



Comparative Analysis of Islamic and Conventional Banks: A Case study from Malaysia

Kiran Javaria

Quaid-i-Azam School of Management Sciences, Quaid-i-Azam University, Islamabad, Pakistan

Received: 20 Aug. 2016, Revised: 18 Sep. 2016, Accepted: 30 Sep. 2016, Published: 1 Dec. 2016

Abstract: The aim of this study is to analyze and compare the financial performance of Islamic and conventional banks from Malaysia. For this purpose, 5 Islamic and 5 conventional banks in Malaysia are selected for the time period of 5 years from 2009 to 2013. For comparing financial performance, internal factors such as financial ratios are choosing. These financial ratios named as profitability, liquidity and credit risk with Bank-0-Meter model to calculate solvency. Statistical tools such as T-test and F-test are used to analyze the data. F test for comparing sample variance and T test for comparing sample means. Findings suggest that in terms of profitability and credit risk, conventional banks are in leading position and in terms of liquidity; Islamic banks are in leading position. But if see the result closely the difference in profitability and solvency is not significantly higher.

Keywords: Islamic and conventional bank, Solvency, Profitability, Liquidity, Credit-risk

1. INTRODUCTION

Banks are one of most important part of any country. Banking industry is very essential for economic development of any society. Financial sector stability play very crucial role for a healthy economy. A developed financial system of any country ensures to attain development. The primary activity of bank is “accepting deposits for the purpose of lending and investment, deposits of money”. Nowadays banking sector provides lots of services which are very important for our daily life. Banking sector is important in the context of motivate people to save, provide risk free income for depositors, generate employment and attain economic welfare. It is important to note that these services are very important for our daily life. Because of such importance and trust banks work as an intermediary between depositors and borrowers. Banks accept savings from general public and advance loans to entrepreneurs which play an important role in economic growth. In 2008, majority of countries faced financial crisis because of the bad performance of banks. As a result of this crisis many people lost their jobs. Nowadays, customer satisfaction and product/service quality is very important for the survival of a bank.

There are two main banking systems in Malaysia. One is Islamic banking (IB) and other is conventional banking (CB). IB is different from CB on the basis of objectives and risk sharing practices. Conventional banks achieve profits from the pre fixed interest rate received from borrowers and paid to the depositors while Islamic banks based on profit sharing [1] Islamic banks are different from conventional banks in the context that Islamic banks follow rules of Islamic law and its practical application through the development of Islamic economics. Shariah strongly prohibits the payments and acceptance of interest, gambling or Gharar, as well as such activities that are contrary to Islamic rules and principles [2]. Islamic banking system operate in different countries including Malaysia, Bahrain, Sudan, Pakistan, Jordan, iran, united kingdom, Singapore and known for its interest free concept. Over recent period, Islamic banking is known as one of the fastest growing industry which is not only receiving acceptance from Muslims but also from non-Muslims [3].



The motivation behind this research is that it conducts comparative performance evaluation of Islamic and conventional banks in Malaysia through quantitative study. This study also contributes to literature on comparative performance, profitability and liquidity of Malaysian banking system by using a sample of five Islamic and five conventional banks over significant amount on time. Researcher collected dataset of Islamic and conventional banks for the period from 2009-2013. The aim of this research is to compare the of financial performance (profitability, liquidity, credit risk and solvency) of Islamic and conventional banks and also Apply accounting tools such as financial ratios, bank-o-meter model as well as statistical tools to make comparative financial performance of Islamic and conventional banks in Malaysia. The previous study of Malaysian banking sector concentrated on comparison of Islamic and conventional bank as whole. This study focused on significant comparative performance impact of 10 banks on their financial performance with the help of Bank-o-Meter Model.

This paper is divided into four sections. Section 1 will give the literature review which explains Islamic banking system its development in Malaysia then difference between Islamic and conventional bank and their performance in Malaysian banking sector. Section 2 demonstrates the research methodology of the paper. Section 3 will give empirical findings and Section 5 finally conclude with short recommendations as well

2. LITERATURE REVIEW

A. Islamic banking system:

Islamic banking is banking or banking activity that is consistent with the principles of Sharia and its practical application through the development of Islamic economics. As such, a more correct term for Islamic banking is 'Sharia compliant finance [4]. Islamic banking can also be defined as "banking with the ethics and value system of Islam and governed by the principles and rules according to Islamic sharia. Islamic banking is not only to avoid interest based transactions that are prohibited in Islamic sharia but also to avoid unethical practices and participate in achieving the goals and objectives of an Islamic economy [5]. Islamic banking is divided into two important Shariah concepts.

- Riba
- Gharar

RIBA. Riba is the premium paid by the borrower to the lender along with the principal amount as a condition for the loan. It is a pre-fixed while profit is post-determined. It cannot be negative while profit can be negative, positive or zero. From shariah point of view, ribah is haram or forbidden.

GHARAR. Gharar means uncertainty, hazard, speculation, chance or risk. Islam prohibits uncontrollable risks or uncontrollable obligations as it leads towards speculation. Some examples of transactions which include the element of Gharar are selling goods that the seller is unable to deliver, selling known or unknown goods against an unknown price, selling goods without proper description and selling goods without specifying price. So it is strictly prohibited in Islam.

B. Difference between islamic and conventional banking:

Like conventional banks, Islamic banks also act as an intermediary but Islamic and conventional banks have some basic differences in their objectives and operations which draw a line between these two institutions. These differences make the two institutions totally different from each other. Some of the basic differences between Islamic and conventional banks are as follow.

SHARIAH LAW. The main difference between Islamic and conventional bank is that Islamic banking systems business framework is totally based on the Shariah law. It is the responsibility of Islamic banks to ensure that all its operations and activities are according to Shariah requirements. But



in conventional banks, functions and operations does not follow any religious laws or guidelines rather all the operating models are based on secular principles [6].

BORROWING. In Islamic banks, there is no fixed rate of interest on depositing. There is use of profit and loss sharing mode in Islamic banks instead of fixed rate of interest. In conventional banking system, rate of interest are fixed in different deposit schemes and borrowed funds from depositors. In conventional banking, total risk is born by the bank and total reward belongs to bank after servicing depositors at a fixed rate while in Islamic banks profit and loss both are shared with depositors [7].

FINANCING. Mode of financing is different for both Islamic and conventional banking. In conventional banking, financing is interest oriented and for the use of money, interest rate is charged which can be fixed or floating while in Islamic bank, Riba is prohibited in terms of financing means financing is not based on interest rather it is based on the principle of buying and selling of assets. Whereas selling price is fixed from the beginning [8].

INVESTMENT. Islamic banks mode of investment is different from conventional banks because conventional banks invest in government treasury bills, bonds and term finance certificates which carries fixed rate of interest while Islamic banks invest only in non-interest bearing financial instruments.

INCOME DISTRIBUTION/ZAKAT. Conventional banks does not deal with Zakat while in modern Islamic banking system, they pay out their Zakat and it has also become one of the service oriented functions of Islamic banks to be a Zakat collection centre.

CONCEPT OF RISK SHARING. Islamic banking system is purely a profit and loss sharing (PLS) system in which both lenders and borrowers are equally share risk while in conventional banking system there is non-risk sharing system in which investors receive fixed rate of interest on their investment and nothing to do with the loss of borrower.

C. Development of Islamic banking in Malaysia:

There was a single Islamic bank named as Bank Islam Malaysia Berhad (BIMB) but this single Islamic bank did not represent the whole financial system. So there was a requirement of other Islamic banking institutions having wide range of products and instruments because the ultimate objective of central bank of Malaysia was to introduce such Islamic banking system which operate parallel to the conventional banking system. So the number of Islamic banking institutions have increased from 1 to 36 till the end of 2003, comprising 14 commercial banks, 10 finance companies, 5 merchant banks and 7 discount houses [9]

On 1st October 1999, the central bank issued licence for second Islamic bank, Bank Muamalat Malaysia Berhad. Since then introducing proper Islamic banking system and variety of securities ranging from two to five years. Now a days there is an increasing acceptance and popularity of Islamic products and services as Islamic asset are more hit than USD1.03 trillion by 2012. Because of this acceptance and popularity now many of the world's largest financial institutions have converted into Islamic banking and products. In 2006, Islamic private capital investments were US\$1.5 trillion but in 2010 they are reach US\$ 2 trillion and also increasing day by day.

D. Performance of Banking Sector internationally and domestically

Many writers from all over the world like Pakistan, Saudi Arabia, Indonesia, Malaysia, Egypt, Bahrain, India and United States Of America etc. have done great research work in the field of comparative analysis among Islamic and conventional banks. So according to their research work this chapter reveals that Islamic and conventional banks become very prominent discussion topics since last two decades. This literature review discusses both national and international banking



sector performance. Internationally impact of financial crisis and comparative performance study of Islamic and conventional banks had done by Bourkhis "References [10]" from Tunisia. She declares that Islamic banks performed better as compared to conventional banks in terms of return to asset indicator during and after the crisis. The reason of this better performance is that Islamic banks have better cost efficiency during 2009 and provisioning strategies of two types of banking systems are different from each other. To measure the performance of first Islamic bank, another study was done by Shehzad "Reference [11]" from Pakistan and he also supported this concept that Islamic banks were getting closer to conventional banks, the trust and confidence of people was increasing in Islamic banks because the conventional banks are more profitable, risky and less solvent than Islamic banks.

There are many other researcher who conduct their studies on Malaysian banking sector performance. According to Shaista Reference [12] from Malaysia, there are many differences between Islamic and conventional banking systems in Malaysia. They make comparison between two types of banking systems especially considering profitability, capital adequacy, liquidity, operational efficiency and asset quality for comparison issues of corporate governance and economic conditions are also considered in this study. Results of this study indicated that in descriptive statistics, conventional banks were more profitable because of higher return on average assets while regression analysis showed opposite results. There is 64.3 percent of banks had total factor productivity progress in which 44% are Islamic banks and the progressive scale efficiency and pure technical efficiency change contributes to the banks overall efficiency Reference [13]. Support of this study also comes from Rahim Reference [14] research they explains a main difference between Islamic and conventional banks and stated that Islamic banks are more stable as compared to conventional banks. The variables that have been identified as the significant factors towards risk are cost-income ratio, total assets, market share, inflation and real GDP for Islamic banks. On the contrary Civic and Charp Reference [15] asserted that there is no huge difference between Islamic and conventional banks the rate of return of Islamic banks and interest rate of conventional banks are closely co integrated to each other.

Said and Tumin Reference [16] use some internal factors to analyze the performance and financial ratios relationship. They claim that Banks size and liquidity have no impact on the performance of Malaysian banks. But in this study liquidity is taken as a financial performance measure so it contradicts with literature. Another study is done on financial performance of Islamic and conventional banks in which Financing to deposit ratio showed that the conventional banks were more vulnerable to credit risk. Islamic banks were more efficient in profits than conventional banks in terms of net financing inform margin (NFIM) and net financing revenue over assets (NFRA) [17]. Overall literature review concluded that Islamic and conventional banking systems and their performance comparisons are very important and research oriented topics in all over the world. Many writers form different countries like Egypt, France, Pakistan, USA, UK, Saudi Arabia, Oman etc. made their research work and conclusions upon this comparison. Many researchers from Malaysia also made their contributions related to research work and results about the comparative performance of Islamic and conventional banks. Different writers used different tools to make analysis of this comparison. Like some writers used ratio analysis, regression model, Bank-o-meter Test, unit root test, Herfindhal index technique, DEA technique etc. along with different statistical tools. Different findings showed different results. Some researchers showed that Islamic banks are better in their working and performance. On the other hand, some writers conclude that conventional banks are doing better as compared to Islamic banks. As far as Malaysian banks concerned, different writers have different views but most of them conclude that both Islamic and conventional banking stand side by side.



3. METHODOLOGY

A. Statistical Tools

Different writers used t-test and F-test in their research as statistical tools to make their results more reliable such as [11], [18] etc. T test assesses whether the means of two groups are statistically equal or unequal expressed as the standard deviation of the difference between the means. T test is very strong statistical tool to compare the performance of different variables. In this research work, two different sample data are selected, one from Islamic Banks and the other from Conventional banks. To compare the financial performance of both banking sector samples, T test is applied to get more useful results about the financial performance comparison of both banking sectors. F test is used to check the equality of variance between samples. F test is experiment base on the ratio of two variations. If two means are considerably different, the variation in treatment will be greater than the variation due to random dissimilarity among individuals.

B. Financial Tools and Analysis

Different financial ratios like profitability, liquidity, credit risk are used to analyze the performance of banking system. These financial ratios are used by many researchers in past. According to Reference [19] from Egypt, "the ratio analysis is a method of calculating and interpreting financial ratios to assess bank performance". The use of ratio analysis has many advantages. One of the main benefits of using this measure is that it removes the disparities in sizes of banks as banks are not equal in terms of sizes [20]. Bank-o-Meter model is used to attain maximum accurate results by using minimum number of parameters. "The ability to perceive weakness and reliability of a bank in financial crises is of vital importance to central bank, creditors and investors. Whenever a bank get insolvent, its creditors often lose portion of principle and interest payments, while equity investors can potentially lose all of their investments. To measure the solvency of a bank, the model used in this research is known as Bank-O-Meter. This tool was recommended by IMF, (2000) and it is used by different writers in their research work like Reference [21] etc

$$S = 1.5 \times C.A + 1.2 \times E.A + 3.5 \times CAR + 0.6 \times NPL + 0.3 \times C.I + 0.4 \times LA$$

S = Solvency, CAR = Capital Adequacy Ratio, CA = Capital Asset Ratio, EA = Equity to Asset Ratio, NPL = Non-performing Loans to Loans, CI = Cost to Income Ratio, LA = Loans to Asset Ratio. And $50 < S < 70$. All banks having S greater than 70 are solvent and termed as super sound bank, while banks having S below 50 are not solvent. And the area between 50 - 70 is identified as grey area, banks under this range are trying to get solvent by crossing 70 as soon as possible in future". Reference [22], [23].

C. Data

5 commercial banks and 5 islamic banks are selected for making comparison of financial performance. Islamic banks include Bank Muamalat, Bank Islam, CIMB Islamic Bank, RHB Islamic Bank, AFFIN Islamic Bank and conventional banks include MAA Bank, Public Bank, CIMB bank, RHB bank and HONG LEONG Bank. To measure the performance of Islamic and conventional banks in Malaysia, financial statements are analyzed by using financial ratio technique.

The collective data was made by combining the datasets from all the banks. The financial analysis was performed on this collective data to find the results which are mentioned in the next section. The mean square techniques were also used on the dataset, wherever required.



4. EMPIRICAL ANALYSIS

The combined financial analysis of the entire ratios to explain which bank is leading in comparison, Islamic or conventional bank.

Table 1: Financial Analysis

Islamic banks		Conventional Banks		Leading banks
Profitability		Profitability		
ROA	0.673%	ROA	1.035%	Conventional
ROE	10.68%	ROE	12.94%	Conventional
CIR	29.71%	CIR	41.16%	Islamic
Liquidity		Liquidity		
NLTA	52.82%	NLTA	59.54%	Islamic
NLD&B	58.70%	NLD&B	70.97%	Islamic
Credit Risk		Credit Risk		
EQTA	6.68%	EQTA	8.26%	Conventional
EQL	13.28%	EQL	14.12%	Conventional
IMLGL	3.05%	IMLGL	1.94%	Conventional

Comparison of Conventional and Islamic bank:

Comparison of combined financial performance of both types of banking systems indicates different results in every Separate ratio analysis. In a combined analysis, firstly we will discuss about profitability. Profitability is used to measure the performance of a business or overall efficiency. Profitability can be analyzed by taking into account its three very important ratios. Firstly we will discuss Return on Asset ratio. The average return on Asset ratio in Islamic banks for the period of 5 years is 0.673% while average ROA in conventional banks of Malaysia is 1.035% which is higher than Islamic banks of Malaysia. This indicates that assets of conventional banks are more capable than Islamic banks to produce high returns. In ROE, conventional banks are leading as compared to Islamic banks. It means that conventional banks are more efficient in producing profit from every unit of equity. In case of CIR, Islamic banks have lower CIR i-e 29.71% as compared to conventional banks that have higher CIR 41.16%. It shows that Islamic banks are more efficient in generating income per dollar cost incurred means Islamic bank are more efficient in this scenario. So we can say that Islamic banks are leading in profitability than conventional banks in Malaysia.

Two different variables are analyzed in case of liquidity which is Net Loans to Asset Ratio (NLTA) and Net Loans to Total Deposits & Borrowings (NLD&B). In case of NLTA, Islamic banks are leading as compared to conventional banks. NLTA of conventional banks is 59.54% while NLTA of Islamic bank is 52.82%. Higher NLTA indicates that conventional banks are tied up in loans so Islamic banks are more liquid as compared to conventional banks. In case of NLD&B, conventional banks have 70.97% while Islamic banks have 58.70% which indicates that conventional banks facing more liquidity risk and Islamic banks are leading. Overall liquidity management of Islamic banks is leading.

Three different indicators are used to analyze credit risk. One of them is Equity to Total Asset (EQTA). Islamic banks have 6.68% EQTA while conventional banks have 8.26%. this indicates that



conventional banks are leading having more capacity of absorbing loan losses as compared to Islamic banks. Second indicator of credit risk is EQL (equity to loan ratio) which is higher in conventional banks i-e 14.12% as compared to Islamic banking having 13.28% indicating that conventional banks are more efficient in absorbing loan losses. Third variable of credit risk is IMLGI (impaired loans to gross loans) which shows that conventional banks has lower IMLGI i-e 1.94% as compared to Islamic banks having higher IMLGL ratio i-e 3.05% which means conventional bank is leading because its quality of assets and loans is better. Overall conventional bank is dominating in credit risk performance.

Bank-o-Meter Test

$$S = 1.5 \times C.A + 1.2 \times E.A + 3.5 \times CAR + 0.6 \times NPL + 0.3 \times C.I + 0.4 \times LA$$

Following table show the comparative results of Bank-o-Meter model in context of Islamic and conventional banks in Malaysia:

Table 2: Conventional Banks Results of Bank-O-Meter Test

Years	C.A*1.5	E.A*1.2	CAR*3.5	NPL*0.6	C.I*0.3	LA*0.4	Score
2009	8.224	7.994	14.352	1.806	41.3677	55.454	107.836
2010	8.472	8.304	14.02	3.004	40.7196	58.67	109.230
2011	8.092	7.99	15.586	2.492	41.16686	60.406	114.2847
2012	8.408	8.312	15.636	1.842	41.08834	61.118	115.1913
2013	8.326	8.24	14.04	1.544	41.4673	62	109.6836

Table 3: Islamic Banks Results of Bank-O-Meter Test

Years	C.A*1.5	E.A*1.2	CAR*3.5	NPL*0.6	C.I*0.3	LA*0.4	Score
2009	6.71	6.76	13.848	3.522	37.85	47.12	98.9637
2010	6.65	6.688	15.798	4.672	27.048	51.586	104.8456
2011	6.314	6.346	15.14	3.59	27.7272	50.68	100.822
2012	6.622	6.65	15.034	2.102	26.5081	55.292	101.8624
2013	6.886	6.914	14.758	1.866	29.544	59.394	104.019

Results showed that all the values including Islamic banks and conventional banks are strongly above the limit of 70%. It means that all the banks are in safe condition and fluctuation does not make any impact on banks performance. It also indicates that during all these period, banks are away from financial distress.

5. CONCLUSION

After data evaluation and empirical results, last section is conclusion and recommendations. In this research, researcher makes comparison of Islamic and conventional banks from Malaysia. 5 Islamic and 5 conventional banks are selected for this purpose for the time period of 2009 to 2013 i-e 5 years.



Two types of financial tools are used in this research that is financial ratios and Bank-o-Meter model. To make the results more efficient and reliable statistical tools like F-test and T-test are also used. Financial ratios included three categories like profitability; liquidity and credit risk which have further 8 ratios. From the examination of data analysis and empirical results, now conclude the findings and draw some conclusion. In terms of profitability, we can say that conventional banks are leading. Although there is slight difference among Islamic and conventional banks but overall conventional banks are leading. In ROA and ROE. Although conventional banks are leading but they are not significantly different from Islamic banks. In CI, Islamic banks are ahead in comparison of conventional banks. As far as liquidity concerns, Islamic banks are leading as compared to conventional banks. In both liquidity ratios, Net loan to asset ratio and Net Loan to Deposits & Borrowings, Islamic banks are dominating.

In credit risk performance, again conventional banks are in dominating position. In equity to asset ratio and equity to loan ratio, conventional banks are dominating while in impaired loans to gross loan ratio, Islamic banks are in leading position. In Bank-o-Meter model, although both Islamic and conventional banking system is in very good position and safe from fluctuations and can be called as super sound banks. But comparatively conventional banks are in more dominating position as compared to Islamic banks. This research also give the answer of research questions like (1)conventional banking system is more profitable in Malaysia as compared to Islamic banking system.(2) In terms of liquidity, Islamic banks are leading and there is significant difference in liquidity of both types of banking systems. (3) in terms of credit risk, conventional banks are dominating in EQA and EQL, but Islamic banks are leading in IMLGL ratios. (4) Conventional banks are leading in solvency as compared to Islamic banks of Malaysia but there is no significant difference among these two sets of banks. (5) Conventional banks are better performer than Islamic banks of Malaysia. So we can say that overall findings conclude that conventional banks are in more strong position and are in lead as compared to Islamic banks of Malaysia.

REFERENCES

- [1] S. Mohamad, T. Hassan and M.K.I. Bader, "Efficiency of conventional versus Islamic banks: International evidence using the stochastic frontier approach (SFA)," *Journal of Islamic Economics, Banking and Finance*, pp. 107-130, 2008.
- [2] M. El-Gamal, "An economic explication of the prohibition of gharar in classical Islamic Jurisprudence," 4th International Conference on Islamic Economics. 2001.
- [3] M. Iqbal and P. Molyneux, "Thirty years of Islamic banking: History Performance and prospects," Palgrave Macmillan, New York, 2005.
- [4] K.A. Ahmed, "Islamic Microfinance: Theory, Policy and Practice, Birmingham," United Kingdom: Islamic Relief Worldwide, 2008.
- [5] State bank of Pakistan, <http://www.sbp.org.pk>
- [6] K. Khir, L. Gupta, and B. Shanmugam, B, "Islamic banking: A practical perspective," Malaysia: Pearson, 2008.
- [7] M. Hanif, "Differences and Similarities in Islamic and Conventional Banking." *International Journal of Business and Social Sciences*, vol.2, 2014.
- [8] L.Gupta and B. Shanmugam, "Islamic Banking: A Practical Perspective by Kamal Khair, Pearson Malaysia(Petaling Jaya, Selangor), 2008.
- [9] Bank Negara Annual Report Malaysia: Central Bank of Malaysia. <http://www.bnm.gov.my/index.php>.
- [10] B. Khawla, S. N. Mahmoud, "Islamic and conventional banks' soundness during the 2007–2008 financial crisis," *Review of Financial Economics*, 2013.
- [11] Moin, M. Shehzad, "Financial Performance of Islamic Banking and Conventional Banking in Pakistan: A Comparative Study," *International Journal of Innovative and Applied Finance*, 2013



- [12] S. Wasiuzzaman, U.N. Gunasegavan, "Comparative study of the performance of Islamic and conventional banks: The case of Malaysia," *Humanomics*, vol. 29, pp. 43 – 60, 2013.
- [13] A. Othman, F. Kari, R. Hamdan, "A Comparative Analysis of the Co-operative, Islamic and Conventional Banks in Malaysia," *American Journal of Economics*, 2013.
- [14] S. R.M. Rahim, J.B.A. Bakar, T.A. Ganapathy, "How Efficient Are Islamic Banks in Malaysia?," *Journal of Business Studies Quarterly*, 2015.
- [15] S. Cevik and J. Charap, "The Behavior of Conventional and Islamic Bank Deposit Returns in Malaysia and Turkey," *IMF Working Paper*, 2011.
- [16] R.M. Said and M.H. Tumin, "Performance and Finance Ratios of Commercial Banks in Malaysia and China," *International Review of Business Research Papers*. vol. 7. 2, pp. 157-169, March 2011.
- [17] M. Rosnia, N. I, "Financial Performance of Malaysian Islamic Banks Versus Conventional Banks," *Universiti Sains Islam Malaysia*, 2009.
- [18] M.F. Akhtar, K. Ali, S. Sadaqat, "Liquidity Risk Management: A comparative study between Conventional and Islamic Banks of Pakistan," *Interdisciplinary Journal of Research in Business*, 2011.
- [19] M.E. Fayed, "Comparative Performance Study of Conventional and Islamic Banking in Egypt," *Journal of Applied Finance & Banking*, 2013.
- [20] A. Samad, "Performance Of Interest-Free Islamic Banks Vis-À-Vis Interest-Based Conventional Banks Of Bahrain," *IIUM Journal of Economics and Management*, 2004.
- [21] O. Masood, H.A. Suwaidi, P.D.P. Thapa, "Credit risk management: a case differentiating Islamic and non-Islamic banks in UAE," *Qualitative Research in Financial Markets*, vol. 4, pp.197 – 205, 2012
- [22] M. Hanif and A. M. Iabal, "Inside-Out: Perception of Key Finance Professionals about Theory and Practice of Islamic Banking," *International Journal of Humanities and Social Science*, vol. 2, 2012.
- [23] E. Anita, "Financial Performance Analysis of PT. Bank Papua: Application of Cael, Z-Score and Bankometer," *IOSR Journal of Business and Management*, 2013.