mediating variables of competition and interest rate between the financial liberalisation and financial stability by comparing between the Islamic and conventional banks.

ملخص البحث

يلعب القطاع المصرفي دورًا حاسمًا في تعبئة الأموال بين وحدات الفائض والنقص بصفته وسيطًا ماليًا. ومع ذلك، شهدت السوق المالية العالمية تغييرًا ملحوظًا نتيجة التحول من القمع المالي إلى التحرير المالي. وأدى هذا التحول إلى تدفق رأس المال عبر الحدود وتنمية القطاع المالي. كانت المنافسة وتحرير سعر الفائدة هما آليتان للتحرير المالي. يمكن تمرير تأثير التحرير المالي على الاستقرار المالي من خلال هاتين الآليتين أو التوسط فيهما. في البنوك الإسلامية، قد تختلف تأثيرات الوساطة عن تلك الخاصة بالبنوك التقليدية بسبب قيود الشريعة. كما دفع القطاع المصرفي المتحرر البنوك التجارية إلى تكثيف أنشطة المخاطرة، والتي يمكن أن تؤثر في النهاية على الاستقرار المالي بشكل سلبي مقابل بقاء البنوك الأصغر. لذلك هدفت هذه الدراسة إلى تحليل الدور الوسيط للمنافسة وسعر الفائدة في العلاقة بين التحرير المالي والاستقرار المالي في البنوك التقليدية والإسلامية الماليزية. نظرًا لأن فترة عينة هذه الدراسة غطت فترات أزمتين ماليتين، وهما الأزمة المالية الآسيوية عام 1997 والأزمة المالية العالمية لعام 2008، فقد بحثت هذه الدراسة في علاقات الوساطة هذه قبل وأثناء وبعد الأزمات المالية المذكورة. باستخدام طريقة PLS-SEM، أظهرت النتائج التجريبية أن التحرير المالي أثر بشكل كبير على الاستقرار المالي للبنوك التقليدية والإسلامية. وبالمثل، توسطت المنافسة وسعر الفائدة بشكل كبير في الصلة بين التحرير المالي والاستقرار المالي. وفي الوقت نفسه، كانت المنافسة الوسيط المهم الوحيد بين التحرير المالي والاستقرار المالي قبل وبعد الأزمة المالية العالمية لعام 2008. وسع هذا البحث من نظرية التحرر المالي ونظرية الهيكل والسلوك والأداء ورؤية هشاشة المنافسة ورؤية استقرار المنافسة في التنبؤ بالاستقرار المالي من خلال التحقيق في الدور الوسيط لآليتي التحرير المالي. ووجدت هذه الدراسة أن وجهة نظر هشاشة المنافسة تحمل في طياتها البنوك التقليدية والإسلامية عندما تتوسط المنافسة في العلاقة التي ستؤثر على الاستقرار المالي. وعلى الحكومة التدخل للحفاظ على الاستقرار المالي عند وجود منافسة. كما يمكن الاستنتاج أن هذه الدراسة لها تأثير على صانعي السياسات والصناعة

المصرفية. أما البنوك الإسلامية، فهي بحاجة إلى الحفاظ على استقرارها في بيئة التحرير المالي بوساطة المنافسة وسعر الفائدة. أخيراً، يجب تحديد المنافسة وسعر الفائدة على أفضل مستوى ممكن حتى يمكن الحفاظ على الاستقرار المالي جيداً خاصة بالنسبة للبنوك الإسلامية التي تلتزم بالشريعة الإسلامية. كما تكمن إحدى مجالات الحداثة التي قدمتها الدراسة في دراسة المتغيرات الوسيطة للمنافسة وسعر الفائدة بين التحرير المالي والاستقرار المالي من خلال المقارنة بين البنوك الإسلامية والبنوك التقليدية.



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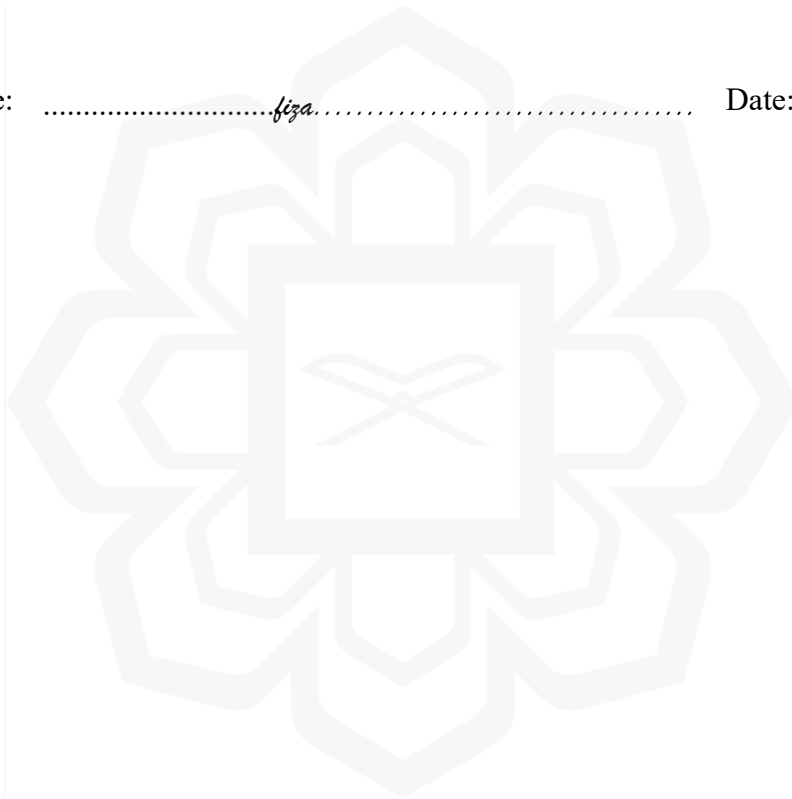
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DECLARATION

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.

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TABLE OF CONTENTS

Abstract.....	ii
Approval Page	v
Declaration.....	vi
Copyright.....	vii
Acknowledgements	viii
List of Tables.....	xiii
List of Figures.....	xvi
List of Abbreviations.....	xvii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Financial Liberalisation : An Overview	7
1.3 Problem Statement	10
1.4 Rationale of the Study.....	15
1.5 Research Objectives	16
1.6 Research Questions	17
1.7 Significance of the study.....	17
1.8 Contribution of the study.....	18
1.9 Scope and Limitation of the Study	19
1.10 Organisation of the thesis.....	20
CHAPTER TWO: MALAYSIAN BANKING SECTOR	22
2.1 Introduction	22
2.2 Overview of the Malaysian Banking Sector	22
2.3 Differences Between Conventional and Islamic Banks	26
2.4 financial stability and Performance of the Banking Sector in Malaysia: islamic and conventional banks.....	31
2.5 financial crisis	37
2.6 financial liberalisation in malaysia.....	39
2.7 Chapter Summary.....	50
CHAPTER THREE: LITERATURE RIEW	51
3.1 Introduction	51
3.2 Financial Stability	51
3.3 Effect of Financial Liberalisation on Financial Stability in banking sector	59
3.4 Effect of Competition on Financial Stability	67
3.5 Effect of Interest Rate on Financial Stability	77
3.6 Control Variables	83
3.6.1 Effect of Bank Specifics on Financial Stability	84
3.6.2 Effect of Macro Economic Variables on Financial Stability.....	88
3.7 Research Gap.....	91
3.8 Chapter Summary.....	94

CHAPTER FOUR: THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT	95
4.1 Introduction	95
4.2 Theoretical Underpinnings	95
4.2.1 Financial Stability Theory	95
4.2.2 Financial Liberalisation Theory	99
4.2.3 Competition Stability and Competition Fragility View	103
4.2.4 Structure Conduct Performance (SCP) Theory	107
4.3 Theoretical Framework	108
4.4 Hypothesis Development	110
4.4.1 Financial liberalisation and Financial Stability	110
4.4.2 Financial Liberalisation , Competition and Financial Stability	112
4.4.3 Financial Liberalisation , Interest Rate and Financial Stability	114
4.4.4 The Effect of Financial Liberalisation , Competition and Interest Rate on Financial Stability Pre, During and post 1997 Asian financial crisis and 2008 Global financial Crisis	116
4.5 Chapter Summary.....	118
CHAPTER FIVE: RESEARCH METHODOLOGY	119
5.1 introduction	119
5.2 Research Design.....	119
5.3 Sample Selection Strategy.....	120
5.3.1 Variables Definition and Measurement.....	122
5.3.1.1 Dependent Variables	122
5.3.1.2 Determinants of Financial Stability	125
5.4 Data Analysis: discussion on Partial Least Square - Structural Equation Modelling (PLS - SEM).....	131
5.4.1 Why PLS-SEM ?.....	134
5.4.2 Rule of Thumb for Selecting CB SEM or PLS SEM	135
5.4.3 Model Assessment: Reflective and Formative Construct.....	137
5.4.4 Assessing Reflective Construct	139
5.4.5 Assessing Formative Construct	141
5.4.6 Normality Test.....	142
5.4.7 Structural Model.....	142
5.4.8 Mediating relationship.....	144
5.5 Chapter Summary.....	146
CHAPTER SIX: RESULTS	147
6.1 Introduction	147
6.2 Descriptive Statistics	147
6.3 PLS SEM Model Assessment.....	152
6.4 Measurement Model Assessment.....	152
6.4.1 Model Assessment: Reflective Construct.....	153
6.4.1.1 Indicator Reliability	153
6.4.1.2 Internal Consistency (Composite Reliability).....	153

6.4.1.3	Convergent Validity	154
6.4.1.4	Discriminant Validity	155
6.4.2	Model Assessment: Formative Construct.....	156
6.4.2.1	Convergent Validity	157
6.4.2.2	Indicator Collinearity	157
6.4.2.3	Statistical Significance (t-value weight)	158
6.5	Normality Test.....	159
6.6	Structural Model Assessment.....	159
6.6.1	Coefficient of Determination.....	160
6.7	Path Coefficient.....	161
6.7.1	The Effect of Financial Liberalisation on Financial Stability (Direct Effect).....	161
6.7.2	Mediating Effect of Competition	162
6.7.3	Mediating Effect of Interest Rate	166
6.7.4	The Mediating Effect of Competition and Interest Rate Before, During and After Asian Financial Crisis.....	168
6.7.5	The Mediating Effect of Competition and Interest Rate Before, During and After Global Financial Crisis	170
6.8	chapter Summary.....	173
CHAPTER SEVEN: DISCUSSIONS OF FINDINGS		174
7.1	Introduction	174
7.2	Recapitulation of the Study	174
7.3	Discussion on the Findings	176
7.3.1	RO1: Determining the Effect of Financial Liberalisation on Financial Stability of Islamic and Conventional Banks in Malaysia.....	177
7.3.2	RO2: Analyzing the Mediating Effect of Competition on the Relationship Between Financial Liberalisation and Financial Stability of Islamic and Conventional Banks in Malaysia.....	179
7.3.3	RO3: Analysing the Mediating Effect of Interest Rate on the Relationship Between Financial Liberalisation and Financial Stability of Islamic and Conventional Banks in Malaysia.....	181
7.3.4	RO4: To Examine the Mediating Effect of Competition and Interest Rate on the Relationship Between Financial Stability and Financial Liberalisation , Competition, and Interest Rate on Financial Stability Pre, During, and Post Asian Financial crisis in 1997 and Global Financial Crisis in 2008 in Malaysia Banking Sector.....	184
7.4	Discussion on Control Variables.....	187
7.5	Chapter Summary.....	189
CHAPTER EIGHT: CONCLUSIONS		190
8.1	Introduction	190
8.2	Summary of major findings.....	191
8.3	Implications of the study	196

8.3.1 Theoretical Implications.....	196
8.3.2 Empirical Implications	198
8.4 Practical Implications / Policy Implications.....	200
8.5 Limitations of the Study.....	202
8.6 Recommendations for Future Research	202
REFERENCES	204
APPENDIX I: MARDIA’S NORMALITY TEST FOR ISLAMIC BANKS	234
APPENDIX II: MARDIA’S NORMALITY TEST FOR CONVENTIONAL BANKS	235
APPENDIX III: MEASUREMENT MODEL ISLAMIC BANKS	236
APPENDIX IV: MEASUREMENT MODEL CONVENTIONAL BANKS	237
APPENDIX V: STRUCTURAL MODEL ISLAMIC BANKS	238
APPENDIX VI: STRUCTURAL MODEL CONVENTIONAL BANKS	239
APPENDIX VII: LITERATURE REVIEW MATRIX	240



LIST OF TABLES

Table 2.1	List of Local and Foreign Conventional Banks in Malaysia	25
Table 2.2	List of Local and Foreign Islamic Banks in Malaysia	26
Table 2.3	Statement of Financial Position Structure of Conventional Banks	29
Table 2.4	Statement of Financial Position Structure of Islamic Bank	29
Table 2.5	Differences Between Islamic and Conventional Banks	31
Table 2.6	Overview of financial liberalisation's event in Malaysia	49
Table 5.1	Yearly Sample Data	121
Table 5.2	Definition of Financial Freedom Index	126
Table 5.3	Interpretation of HHI Scores	128
Table 5.4	Measurement of Bank Specific	129
Table 5.5	Summary of the Variable Definitions and Source of the Data	130
Table 5.6	Reflective and Formative Construct	138
Table 5.7	Summary of Validity Guidelines for Assessing Reflective Structural Model	140
Table 5.8	Summary of Validity Guidelines for Assessing Reflective Structural Model	142
Table 6.1	Descriptive Statistics for Islamic Banks	148
Table 6.2	Descriptive Statistics for Conventional Banks	149
Table 6.3	Indicator Reliability (Loading), Internal Consistency (CR) and Convergent Validity (AVE) for Islamic Banks	154
Table 6.4	Indicator Reliability (Loading), Internal Consistency (CR) and Convergent Validity (AVE) for Conventional Banks	154
Table 6.5	HTMT for Islamic Banks	156
Table 6.6	HTMT for Conventional Banks	156
Table 6.7	Convergent Validity, Indicator Collinearity and Statistical Significance for Islamic Banks	158

Table 6.8	Convergent Validity, Indicator Collinearity and Statistical Significance for Conventional Banks	158
Table 6.9	Coefficient of Determination (R^2) for Islamic Banks	160
Table 6.10	Coefficient of Determination (R^2) for Conventional Banks	161
Table 6.11	Summary of Hypotheses Result (Direct Relationship)	162
Table 6.12	Direct and Indirect Effects (Competition) of Financial Liberalisation to Financial Stability Path Analysis for Conventional and Islamic Banks	166
Table 6.13	Direct and Indirect Effects (Interest Rate) of Financial Liberalisation to Financial Stability Path Analysis for Conventional and Islamic Banks	167
Table 6.14	Direct and Indirect Effects of Financial Liberalisation to Financial Stability Path Analysis Before 1997 Financial Crisis	168
Table 6.15	Direct and Indirect Effects of Financial Liberalisation to Financial Stability Path Analysis During 1997 Financial Crisis	169
Table 6.16	Direct and Indirect Effects of Financial Liberalisation to Financial Stability Path Analysis After 1997 Financial Crisis	169
Table 6.17	Direct and Indirect Effects of Financial Liberalisation to Financial Stability Path Analysis Before 2008 Financial Crisis	170
Table 6.18	Direct and Indirect Effects of Financial Liberalisation to Financial Stability Path Analysis During 2008 Financial Crisis	171
Table 6.19	Direct and Indirect Effects of Financial Liberalisation to Financial Stability Path Analysis After 2008 Financial Crisis	171
Table 6.20	Summary of Hypotheses Results for Control Variables	172
Table 7.1	Summary of Hypothesis for the Direct Relationship Between Financial Liberalisation and Financial Stability	178
Table 7.2	Summary of Hypotheses for the Mediating (Indirect) Relationship Between Financial Liberalisation and Financial Stability	179
Table 7.3	Summary of Hypotheses for the Mediating (Indirect Effect) on the Relationship Between Financial Liberalisation and Financial Stability	183
Table 7.4	Summary of the Hypotheses on the Effect of Mediating (Indirect Effect) Pre, During, and Post Asian Financial Crisis 1997 and 2008 Financial Crisis	184

Table 8.1 Summary of Major Findings	191
Table 8.2 Marginal Effect Between Financial Liberalisation and Financial Stability Mediated by Competition for Conventional Banks	199
Table 8.3 Level of HHI Index	199



LIST OF FIGURES

Figure 2.1	Commercial Banks and Islamic Banks Return on Assets (ROA)	34
Figure 2.2	Commercial Banks and Islamic Banks Return on Equity (ROE))	35
Figure 2.3	Malaysian Banking System Conventional and Islamic Financing	35
Figure 2.4	Total Assets of Conventional and Islamic Banks (RM/Million)	36
Figure 2.5	Financial Liberalisation Index and Interest Rate on Banking Sector	47
Figure 2.6	Milestone of Financial Liberalisation in Malaysia	48
Figure 4.1	Theoretical Framework	110
Figure 5.1	Research Model	145
Figure 6.1	HHI for Islamic Banks in Malaysia	151
Figure 6.2	HHI for Conventional Banks in Malaysia	151
Figure 6.3	Research Model using PLS-SEM	152
Figure 7.1	The Hypothesized Model of the Study	176

LIST OF ABBREVIATIONS

2SLS	Two stage least squares
ASQUAL	Asset Quality ratio
AVE	Average Variance Explained
BAFIA	Banking and Financial institution act
BIMB	Bank Islam Malaysia Berhad
BNM	Bank Negara Malaysia
CAR	Capital Adequacy Ratio
CB	Conventional banks
CB-SEM	Covariance Based – Structural Equation Model
CEE	Central and Eastern European
CR	Composite reliability
EU	European Union
FL	Financial liberalisation
FS	Financial stability
FSMP	Financial sector master plan
GDP	Gross domestic product
GMM	Generalized Method of Moments
HHI	Herfindahl –hirschman index
HTMT	Heterotrait-Monotrait
IB	Islamic banks
IMF	International Monetary Fund
INF	Inflation rate
LENDRATE	Interest rate
LRATIO	Liquidity ratio
LV	Latent variables
OECD	Economic cooperation and development
OLS	Ordinary least squares
PLS	Profit and Loss Sharing
PLS-SEM	Partial least square – structural equation model
ROA	Return on assets
ROAA	Return on assets average
ROE	Return on equity
ROEA	Return on equity average
SADC	Southern African development community
SCP	Structure conduct performance
SEM	Structural equation model
VIF	Variance inflation factor

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Financial stability can be achieved when the process of financial intermediation functions steadily and at the same time there is a confidence in the financial institutions' operations. The banking sector acts as the financial intermediary in mobilizing the fund between the surplus and deficit units. Therefore, Banks act as the financial intermediaries that will translate the monetary policy in the financial system in order to promote financial stability. On the other hand, financial instability can have a repercussion effect on the economic system. Financial instability can lead to a financial crisis or spill over effect to the other parts of the economy. Hence, it is very crucial to have a sound and stable financial system that supports efficient allocations of resources and the dissemination of risk in the economic system. The financial system plays a critical role in the economy. For the economic development and growth, an efficient and stable financial system is vital. Therefore, a disturbance in the financial market due to economic events, such as financial liberalisation , can trigger financial instability.

The global financial system has seen dramatic changes as a result of the shifting from financial repression to financial liberalisation that leads to a capital flows across borders and the financial sector development. Therefore, the shifting from financial repression to financial liberalisation , i.e., the deregulation or financial reform of the domestic financial market will affect financial system's stability due to

the reform in the banking policy. The pace of financial liberalisation needs to be in alignment with the system's ability and capacity in absorbing these changes without the financial stability being undermined (BNM, 1999). Arteta, Eichengreen, and Wyplosz (2001), and Fuchs-Schundeln and Funke (2001) argue that in the financial liberalisation regime, the financial stability can be achieved through a financial development, which facilitates the economic growth of the financial sector and product innovation. On the other hand, financial liberalisation has also been identified as a source of financial instability that leads to a financial crisis (Hamdaoui, 2017). As a result of the global integrated system and pressure from the financial liberalisation process, the financial system now plays a larger role in the pricing and management of economic and financial risk. Financial stability factors such as increasing cross-border integration and the establishment of international financial institutions make financial crises more easily spread across countries. When international financial institutions exist, risks are also transmitted globally, and the effects of competition brought on by financial deregulation can lead to financial system instability. The instability will result in insufficient or excessive competition between financial institutions and new entrants. In a global environment, financial crises can happen quickly, with a speedier spread of contagion. This is because a more integrated system due to financial liberalisation not only will increase the rate of return, but will also increase the systemic risk because such a system will affect the bank behaviour to take the risk by giving more financing to the customers (Cubillas and González, 2014). Eventually, a financial crisis will erupt in the financial system.

The theory of financial liberalisation was originated by McKinnon's (1973) and Shaw's (1973) the seminal works. These researchers contend that in developing countries, financial repression undermines the economic growth. Hence, they propose

the utilization of the policies of financial liberalisation with the aims to promote investments and savings as well as economic growth. Mckinnon (1973) and Shaw (1973) found that financial liberalisation could exert a positive impact on growth rates as interest rate levels raise their competitive market equilibrium, while resources are efficiently allocated. Financial system need to be sound and stable to achieve the economic growth. Therefore, the liberalisation of the financial system is done by the deregulation of the interest rates, removal of the barriers on capital flows, and removal of the barriers on competition among the financial institutions (Allegret, Courbis, and Dulbecco, 2003).

Financial liberalisation will induce competition. The theories that can link competition and financial stability are competition stability and competition fragility. Under the competition fragility view proposed by Keeley (1990), the pressure of competitive environment with a more pressure on profit cause banks to have higher incentives to take more excessive risk. Banks tend to increase in their risk-taking activities by financing riskier projects for higher returns. Therefore, when banks increase their risk, it will reduce the value of the firm, i.e., the charter value. This will result in higher fragility (Beck, 2008). The competition fragility predicts that banking systems that are less competitive tend to be more stable. On the hand, a contrast view posits that more competition will result on stability. Boyd and De Nicolo's (2005) competition stability view argues that with less competition, i.e., a more concentrated market in the loan marker results in a higher cost of borrowing for consumers from the monopoly bank. Therefore, the credit risk to the bank will increase because of a higher interest cost.

Bank will make excessive risk taking especially on the asset side in order to compete among themselves in the banking industry. Banks' excessive risk-taking

behaviour is also due to the selling of financing products from the market to tradable securities or securitization (Marques-Ibanez, Altunbas and Leuvensteijn, 2014). By selling the financing products, the banks will receive cash through securitization and more new transactions for their business can be generated. Banks can give more financing and earning through new financing transaction because the banks need to compete. For this reason, financial liberalisation is usually followed by a boom-bust cycle (Ramirez, 2007) because it will stimulate economic activities supported by lending activities. During this cycle, banks expand their credits by taking excessive credit risk due to the increase in lending activities due to competition. This notion is supported by Gruben, Koo, and Moore (2003), and Daniel and Jones (2007), of which they deduce that in a liberalized regime, it is more likely for banks to face a failure due to financial liberalisation .

Another mechanism of financial liberalisation is the deregulation of interest rates. Based on the financial liberalisation theory (Mckinnon and Shaw, 1978), during the financial liberalisation , the interest rate ceiling should be lifted up and the market forces should be allowed to determine the interest rate. It is expected that there would be a high rise of interest rates. In the theory, it is ideal for the interest rate to increase to stimulate savings and investments that can boost the economic growth. However, by deregulating the interest rate, it will have an exposure on the bank's statement of financial position. This is because banks need to adjust the lending and deposits rate due to the deregulation in order to get the highest net interest margin. This exposure occurs when there is a mismatch of asset and liabilities due to the duration of financing with the adjustment of the interest rate. Therefore, the bank is in a vulnerable position to become more fragile and exposed to a financial crisis.

The financial crisis has fundamentally altered the banking industry's structure. The relationship among financial liberalisation, competition, and interest rate on financial stability has been frequently debated by academics and policy makers after the financial crisis. The 1997 financial crisis in Asian has resulted in concerns on the financial system stability of the Asian countries. The 1997 crisis has brought up the issue of uncontrolled financial liberalisation and the repercussion for the economy system as a whole (Wang, 2007). The 2008 global financial crisis, which is known as a subprime crisis had led to the bank financial crisis and failures. This subprime crisis was contagious to every part of the world. In the event of the subprime crisis, banks were declared insolvent and some Asian countries were also affected by this financial crisis. According to Lukas (2013), financial liberalisation may also induce an excessive risk-taking behaviour and macroeconomic volatility, and thus leads to more frequent crises. Hence, a financial crisis affects the banks when there is financial liberalisation with a weak regulation and supervision during the financial crisis (Angkinand, Sawangngoenyuan, and Wihlborg, 2010). Therefore, the effect of financial liberalisation on financial crisis becomes the main issue that triggers the financial crisis through banks' excessive risk taking (Rokhim and Susanto, 2013; Ionescu, 2013). According to Demirgüç-Kunt and Detragiache (1998), under the pressure of an increased competition, financial liberalisation could trigger the occurrence of crises in the condition that it induces an excessive risk-taking behaviour.

The effect of financial liberalisation on Islamic banks' financial stability versus that of conventional banks is an issue to be further researched. The rulings in Shariah and also the transparency of the contract make the operation of Islamic and conventional banks different in terms of product offering and asset liability structure

(Ashraf, Rizwan, and L'Huillier, 2016). The assets liability structure of a bank will determine the risk-taking behaviour of the bank (IMF, 2011). As an example, for Islamic banks, the concepts of profit and loss sharing (PLS), and non-profit and loss sharing are being used for their assets and liabilities activities. Under PLS the credit risk from the banks can be shifted to the investment holders rather than to the debt holders. According to Čihák and Hesse (2010), on the assets side, the negative shock can be passed to investment depositors using the concept of PLS where the bank will share the risk with the depositors. According to the classic theory, the current interest rate is determined by the amount of money saved and invested. As a result, interest rates are a significant role in determining people's saving habits (Abduh, Omar, & Duasa, 2011). In practise, every change in interest rates in conventional banks affects both conventional and Islamic bank deposits and loans (Ergeç & Arslan, 2013). The research conducted by Kasri and Kassim (2009) support this association that impacts deposits and *shariah* savings loans, providing them with a high rate of return and low interest rates. Therefore, the exposure will be on how the Islamic banks can offer a competitive rate in order to compete in the dual banking environment since both the deposit and financing activities rely on interest rate. According to Usmani (2002), that the same benchmarking was applied by both conventional and Islamic institutions. According to Khatat (2016), the interest rate is an important tool for both conventional and Islamic banking systems since it facilitates the monetary transfer from the conventional to the Islamic system through interest rate channels. Although some studies claim that the profit-sharing structure has little effect on the number of contract, Ergeç and Arslan (2013) discovered that interest rates had an impact on the products offered by Islamic and conventional banks. As a result, the profit-sharing structure used by Islamic banks remains a key variable in the current study.

Thus, with these two parallel systems, it is important to compare between conventional and Islamic banks because they operate within the same regulatory environment, and thus it is vital to look at whether or not the exposure is the same for both types of the banks. According to Ros, Abdul-Majid, and Nor (2011), relatively new international Islamic banks require longer time to compete since they are inefficient, while conventional banks with Islamic bank subsidiaries do not show any improvement in efficiency during financial liberalisation. Therefore, by comparing between conventional and Islamic banks, it could provide the insights into whether with competition, it is favourable or unfavourable for the banks to operate in the dual banking system. Moreover, by having the same benchmarking for the interest rate, Islamic banks are most likely to be affected by the economic events with potential systemic consequences similar to the conventional banks (Sundararajan and Errico, 2002).

1.2 FINANCIAL LIBERALISATION : AN OVERVIEW

As mentioned earlier, the theory of financial liberalisation came from the seminal works of Shaw (1973) and Mckinnon (1973). Both researchers argue, for economic growth, financial repression must be moved into financial liberalisation . The objectives of financial repression are to sustain the stability of the financial system through the provision of loans subsidies to particular sectors, regulation of the banking sector, and controlling of the interest rates. Shaw (1973) and Mckinnon (1973) contend that controlling the interest rates will affect the deposits in terms of negative real interest rates, which discourages savings. Savings are discouraged by lower interest rates. For developing countries, the primary source of investment is savings. Therefore, lack of sufficient funds has distorted investment from private incentives. In