Bank Lending Behavior towards SME during Global Financial Crisis 2008: Evidence from Malaysia

Anisul Mannan Shammo*, Meshkat Mahbub**, Abdul Aziz Yahya***, Mohammed H.A. Aqra**** & Noman Bashir*****

*Persuing MSc Finance, Department of Finance, International Islamic University Malaysia, Kuala-Lumpur, MALAYSIA.
**Persuing MSc Finance, Department of Finance, International Islamic University Malaysia, Kuala-Lumpur, MALAYSIA.
***Persuing MSc Finance, Department of Finance, International Islamic University Malaysia, Kuala-Lumpur, MALAYSIA.
E-Mail: aziz.syauqi[at]gmail[dot]com
****Persuing MSc Finance, Department of Finance, International Islamic University Malaysia, Kuala-Lumpur, MALAYSIA.
E-Mail: aqraiescocus[at]gmail[dot]com
*****Lecturer, Cempaka International School, Kuala-Lumpur, MALAYSIA.
E-Mail: nomanj[at]gmail[dot]com

Abstract—The financial crisis in 2008 caused by the failure of the large numbers of banks in the United States. This financial crisis also gives the impact to the other sector such as SMEs. The financial shock also spread to the other financial institution outside the US like in Europe and Asia including Malaysia. The volume of trade between US and Malaysia decreased gradually over the period of crisis, thus it affected as well to several industries in Malaysia including the financial industry. Therefore, we would like to examine whether the bank lending behavior in Malaysia affected by the global financial crisis in 2008 or not and the impact of the crisis on the lending towards SME in Malaysia. The objective of the research is conventional and Islamic commercial banks and investment banks in Malaysia. The time series data used in this research is quarterly data from 2006 till 2010. The data is obtained from Bank Negara Malaysia (BNM), sources. This research involves the descriptive analysis to analyze the study. The result shows that the lending from conventional commercial and Islamic banks to large businesses fell slightly by 0.09% in the third quarter of 2007 but it contracted shortly in the next quarter by 2.5%. SME businesses are not influenced by the global financial crisis in 2008 even in peak quarter of financial crisis, they increased gradually by 3.9% instead. Conversely, the lending from Investment bank in Malaysia fell by 49% during peak quarter of crisis.

Keywords—Bank Lending Behavior; Financial Crisis; Investment Bank; Malaysia; SME.

Abbreviations—Non-Performing Loan (NPL); Small and Medium-sized Enterprise (SME).

I. INTRODUCTION

The financial crisis in 2008 started due to failure of mortgages debt repayment by subprime creditors. At that time, the biggest investment bank in United States, Lehman brothers announced bankruptcy and the failure also followed by large numbers of banks in the US. The Federal Deposit Insurance Corporation has closed about 465 banks in the US from 2008 to 2012 [The FDIC, 26]. The failure of large numbers of the banks also affected some SMEs in the US and that attracted the attention of policymakers. In 2010 the US President Barak Obama signed the Small Business Jobs Act which created the small business lending fund programmed to raising fund for the small business in the USA. Also in the United Kingdom, they put pressure on banks to increase or not to reduce the lending for small and medium-sized firms. Mainly banks use relationship lending as the main lending tools for the SMEs. Also, arm’s length lending or transaction based where using hard assets as collateral is more cost effective [Berger & Udell, 4; Berger, 5]. It also allows big banks and foreign banks to lend to SMEs [Beck et al., 12].

The financial crisis also shock the rest of the world and it weakening several financial industries outside the United States. Several countries in Southeast Asia were affected by the global financial crisis of 2008 including Malaysia. The
trade between US and Malaysia has significantly dropped during peak quarter of the financial crisis. It can be seen from the figure 1.1 which depicts that trade from Malaysia to the United States decreased gradually from 2006 to 2008 by 15.8% and it declined sharply by 43.11% in 2009 relative to the beginning year, therefore the effect of the financial crisis in U.S cannot be avoided by Malaysia. Furthermore, this condition also had domino effect on several industries in Malaysia including the financial sector.

Financial industries in Malaysia are listed as the second largest industry in Southeast Asia after Singapore. During the crisis, there were several banks in Malaysia that got affected by the financial crisis. Some of the Malaysian conventional banks got badly hit and government intervention needed to bailout them [Abdulle & Kassim, 15]. On the other hand, Islamic banks demonstrated some stability even though their performance lost some pace but not as bad as conventional banking systems [Kassim & Shabri Abd. Majid, 9]. During the crisis, liquidity level in the banking sector is quite high with low non-performing loans in Malaysia (See Table 1). This situation gives financial stability to government. Although the investment level was quite poor but Bank Negara Malaysia [21] managed to keep non-performing loan at a low level. In March 2007 NPL (non-performing loan) over total loan was 4.4% but it decreased to 2.2% in December 2008 and June 2009. This fall offers the government space to implement expansionary monetary policies to increase domestic demand. Although NPL condition was good but due to fall in aggregate demand the environment for investment also deteriorated. Thus, it is very interesting to study further about the bank lending behavior during the Global Financial Crisis 2008. This research also intends to find out the impact of the financial crisis on SMEs in Malaysia.

![Figure 1: Trading Data between U.S.A and Malaysia from 2006 to 2016](Data were taken from U.S.A Statistical Bureau [25])

Table 1: Non-Performing Loans, Malaysian Banks, 2007-2009 (RM Million)

<table>
<thead>
<tr>
<th>Month</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mar</td>
<td>Jun</td>
<td>Sep</td>
</tr>
<tr>
<td>Non-Performing Loans</td>
<td>49631</td>
<td>46641</td>
<td>44074</td>
</tr>
<tr>
<td>Non-Performing Loan/Total Loans (%)</td>
<td>4.4</td>
<td>4.1</td>
<td>3.5</td>
</tr>
</tbody>
</table>


According to the background above, this research will examine the effect of the 2008 Global Financial Crisis on the bank lending activities in Malaysia. This research will investigate the lending pattern in both conventional and Islamic commercial and investment banks. Also, it will show that, whether the Financial Crisis of 2008 affected the lending activities to SME in Malaysia.

## II. Literature Review

### 2.1. Lending Behavior during Crisis

There are several studies relating to this research which has been done before. Ivashina & Scharfstein [8], examined the bank lending behavior in the United States during the financial crisis of 2008. The study found that new debt to the large borrowers decreased by 47% in the peak of the financial crisis in fourth quarter 2008 comparing to credit boom of the second quarter of 2007. And in the last quarter of 2008, the new debt for real investment such as working capital and expenditures fell by 14% comparing to the credit peak in 2007 but it contracted nearly relative to the credit boom in new lending for restructuring purposes. In addition, the other study has been done by Rauch [11], which examines the bank fragility and lending during financial crisis 2008 in state banks and federal banks of United States. The study found that in the escalation of the financial crisis in August 2007 both state banks and federal banks reduced their lending growth by 2.5% and 2.1% respectively in aiming to minimize the potential balance sheet fragility.

Furthermore, another research has been done by Kapan & Minou [24], they examined the balance sheet strength and bank lending during global financial crisis 2008. The research found that the bank with strong balance sheet position had better ability in maintaining the lending during financial crisis 2008. On the other hand, they found that banks which were more dependent on market funding and had lower liquidity had reduced their lending more than the other banks. Thus, the strong balance sheet position is an important factor for the banks to mitigate failure in the financial crisis. Puri et al., [13], researched about the global retail lending after global financial crisis 2008 and the effect into supply and demand side of bank lending in Germany. The study depicted that there are some contractions of lending supply along with the decreasing the demand for loan and it is no different among affected banks or non-affected banks. The research also found that the affected banks rejected more loans than the non-affected banks.

In addition, another research about the effect of financial shocks during the global financial crisis in 1997 and 2007 towards the conventional banks and Islamic banks in Malaysia has been done by Kassim & Shabri Abd. Majid [9].
The study found that during the financial crisis in 1997 the lending volatility in the conventional bank was much higher than the Islamic financing as well as in global financial crisis in last quarter 2007 the lending volatility of conventional bank also depicted much more volatility than the Islamic finance. The post-crisis research also becomes an important thing to learn in aiming to make some improvements.

2.2. SME Financing during Financial Crisis

This issue has been done by Cowling et al., [22], which examined the bank financing access to the SMEs business after the global financial crisis in the United Kingdom. The research found that older firms and those with a higher risk rating, and a record of financial delinquency, were more likely to have a demand for external finance. The opposite was true for women-led businesses and firms with positive profits. In general, finance was more readily available to older firms post-GFC, but banks were very unwilling to advance money to firms with a high-risk rating or a record of any financial delinquency. It is estimated that a maximum of 42,000 smaller firms were denied credit, which was significantly lower than the peak of 119,000 during the financial crisis [Chen & Lin, 19].

Cowling et al., [16], studied that larger corporations and those experiencing declines in sales were much more likely to maintain or grow their demand for external finance. The opposite was the case for women-led organizations. Typically, finance turned into extra quite simply available to larger and older firms at some stage in the recession. It is the general condition of the small firm during the crisis period. Consequences [Soininen et al., 14] primarily based on a sample of almost two hundred small and medium-sized firms indicated that the distinctive dimensions of the EO could have diverging consequences on how companies are impacted during the recession. Therefore, the more progressive and proactive the firm is, the less its operations are stricken by the recession and the greater risk-taker is the company, the more its profitability tormented by the recession.

Casey & O’Toole [18], said that the use of euro region firm-degree records because latest monetary crisis, they check whether financial institution lending constrained small- and medium-sized organizations (SMEs) are more likely to use or practice for opportunity outside finance consisting of exchange credit score, informal lending, loans from different agencies, market financing (issued debt or fairness) and state grants. Their constraint signs pick out both credit score-rationed companies and firms that self-ration because of high lending expenses. They locate that credit-rationed corporations are more likely to use, and apply for, trade credit score. This increases with company size and age. Additionally, they find that limited companies are more likely to use casual lending or loans from different agencies, however, discover no evidence that bank-confined SMEs observe for, or use, marketplace finance. Smaller, self-rationing borrowers are much more likely to apply for grant finance. ultimately, they discover that corporations denied credit for operating capital tend to turn to exchange credit, while informal and inter-enterprise lending tends to act as an alternative for bank funding loans.

De la Torre et al., [7], stipulated that while large and overseas banks are generally no longer interested in serving SMEs, small and niche banks have an advantage because they could conquer SME opacity. Their studies indicate that there’s a gap between this view and what banks surely do. Banks understand SMEs as a middle and strategic commercial enterprise and appear properly-located to expand their links with SMEs. The intensification of financial institution involvement with SMEs in diverse emerging markets is neither led by small or niche banks nor especially dependent on courting lending. Furthermore, it has no longer been ruined with the aid of the 2007–2009 crisis. Instead, all sorts of banks are catering to SMEs and massive, more than one-provider banks have a comparative gain in supplying an extensive range of products and services on a massive scale, via the use of recent technology, commercial enterprise fashions, and chance control structures.

2.3. The Determination of Banks’ Default

Godlewski [1] confirmed that the performance of internal bank policy or central bank monitoring might cause the source of excess credit risk thus lead to increasing bank default risk. This banking environment consists of some interrelated or connected variables which negatively contributed to bank defaults. So, in their research, country’s economy is the main factor to override the banking default. Moreover, Godlewski [2, 3], confirmed that in specific, the implementation of law seems to be a vital component of a well-organized regulatory atmosphere, which may decrease unnecessary risk taking incentives.

Eichler & Sobański [23], highlighted about default risk on the Eurozone. They measure bank default risk of the bank with stock market-based distance to default, national political factors highly cause of the instability of Eurozone banks. Moreover, banking unity is likely to lower administratively determined brittleness of Eurozone banks. They study the impact of national electoral cycles, the control of the management as well as the management’s party moral arrangement expressively distress the stability of banks in the Eurozone. Moreover, they show that the influence of countrywide politics on bank default risk is more noticeable for both large and weakly capitalized banks.

Godlewski [1], found that principle results of the first warning signals models that follow the artiodactyl categorization. The proxy variables of bank solvability, assets’ quality and liquidity, significantly loan losses provisions, management quality, profit, and arbitration rate have a negative impact on the annual likelihood of banks’ default. Also, the position of the primary holding, deposits insurance system theme, regulation and prudent oversight, and market structure have a vital impact on bank’s default likelihood in rising market economies.

Lin et al., [10], discussed about the impact of nationalization. The negligence of governmental regulatory
bodies led to greater volatility in the banking sector. They evaluated that the nationalization of the banking sector was an event-dependent and structural breakdown framework. Their initial feature is the presence of the interruption and fatigue of capital return and volatility caused by structural change. They showed that bank’s return interruption and volatility fluctuation are done by occupying bank’s nationalization which leads to increase the bank’s interest margin and default risk. They concluded this might be the reason of high return volatility structural break.

Brancati & Macchiavelli [17], discovered indication that precise facts act as a corporation expedient which decreases lenders’ willingness to roll over debt to a financial institution, for this reason increasing each its default risk and its vulnerability to adjustments in expectations. Moreover, in another paper, Brancati & Macchiavelli [20], mentioned that starting from September 2007 the banking system worldwide was turned upside down; both level and volatility of banks’ CDS spreads experienced an eightfold increase that can hardly be motivated by changes in fundamentals. The recent Global Games literature proposes a theory that explains banks’ default without resorting to panics. They assessed the empirical relevance of this literature and find that dispersion of beliefs plays a key role in affecting default risk. More precise information greatly amplifies the reaction of CDS spreads to market expectations; for highly leveraged banks, this sensitivity is four times larger if the market receives precise signals instead of imprecise ones. These findings suggest that dispersed information and higher order beliefs are essential to understanding what may look like an overreaction of market participants to news.

III. FINDINGS AND DISCUSSION

We use time series data from the first quarter of 2006 to last quarter of 2010. We obtained it from Bank Negara Malaysia (BNM) the central bank of Malaysia [21]. The object of our research is commercial banks, Islamic banks and Investment banks in Malaysia. To analyze the study, we use descriptive analysis by comparing the amount of lending and categorized it by purpose during the research period.

3.1. Commercial and Islamic Bank Lending Behavior

The Figure 2 above depicts that there is no significant negative impact of the global financial crisis to the total lending of commercial and Islamic banks particularly during the peak quarter of crisis (in the fourth quarter in 2007). The lending decreased by 0.09 % or by RM - 590 Million during the fourth quarter of 2007 and contracted nearly in the first quarter of 2008 by 2.5% or by RM 16,502 Million. This result shows that there were a few impacts to the commercial and Islamic banks as a response to financial shock in peak quarter of crisis to avoid the global failure but they increased the lending soon in the first quarter of 2008.

This result shows that the conventional and Islamic bank in Malaysia are less affected by the global financial crisis, even there were decreasing slightly in the fourth quarter of 2007 to anticipate great fall in lending, but after that, the lending activities climbed shortly. This fact proves that the commercial and Islamic bank have good management in mitigating the financial shock. This result is confirmed by the research which has done by Kassim & Shabri Abd. Majid [9], which explained that Malaysian banks have well experienced the financial shock. This result shows that the conventional and Islamic bank in Malaysia are less affected by the global financial crisis, even there were decreasing slightly in the fourth quarter of 2007 to anticipate great fall in lending, but after that, the lending activities climbed shortly. This fact proves that the commercial and Islamic bank have good management in mitigating the financial shock. This result is confirmed by the research which has done by Kassim & Shabri Abd. Majid [9], which explained that Malaysian banks have well experienced the financial shock.

On the other hand, refer to Figure 3 the lending activities by commercial and Islamic banks to the small medium enterprise (SME) which proxies by lending to shop houses and commercial complexes incline gradually even in the peak of financial crisis condition in last quarter of 2007, the lending increased by 3.9%. This fact shows that the SME businesses in Malaysia did not affect by the global financial crisis due to strong domestic consumption in Malaysia which allowed SMEs to survive and generate profit during global financial crisis. Thus, the banks trust this sector by giving the loan even during the peak quarter of crisis. This finding contradicts with the research which has been done by Cowling et al., [22], which stated that there was a declining of bank lending to SMEs in U.K by 52% during the crisis in 2008.

3.2. Investment Banks Lending Behavior

Refer to Figure 4, the investment bank in Malaysia is the most bank which affected more by the global financial crisis 2008. It can be seen from the total lending amount which fell by 49 % or RM. 4,421.9 Million in the second quarter of 2008. However, it increased slightly by 11.12% or RM 502 Million in the last quarter of 2008 and it keeps stagnant until the end of the quarter of 2010. The sector that was
significantly affected by the financial crisis was the lending on construction sector which fell about 76% and following by working capital and other purposes which fell by 59% and 58% respectively.

This finding depicts that the investment bank in Malaysia is more vulnerable during financial crisis compared to the commercial banks and Islamic banks. Acharya et al. [6], have identified two major reasons that caused investment banks to be affected the most in the financial crisis 2008, first, they placed assets such as securitized mortgages under the off-balance sheet, therefore, they did not have a significant capital to overcome the financial distress. Second, the capital regulation allows them to reduce the amount of capital which they held against assets that remained on the balance sheet. Moreover, the decrease in lending activities in investment banks was caused by the systemic failure of the securitization market, which had been triggered by the housing bubble in subprime sector.

IV. Conclusion

The financial crisis in 2008 caused the failure of the large numbers of banks in the United States. This financial crisis also impacted other sector such as SMEs in the US. The financial shock spread to the other financial institution outside the US like in Europe and Asia including Malaysia. The amount of trading between the US and Malaysia decreased gradually over the period of crisis, thus it affected several industries in Malaysia including financial sector.

We found that the lending from commercial and Islamic banks to the large businesses fell slightly by 0.09% in the third quarter of 2007 but it contracted shortly in the next quarter by 2.5%. SMEs are not influenced by the Global Financial Crisis in 2008 even in peak quarter of financial crisis, they increased gradually by 3.9% instead. Conversely, the lending from Investment bank in Malaysia fell by 49% during peak quarter of crisis. This finding shows that the Malaysian banking sector had good management in facing financial distress during 2008 even the lending of commercial and Islamic banks slightly decrease in last quarter 2007 but it contracted nearly as the first quarter of 2008. SMEs in Malaysia have not been affected by the crisis, but the lending to SMEs increased during the period of crisis. This indicates that Malaysia had strong economic fundamental during that time.

In contrast, the investment bank demonstrated negative response during the peak of the crisis, this finding shows that investment banks cannot avoid the financial crisis due to the nature of its business which involve in buying and selling securities in the financial market, and the financial market was the most affected market during financial crisis 2008. The only way to overcome this mitigation risk, is for the authority to be vigilant and make prudent regulations regarding investment banks particularly in term of capital adequacy, therefore the investment bank could avoid a huge loss in the future.

REFERENCES


[26] The FDIC (https://www.fdic.gov/)

Anisul Mannan Shammo received B.B.A degree in Finance from International Islamic University Malaysia. He is currently pursuing his MSc. Degree in Finance from International Islamic University Malaysia. He published some journals in the field if Islamic Finance and Islamic Bank. He has already completed his academic research with distinct grade in the area of International Finance. His area of interest is risk analysis and stock market volatility measurement.

Meshkat Mahbub received B.B.A degree in Finance and Accounting from North South University Bangladesh. He is presently pursuing his MSc. Degree in Finance from International Islamic University Malaysia (IIUM). Currently he is doing research on “The development of the financial sector impact on real sector among ASEAN countries. He published some journals in the area of Islamic Finance, Islamic Bank, Human Resource Management, International Finance and Marketing.

Abdul Aziz Yahya is a master candidate in finance of International Islamic University Malaysia, he finished his bachelor degree in Islamic economics program in Tazkia University Indonesia in 2012. He is interested on Islamic economics & finance research.

Mohammed H.A. Agra, a Palestinian Student in the field of economics and finance. Currently doing my master degree in finance science and contributing in the Non-governmental affairs by being involved in the administrative work in one of the biggest Islamic NGOs called RAF. His goal in life throughout his study life and after is to evolve the thought and theory that is used in most of the Islamic reliefs buddies or NGOs from being consumptive to being constructive through a revolutionary model of Islamic waqf.

Noman Bashir completed his M.Sc. in Islamic Finance from INCEIF (International Centre for Education in Islamic Finance) and Bachelor of Economics from IIUM (International Islamic University Malaysia). Currently he is teaching Economics and Global perspective as a lecturer in Cempaka International School, KL, Malaysia.