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Analyzing Performance of Islamic and Conventional Bank in Southeast Asia: The Firm Size View

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ABSTRACT

This paper examines how the firm size of Islamic and Conventional bank different in performance of efficiency, stability and asset quality. The result of the study is aimed to see the extent of Islamic banks compete with conventional banks in the ASEAN context. The type of this research is a comparative study. The data is obtained from 31 conventional banks and 17 Islamic banks in Southeast Asia over the period of 2013-2017. Collected data are analyzed using DEA Analysis, Loan Loss Provision, Loan Loss Reserves and Z_Score. The findings showed that there were differences in efficiency and stability between conventional banks and Islamic banks based on firm size.

ABSTRAK

Penelitian ini melakukan pengujian pengaruh perbedaan ukuran perusahaan pada bank syariah dan bank konvensional terhadap efisiensi kinerja, stabilitas dan kualitas aset. Hasil penelitian ini bertujuan untuk melihat sejauh mana bank syariah bersaing dengan bank konvensional dalam konteks ASEAN. Jenis penelitian ini adalah berupa studi komparasi. Data diperoleh dari 31 bank konvensional dan 17 bank syariah di Asia Tenggara selama periode 2013-2017. Data yang terkumpul dianalisis menggunakan Analisis DEA, Provisi Kerugian Pinjaman, Cadangan Kerugian Pinjaman, dan Z_Score. Hasil penelitian menunjukkan bahwa terdapat perbedaan pada tingkat efisiensi dan stabilitas antara bank konvensional dan bank syariah berdasarkan ukuran perusahaan.

INTRODUCTION

The popularity of Islamic banking (IB) as an alternative of financing among Muslim society has been attracting the researcher, policy maker, and customers. Indeed, the awareness of *sharia* awakening among Muslim makes Islamic banking as a prominent choice to get financial transactions. However, there is a concern whether Islamic banks have features as good as conventional banks (CB) or whether Islamic banks offer competitive advantage as well as conventional banks.

Islamic banks, peculiarly in Muslim-majority societies, have high competitiveness to advance. However, the position of conventional banks which is still dominated even in Islamic region cannot be neglected (Rashid & Jabeen, 2016). Thus, analyzing the added value carried by Islamic banking system compared to conventional bank would be an interesting matter (Alghfais, 2017). The productivity of Islamic banking should be investigated, one of which by research, to catch up with conventional banks.

The issue of stability of Islamic banking against economic crisis needs to be taken into account as the strength features. The financial crisis in Indonesia in 1998 brought down most of conventional bank and left a surviving Islamic bank. Likewise, the worldwide financial meltdown due to the US subprime mortgage crisis is resulted to the financial and economic collapsed in America (Miah & Uddin, 2017). Moreover, in MENA (Middle East and North Africa) countries prove that the Islamic bank have survived the global financial crises in 2007-2009, whereas many conventional banks were suffering due to the crisis (Kassim & Shabri, 2010). Therefore, Islamic banks have begun to recognize its existence and played an important role as crises-resistant bank in the midst of conventional financial fragility.

Comparative study of Islamic bank and conventional bank become appealing things to study considering its characteristics. There were some factors contributing the performance of banks, namely, bank-specific, industry-specific, financial, and macroeconomic factors (Rashid & Jabeen, 2016). In this study, it's highlighted the financial factors of Islamic bank versus conventional bank in three areas, they are efficiency, stability and asset quality. This research takes an international study as proposed by Abdul-Majid, Saal, & Battisti (2010) to look for Islamic banks position toward conventional banks in global perspectives.

Analyzing the comparative issue in cross countries is necessary to enrich the data; so that, it might appear other factors that have impact on competitiveness of Islamic and conventional bank (Čihák & Hesse, 2010). Thus, Southeast Asia countries are chosen to be investigated since the industry of Islamic finance in Asia, particularly in Southeast Asia is increasing substantially over the last 2 decades (Komijani & Taghizadeh-Hesary, 2019). These studies need to be carried out considering the scarcity of literature about financial performance comparing those two banks in Asean.

The bank's size is interesting matter to asses the default risk that may happen in Islamic and conventional bank (Čihák & Hesse, 2010). The international study which investigates how the firm size affects the efficiency, asset quality and stability relatively has little empirical analysis. A number of studies seek these performances in individual countries, like studies conducted by Farooq, van Wijnbergen, & Zaheer (2015), Wahid & Dar (2016), Sakti & Mohamad (2018), and Abrar, Ahmed, & Kashif (2018).

A study from Sakti & Mohamad (2018) found that in Indonesia, large Islamic banks are more stable than medium and small Islamic banks. Different results were examined by Wahid & Dar (2016) in Malaysia; large Islamic banks are less stable than conventional banks. On the contrary, Farooq et al. (2015) revealed that large conventional banks are more stable than large Islamic banks in Pakistan. Overall, seeking the financial performance among these variable has not yet been analyzed in consistent. Even more previous studies just investigate in single country. The international study will asess how the firm size give substantial comparative in these banks.

This paper tries to fill the gap in the empirical literature of Islamic banking comparing to conventional banking. To our knowledge, it is the first paper which highlited the Asean analysis of how the firm sizes affect these two banks in efficiency, asset quality and stability. Analyzing the issues with size is interesting to understand the advantages and risk differentiation on two banking paradigms. Then, cross countries research is necessary since comparing the banks in individual countries are not adequate to decide financial factors affected to these banks.

The structure of this paper is as follows. On the following section, it explains the literature review and hypotheses development. Then, the section is continued to describe the

methodology, the variables, and data used in the study. Next, the sections present the result and discussion. The last section summarizes the conclusion of the study.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Motivated by Kumar, Rajan, & Zingales (2001) which stated the determinant factors of firm size, he related to the theory of the firms (Holmstrom & Tirole, 1989) which classified into organizational, technological and institutional. In technological theory, it's claimed the production process influence the scale of the firm. Productions inside the firms process the technology and human capital would result to the large firms. In organizational theory, it focused on process control that the quantity of physical asset utilized by the owner is one of firm size determinants. Then, institutional theory related to environmental influences.

Kumar et al. (2001) group this channel into regulatory and financial theory. In regulatory theory, the strong law will result to small firms. Then the financial theory explains that the external financial will be correlated to the scale of the firm. This study seeks how the scale of firms may impress in efficiency, stability and asset quality differentiation between Islamic and conventional bank.

Efficiency is related to bank's ability to turn resources into revenue of the bank. The efficiency can be observed from the higher levels of output productivity than the input. Regarding to cost, efficiency determines how the banks maintain the cost in minimal level (Karim, Chan, & Hassan, 2010). Alghfais (2017) states that the efficiency of conventional bank was 20% better to Islamic Banks counterpart. Islamic banks show less efficiency than conventional banks since the compulsion to maintain such level of demand-deposit. Whereas, the conventional banks do not have such requirements, so the capital can be invested more to generate revenue (Miah & Uddin, 2017). Another reason comes from the complexity of the standardization of Islamic products (Alghfais, 2017). Products that are forbidden and high risk are excluded for it's not accordance to *sharia* law (Komijani & Taghizadeh-Hesary, 2019). Thus, the operational costs of Islamic banks are rising due to the complexity of the banking products (Beck, Demirgüç-Kunt, & Merrouche, 2013).

Stability in simple words determines the level of banks'

solvency (Shaikh, Sharif, & Arif, 2016). Furthermore, the bank's ability to survive in external and internal economic conditions or the bank's ability to fulfill its obligations under the most difficult conditions, are some conditions where banks categorized as stable (Miah & Uddin, 2017). Islamic banks have better stable performance to conventional banks for several reasons. Beck et al. (2013) found that the Islamic banks' stability is related as a result of not involving in risky financial products such as interest and other trading securities.

Furthermore, Miah & Uddin (2017) noted that Islamic banks are more stable because they separate funds into two deposits, namely demand deposits (short-term) and investment deposits (long-term). The demand deposits are reserved, while investment deposits are used as a financing. Unlike conventional banks, banks obtain short-term loans which are then distributed for long-term financing. This condition is risky due to incapability between the source of funds and the use of funds.

The bank's performance in obtaining advances and placements proves the ability of the firm to manage the quality of its assets (Shaikh et al., 2016). Analyzing asset quality of the bank relates to risk management and form of reservation, asset valuation and lending. Beck et al. (2013) measures the asset quality by using ratio of loan loss reserves (LLR), loan loss provision (LLP) and non-performing loans (NPL). LLR determines the ability to maintain sufficient reserves for possible assets defaults. While, NPL determines the rate of bank defaults on loans and advances (Beck et al., 2013).

Superiority of asset quality is demonstrated by conventional banks due to the large number of professional financing and management resources. In fact, Islamic banks must struggle to manage superior management, investment, liquidity and capital (Aziz, Husin, & Hashmi, 2016). Furthermore, diversification of portfolio investment of conventional bank financing sources requires Islamic banks to diversify investment portfolios so that asset quality is better (Alghfais, 2017). All of these delays must be pursued by Islamic banks, in order to position their asset quality as well as conventional banks.

As an increasing the role of Islamic financial institution, the research developed on Islamic banking has also grown. Several studies related to efficiency, stability and asset quality have conducted to analyze the comparative outlook of Islamic banking and conventional

banking. Related to efficiency, Alghfais (2017) found that Islamic banking had better efficiency to conventional banking. In contrary, some studies found that conventional banks were more efficient in managing costs than Islamic banks (Beck et al., 2013; Miah & Uddin, 2017; Shaikh et al., 2016). Furthermore, Islamic bank was found to be more stable than Conventional bank (Beck et al., 2013). In contrast, Wahid & Dar (2016) found that Islamic bank was less stable than conventional bank. Related to asset quality, Islamic banks were found to have superior asset quality than conventional bank (Alghfais, 2017; Aziz et al., 2016; Beck et al., 2013; Shaikh et al., 2016).

The comparative outlook of bank performance between Islamic banks and conventional bank can be seen on others factors, namely the size of the firm. A study from Sakti & Mohamad (2018) found that in Indonesia, large Islamic banks are more stable than medium and small Islamic banks. Different results were examined by Wahid & Dar (2016) in Malaysia, large Islamic banks are less stable than conventional banks; whereas small Islamic banks are more stable than small conventional banks. On the contrary, Farooq et al. (2015) revealed that large conventional banks are more stable than large Islamic banks.

In addition, Cihak & Hesse (2010) noted several comparisons between Islamic banking and conventional banking based on the size of these banks. First, large conventional banks are no more financially stable than small Islamic banks. Second, compared to large Islamic banks, it turns out that large conventional banks are stronger financially than large Islamic banks. The final result is comparing between Islamic banks, where small Islamic banks are financially stronger than large Islamic banks. Abrar et al. (2018) also revealed several results related to Islamic banks and conventional banks from the size factor. They found that large conventional banks are declared to be more financially stable than large Islamic banks. Furthermore, small conventional banks are more stable than small Islamic banks. This study will then evaluate the impact of bank size to compare the performance of Islamic banks and conventional banks.

The hypotheses proposed in this study are:

H_{1a}: There is a variation in efficiency between large IB and large CB

H_{1b}: There is a variation in stability between large IB and large CB

H_{1c}: There is a variation in asset quality between large Bb and large CB

H_{2a}: There is a variation in efficiency between large IB and small CB

H_{2b}: There is a variation in stability between large IB and small CB

H_{2c}: There is a variation in asset quality between large IB and small CB

H_{3a}: There is a variation in efficiency between small IB and small CB

H_{3b}: There is a variation in stability between small IB and small CB

H_{3c}: There is a variation in asset quality between small IB and small CB

H_{4a}: There is a variation in efficiency between large IB and small IB

H_{4b}: There is a variation in stability between large IB and small IB

H_{4c}: There is a variation in asset quality between large IB and small IB

METHOD

The research is comparative descriptive study to compare the similarities and differences between two or more phenomena. The study seeks the comparisons of Conventional banks and Islamic banks in Southeast Asia. The nations included in this study are Indonesia, Malaysia, Brunei Darussalam, Philippines and Thailand in 2013-2017. The sampling technique was purposive sampling based on researcher's criteria. The sampling must have financial reports for 5 years and complete data to measure variables. The data used are annual reports from two groups of banks. There are 47 banks to be analyzed, consisted of 30 conventional banks and 17 Islamic banks in Southeast Asia.

The test hypotheses, this study uses the MANOVA statistical test that is non-parametric test to compare two population means originating from the same population. The data of efficiency, stability and asset quality from the sample will be compared between Islamic and Conventional Banks. Then, the firm size will compare both data to see the differentiation.

DEA or Data Envelopmental Analysis of inputs and outputs is used to measure the efficiency. In this regard, typically on banking sector research, it uses two outputs, they are loans and non interest income and three inputs, namely total deposits, personnel expenses and fixed assets. The efficiency by using DEA analysis refers to research done by Said (2013), Rosman, Wahab, & Zainol (2014) and Sakti & Mohamad (2018). DEA is proposed to examine the efficiency of every unit that provides the maximum

ratio of input and output. In other words, efficiency indicates the more outputs than the inputs produced.

The Z score measures the bank stability, as proposed by Čihák & Hesse (2010), Beck et al. (2013), Miah & Uddin (2017), Sakti & Mohamad (2018). The higher Z score represents the higher of bank Stability. The formula is given by:

$$z = \frac{ROA + CAR}{SD\ ROA}$$

ROA measures the return on asset, while CAR defines as the capital to asset ratio and SD ROA refers to standard deviation by showing the fluctuation of ROA. The Z score model points the amount of standard deviation that must be obtained by the return on assets before the bank's equity capital dissolves. Z score shows the multiples of bank equity buffering before falling to default status. A high Z score is preferred because it shows a low risk of bank failure.

The Asset quality, then, is examined by calculating the Loan Loss Reserves (LLR) and Loan Loss Provision (LLP) as suggested by Beck et al. (2013) and Sakti & Mohamad (2018). These ratios are scaled using the gross loans. In previous research, they added Non Performing Loans (NPL) to measure asset quality. However, this study only used LLR and LLP, due to the difficulty of obtaining data on NPL in the financial statements of the two banks.

The bank size and the type of banks are important factors seeks in this study. The size of the bank is used to divide the scale of the bank, that is large Islamic and conventional bank, and small Islamic and conventional bank. The total assets amount US$ 2 billion is used as the cut-off point (Farooq et al., 2015). The large banks have asset more than US$ 2 billion and the small banks have assets below US$ 2 billion. Since the financial reports are presented in different currencies, this study translates the respective country's currencies into USD on the financial reporting date. This research uses the mid rate to translate the country's currency. The data of the the currency is derived from the website of each country's central bank.

RESULT AND DISCUSSION

This study analyses the efficiency, stability and asset quality in Southeast Asia. There are five countries included in the research, consist of 47 banks; they are 30 conventional banks (CB) and 17 Islamic banks (IB). However, due to the limitation of the data, there are no sample of Islamic bank in Thailand and Philippine (N/A or not available).

Table 1. Descriptive Statistics of Comparing IB (Islamic Bank) and CB (Conventional Bank)

	Size	Mean	Std. Deviation	N
DEA	Small CB	0,5127	0,26800	35
	Large CB	0,6112	0,20258	115
	Small IB	0,8119	0,19415	36
	Large IB	0,7450	0,27384	49
	Total	0,6552	0,24679	235
Z-Score	Small CB	31,0728	29,02293	35
	Large CB	16,3205	11,14915	115
	Small IB	6,5902	4,72066	36
	Large IB	5,1173	4,34545	49
	Total	14,6911	16,15203	235
LLR	Small CB	2,5813	6,43088	35
	Large CB	0,0377	,11534	115
	Small IB	0,0587	,13453	36
	Large IB	0,0254	,02512	49
	Total	0,4172	2,61563	235
LLP	Small CB	2,6024	6,42552	35
	Large CB	0,0666	0,13800	115
	Small IB	0,0523	0,08289	36
	Large IB	0,0533	0,04922	49
	Total	0,4393	2,61384	235

Source: Data Processed (2019)

From the table above, it is found that small Islamic bank is the most efficient bank among the categorized sample, that is 0,8819. Large Islamic bank is more efficient than large conventional bank, that is 0,7450 and 0,6112. Large conventional bank is less efficient than small Islamic bank, that is 0,8119 (Ib) and 0,6112 (Cb). Then, small Islamic bank is more

efficient than small Islamic bank, that is 0,8119 and 0,5127. Lastly for efficiency, large Islamic bank (0,7450) is less efficient than small Islamic bank (0,8819).

Stability is measured by Z_Score. From the table 1, it is found that the small conventional bank is the most stable among bank's categorized sample, that is 31,0728. Large Islamic bank (5,1173) is less stable than large conventional bank (16,3205). Then, large conventional bank is more stable than small Islamic bank, that is 16,325 and 6,5092. Small Islamic bank is more stable than small Islamic bank, that is 16,325 and 31,0728. Finally, large Islamic bank (5,1173) is less stable than small Islamic bank (6,5092).

Asset quality is proxies by LLR and LLP. From these two measurements, small conventional banks have better asset quality than the others, they are: 2,5813 for LLR and 2,813 for LLP. From the LLR, large Islamic bank have lower asset quality than large conventional bank, that is 0,0254 and 0,0377. Similar with LLP, large Islamic bank have lower asset quality (0,053) than large conventional bank (0,0666) . Then, small Islamic banks have better asset quality than large Islamic banks. It is showed by the LLR that small Ib has index 0,0587 and large Cb has index 0,0377. In contrary, from LLP, it is found that large conventional bank (0,0666) have better asset quality than small Islamic banks (0,0523). From the index LLR, small Islamic banks (0,0587) have better asset quality than large Islamic bank (0,0254). While, small Islamic banks (0,0523) have slightly lower asset quality than large Islamic bank (0,0533). Then comparing the index of LLR and LLP, small conventional bank have better asset quality than small Islamic bank.

This study employed MANOVA that assumes each dependent variable has the same variance for all group. However, Levene's test showed that dependent variables are significant at 0,000 which means they have different variances. Thus, it may violate the MANOVA assumption. Ghozali (2016) stated that this variable still robust and can be analyzed even thought the result violates MANOVA assumption. Therefore, the variables of efficiency, stability, and asset quality would be analyzed by using MANOVA – PostHoc/Games-Howell.

Table 2 summarizes the outcomes of the study that explain the differences between the variables on the size of the banks. From the analysis, it can draw the results that no significant difference of efficiency between small conventional banks

Table 2. Multiple Comparison of IB and CB in Southeast Asia

Variables		Mean Difference	Std. Error	Sig.	
DEA	Small CB VS Large CB	0,099	0,049	0,200	Not Significant
	Small CB VS Small IB	0,299*	0,056	0,000	Significant
	Small CB VS Large IB	0,232*	0,060	0,001	Significant
	Large CB VS Small IB	0,201*	0,037	0,000	Significant
	Large CB VS Large IB	0,134*	0,043	0,015	Significant
	Small IB VS Large IB	0,067	0,051	0,554	Not Significant
Z Score	Small CB VS Large CB	14,752*	5,015	0,027	Significant
	Small CB VS Small IB	24,482*	4,968	0,000	Significant
	Small CB VS Large IB	25,956*	4,945	0,000	Significant
	Large CB VS Small IB	9,730*	1,304	0,000	Significant
	Large CB VS Large IB	11,203*	1,211	0,000	Significant
	Small IB VS Large IB	1,473	1,002	0,461	Not Significant
LLR	Small CB VS Large CB	2,544	1,087	0,109	Not Significant
	Small CB VS Small IB	2,523	1,087	0,113	Not Significant
	Small CB VS Large IB	2,556	1,087	0,106	Not Significant
	Large CB VS Small IB	0,021	0,025	0,832	Not Significant
	Large CB VS Large IB	0,012	0,011	0,699	Not Significant
	Small IB VS Large IB	0,033	0,023	0,467	Not Significant
LLP	Small CB VS Large CB	2,536	1,086	0,110	Not Significant
	Small CB VS Small IB	2,550	1,086	0,107	Not Significant
	Small CB VS Large IB	2,549	1,086	0,107	Not Significant
	Large CB VS Small IB	0,014	0,019	0,872	Not Significant
	Large CB VS Large IB	0,013	0,015	0,799	Not Significant
	Small IB VS Large IB	0,001	0,016	1,000	Not Significant

Based on observed means.
The error term is Mean Square (Error) = 6,088.
*. The mean difference is significant at the 0,05 level.
Source: Data Processed (2019

and large conventional bank. Similarly, small Islamic bank and large Islamic banks is found to have no significant differentiation in efficiency. The significant contrasts of efficiency are found on small conventional banks and small Islamic bank, then for small conventional banks and large Islamic banks, large conventional banks and small Islamic banks and lastly for large conventional banks vs. large Islamic banks.

The findings of variance Z_score are presented in table 2. Only small Islamic banks compared to large Islamic banks is found to be not significant differentiated in stability, while others size of Islamic banks and conventional banks are found to have significant contrast stability. For asset quality variable, that is proxied by LLP and LLR, is found to have no significant discrepancy of stability variance among all size of Islamic banks and conventional banks.

Efficiency is related to bank's ability to turn resources into revenue of the bank. The efficiency is measured by DEA analysis that shows the higher levels of output productivity than the input. The study found that small Islamic bank has the highest efficiency among others size of Ib and Cb. Similar result is also revealed by Čihák & Hesse (2010) which small Islamic banks is financially stronger than small conventional banks. In addition, the results of the study also found that small Islamic banks tend to be stronger financially than large Islamic banks (Čihák & Hesse, 2010). This study resulted that large Islamic banks has better efficiency than large conventional bank. Then, large Islamic banks are found insignificantly less efficient than small Islamic banks. The result of this study violates previous research which shows conventional banks are better in efficieny than Islamic banks. This research shows that large and small size Islamic banks are more efficient than small and large conventional banks. However in Asian case, Islamic banks were more relatively efficient than conventional banks in MENA countries (Wahid & Dar, 2016).

The bank's ability to survive in external and internal economic conditions or the bank's ability to fulfill its obligations under the most difficult conditions, are some conditions where banks categorized as stable (Miah & Uddin, 2017). This study found that large Islamic banks are less stable than large conventional banks significantly. It is similar with Wahid & Dar (2010) who revealed that large Islamic banks are less stable than large conventional banks. Čihák

& Hesse (2010) stated that irregularities to monitor the credit risks make large Islamic banks to be less stable. In fact, Islamic banks are found to be more stable due to their concern on risk assessment and risk management in investing. Then, this study also found that small Islamic banks are more stable than small conventional banks. Čihák & Hesse (2010) confess that small Islamic bank will be more stable to be operated in small scale. Similar result is also revealed by Wahid & Dar (2010), who stated that small Islamic banks are more stable than small conventional banks in Malaysia. Čihák & Hesse (2010) conducted a global study and found that small Islamic banks are more stable than small conventional banks. In contrast, this study found that large conventional banks are more stable than small Islamic banks.

Asset quality is analyzed to know how well the bank manages the assets to avoid the risks. As the banks become large, the asset quality of the banks is expected to be improved (Farooq et al., 2015). This research reveals that the firm sizes of Islamic and conventional banks are insignificantly different. However, Beck et al. (2013) found that as the size of Islamic banks grows, the quality of Islamic banks' assets weakens. Similarly, Farooq et al. (2015) stated that asset quality of the banks would improve as the banks become large. In developing country, many companies rely on bank loans to fund their business, thus banks may have better place of asset quality. The results of the study do not promote previous research that the bank sizes do not relate insignificantly to the asset quality.

The firm size highlited in this study is supported by the theory of the firms explained above. In technological and financial theory (part of theory of the firms) state that technological, human capital, external financial will be correlated by the scale of the firm (Kumar et al., 2001). There are two variable supported this theory, those are efficiency and stability. This study found that small firms have better efficiency than large firms. Then for stability, the result found differentiation of stability between large and small banks. Efficiency show the comparison of input and output inside of the firms, while stability show how financial of the firm would be stable in internal and externaleconomic condition.

The study found no significantly different for asset quality between large and small bank. It's violating the organizational theory (part of theory of the firm) that the quantity of physical

asset utilized by the owner is one of firm size determinants (Kumar et al., 2001). This due to asset quality between Islamic and conventional bank are different managed as the principle rely on each bank.

Overall, the Islamic banking in Southeast Asia apparently seems bright, given as the countries as the home for biggest Muslim population. Using data from countries in Southeast Asia, where conventional and bank Islamic banks growing rapidly, this study investigate how the sizes of Islamic banking are different from conventional banks for efficiency, stability and asset quality. As well as Southeast Asia increasing in economy, government alignments with Islamic finance and the need to comply with *sharia*, support Islamic banking to grow continuously. An international study about Islamic banks versus conventional bank is required to allow analysis of how Islamic banks from various countries perform relative different to other countries. Thus, this research analyzed the efficiency, stability and asset quality in Southeast Asia countries from the size view. Therefore, this study would potentially provide relevant policy for policy makers in banking sector for diverse countries.

CONCLUSIONS, IMPLICATIONS AND LIMITATIONS OF THE RESEARCH

This study implicated for banks to know the level of firm size influencing the efficiency, stability and asset quality. Theory and previous studies show how the firm productivity will affect to the firm size. The study found efficiency and stability support the theory of the firm, while asset quality is not signficantly different between large and small bank. This due to asset quality between Islamic and conventional bank are different managed as the principle rely on each bank.

This study is limited to look for financial performance between Islamic and Conventional bank in Southeast Asia. Thus, international study is expected to look for financial performance of those banks more broadly. Then, this study is also limited for efficiency, stability, and asset quality. Further research may seek another factor that contributes to financial performance of those banks.

REFERENCE

Abdul-Majid, M., Saal, D. S., & Battisti, G. (2010). Efficiency in Islamic and Conventional Banking: An International Comparison. *Journal of Productivity Analysis*, *34*(1), 25–43.

https://doi.org/10.1007/s11123-009-0165-3

Abrar, T., Ahmed, F., & Kashif, M. (2018). Financial Stability of Islamic versus Conventional Banks in Pakistan. *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah*, *10*(2), 341–366. https://doi.org/10.15408/aiq.v10i2.6500

Alghfais, M. (2017). *A Comparative Study between Islamic and Conventional Banks-The case of Saudi Arabia: A Binary Logistic Regression Approach* (No. WP/17/4).

Aziz, S., Husin, M. M., & Hashmi, S. H. (2016). Performance of Islamic and Conventional Banks in Pakistan: A Comparative Study. *International Journal of Economics and Financial Issues*, *6*(4), 1383–1391.

Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. Conventional Banking: Business Model, Efficiency and Stability. *Journal of Banking and Finance*, *37*(2), 433–447. https://doi.org/10.1016/j.jbankfin.2012.09.016

Čihák, M., & Hesse, H. (2010). Islamic Banks and Financial Stability: An Empirical Analysis. *Journal of Financial Services Research*, *38*(2), 95–113. https://doi.org/10.1007/s10693-010-0089-0

Farooq, M., van Wijnbergen, S., & Zaheer, S. (2015). Will Islamic Banking Make the World Less Risky? An Empirical Analysis of Capital Structure, Risk Shifting and Financial Stability. In *Tinbergen Institute Discussion Papers 15-051/VI/DSF92*. https://doi.org/10.2139/ssrn.2605358

Ghozali, I. (2016). Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8). In *Universitas Diponegoro*. Semarang: Badan Penerbit Universitas Diponegoro.

Holmstrom, B. R., & Tirole, J. (1989). Chapter 2 The theory of the firm. *Handbook of Industrial Organization*. https://doi.org/10.1016/S1573-448X(89)01005-8

Karim, M. Z. A., Chan, S. G., & Hassan, S. (2010). Bank Efficiency and Non-Performing Loans: Evidence from Malaysia and Singapore. *Prague Economic Papers*, *19*(2), 118–132. https://doi.org/10.18267/j.pep.367

Kassim, S. H., & Shabri, M. (2010). Impact of Financial Shocks on Islamic Banks: Malaysian Evidence during 1997 and 2007 Financial Crises. *International Journal of Islamic and Middle Eastern Finance and Management*, *3*(4), 291–305. https://doi.org/10.1108/17538391011093243

Komijani, A., & Taghizadeh-Hesary, F. (2019). An overview of Islamic banking and finance in Asia. In *Routledge Handbook of Banking and Finance in Asia*. https://doi.org/10.4324/9781315543222-28

Kumar, K. B., Rajan, R. G., & Zingales, L. (2001). *What Determines Firm Size?* (No. NBER Working Paper No. w7208). Chicago.

Miah, M. D., & Uddin, H. (2017). Efficiency and Stability: A Comparative Study between Islamic and Conventional Banks in GCC Countries. *Future Business Journal*, *3*(2), 172–185.

https://doi.org/10.1016/j.fbj.2017.11.001

Rashid, A., & Jabeen, S. (2016). Analyzing Performance Determinants: Conventional versus Islamic Banks in Pakistan. *Borsa Istanbul Review*, *16*(2), 92–107. https://doi.org/10.1016/j.bir.2016.03.002

Rosman, R., Wahab, N. A., & Zainol, Z. (2014). Efficiency of Islamic Banks during the Financial Crisis: An analysis of Middle Eastern and Asian Countries. *Pacific-Basin Finance JournalBasin Finance Journal*, *28*, 76–90. https://doi.org/10.1016/j.pacfin.2013.11.001

Said, A. (2013). Risks and Efficiency in The Islamic Banking Systems: The Case of Selected Islamic Banks in MENA Region. *International Journal of Economics and Financial Issues*, *3*(1), 66–73.

Sakti, M. R. P., & Mohamad, A. (2018). Efficiency, Stability and Asset Quality of Islamic vis-à-vis Conventional Banks: Evidence from Indonesia. *Journal of Islamic Accounting and Business Research*, *9*(1), 378–400. https://doi.org/10.1108/JIABR-07-2015-0031

Shaikh, A., Sharif, S., & Arif, I. (2016). Comparison of Islamic Banks with Conventional Banks: Evidence from an Emerging Market. *Journal of Management Sciences*, *3*(1), 24–33. https://doi.org/10.20547/jms.2014.1603102

Wahid, M. A., & Dar, H. (2016). Stability of Islamic versus Conventional Banks: A Malaysian Case. *Jurnal Ekonomi Malaysia*, *50*(1), 111–132. https://doi.org/10.17576/JEM-2016-5001-09