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

BY

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

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JULY 2022

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 تغيرًا 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. أخيرًا، يجب تحديد المنافسة وسعر الفائدة على أفضل مستوى ممكن حتى يمكن الحفاظ على الاستقرار المالي جيدًا 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.

APPROVAL PAGE

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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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ACKNOWLEDGEMENTS

Praise be to Allah for giving me strength and perseverance in undergoing this academic journey, without which I may not have been able to complete this humble journey. His mercy provided me with supervisors, friends, and family who assist me in alleviating the burden of my work.

It is my utmost pleasure to dedicate this work to my dear mother Fauzias Mat Nor, my beloved husband Khairul Azwan bin Manan, my daughter Aisya Zahra and my grandmother Ramlah Miasar who granted me the gift of their unwavering belief in my ability to accomplish this goal. Thank you for your support and patience.

I also wish to express my appreciation and thanks to those who provided their time, effort and support for this project. Finally, a special thanks to Professor Dr Noraini Mohd Ariffin and Associate Professor Dr Zulkufly Ramly for their continuous support, encouragement, and leadership, of which I will be forever grateful.

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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, Sawangngoenyuang, 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