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# COMPARISON OF SHARIA BANKING PERFORMANCE BASED ON RISK PROFILE AND EARNING AND CAPITAL (REC)

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**Abstract**: This study aims to describe the performance of Islamic banking REC method better or equal to the performance of Islamic banks. Descriptive method issued to find how ratio of Non Performing Loans and Loan to Deposit Ratio representing Risk Profile, Earning representing Return on Assets and Capital ratio representing Capital Adequacy Ratio in Islamic banking for the period 2014-2017.

The Independent sample t-test hypothesis test results show that, at the average value of the NPL, FDR and CAR is in significant differences between 11 Islamic banks in Indonesia. Where as ROA has a very significant difference between one bank and an other from 11 Islamic banking in Indonesia.

**Keywords**: Islamic Banking, Performance and Comparasion

#### Introduction

Islamic banking is one of the fastest growing businesses of the financial sector, the financial crisis in 1998 may be one of the reasons many markets have shifted from conventional banks to using Islamic banks that run their business activities based on sharia principles. Islamic banks in their operational activities are intermediary institutions or intermediaries between people who have funds and people who need funds. The main task of Islamic banks is to raise funds (funding) and channel funds (financing) to the community. The collection of funds from the community is in the form of deposits (savings, current accounts and deposits), while the distribution of funds in the form of funding to the community. <sup>1</sup>

One of the factors that accelerates the growth of the banking industry today is the bank's management strategy in expanding, namely by going public, which means selling part of its shares to the public and listing its

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<sup>&</sup>lt;sup>1</sup> Faturrahman Djamil, *Penyelesaian Pembiayaan Bermasalah di Bank Syariah*, (Jakarta: Sinar Grafika, 2012), 53.

shares on the Indonesia Stock Exchange. In Islamic banking financial institutions, the only bank that registers shares on the stock exchange is Bank Panin Syariah in 2014.<sup>2</sup> The official website of the Indonesia Stock Exchange explains the benefits that the company can get when it becomes a public gothrough company through initial listing (initial public offering), which includes: obtaining new funding sources, providing competitive advantages for business development, conducting mergers or acquisitions of other companies with financing through the issuance of new shares, increasing going concer capabilities, improving the company's image, and increasing company value. So if the bank will register its shares on the stock exchange, a healthy condition is needed to maintain the loyalty and trust of shareholders and the public (customers) in collecting and channeling funds and providing services. In addition to requiring healthy conditions, banks must also have sufficient capital and be consistent in increasing profits at least in the five year period.<sup>3</sup>

The health of a bank is in the interest of all parties involved, namely the owner and manager of the bank, the community using the services of the bank and the FSA as the bank supervisory authority.<sup>4</sup> The condition of the Bank can be used by these parties to evaluate the performance of the Bank in applying the precautionary principle, compliance with applicable regulations and risk management. The soundness of the bank itself is the result of a qualitative assessment of various aspects that affect the condition or performance of a Bank through Quantitative Assessment and / or Qualitative Assessment of capital, asset quality, management, profitability, liquidity and sensitivity to market risk factors. The rating system for commercial banks is constantly adjusted for changes in business complexity and bank risk profiles and changes in the methodology for evaluating bank conditions that are applied internationally. Banking performance assessment includes six factors, namely: Capital (capital), asset quality (asset quality), management (management), profitability (earnings), liquidity (liquidity), and sensitivity to market risk (sensitization to market risk). To assess a bank's health, it can be seen from various aspects. Bank Indonesia has made several changes to the

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<sup>&</sup>lt;sup>2</sup> Faly, Q. P, *Pengukuran Kinerja Bank Syariah Dengan Dengan Metode RGEC.* (Jakarta: Bina Ilmu, 2005) 185-201.

<sup>&</sup>lt;sup>3</sup> Ibid., 201

<sup>&</sup>lt;sup>4</sup> Bank Indonesia, *Peraturan Bank Indonesia Nomor: 13/1/PBI/2011 tentang Penilaian Tingkat Kesehatan Bank Umum*, Jakarta: BI, 2011) 110.

bank's health assessment method. In 1999, Bank Indonesia used the CAMEL method which stands for Capital, Assets, Management, Earning, and Liquidity. After being applied for some time, the method is considered to be unable to assess the bank's ability to external risk, so in 2004, Bank Indonesia through Bank Indonesia Regulation Number 6/10 / PBI / 2004 changed the method used to assess the bank's health into CAMELS.<sup>5</sup>

After seven years the regulations concerning CAMELS were implemented, Bank Indonesia through Bank Indonesia Regulation No. 13/1/PBI/2011 applies a new policy regarding the assessment of the soundness of commercial banks. Bank Indonesia replaced the CAMELS rating system to be a Risk-Based Bank Rating that was more risk-oriented and the application of good corporate governance, but still ignored the other two factors, namely profitability and capital adequacy that were effectively implemented since January 1, 2012.

In order to maintain the stability of the bank's banking performance, one must be monitored by Bank Indonesia to seek the process of transferring functions, duties, and regulatory authority and supervision of the banking sector to the Financial Services Authority (OJK) by minimizing negative impacts on financial system stability.

The factors for assessing bank soundness using Risk Based Bank Rating, better known as REC, consist of risk profiles, good corporate governance, profitability, and capital. The risk profile assesses the inherent risk and quality of the application of risk management in the bank's operational activities. There are eight types of risks assessed, namely credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputation risk. The factor of Good Corporate Governance assesses the quality of bank management on the implementation of the principles of Good Corporate Governance (GCG) as determined by Bank Indonesia. The profitability factor assesses the ability of banks to generate profits in one period. Capital factor is an evaluation of capital adequacy and capital management adequacy.<sup>6</sup>

In principle, the level of health, management of the bank, and business continuity of the bank are the full responsibility of the bank management. Therefore, banks are required to maintain and improve their level of health

<sup>&</sup>lt;sup>5</sup> Faly, Q. P, Pengukuran Kinerja Bank Syariah Dengan Dengan Metode RGEC, 185-201.

<sup>&</sup>lt;sup>6</sup> Bank Indonesia, UU No.10 tahun 1998, Tentang Perubahan Terhadap UU No. 7 tahun 1992, (Jakarta: BI, 1998) 121.

by applying prudential principles and risk management in carrying out their business activities including conducting periodic self-assessments of their level of health and taking corrective steps effectively. On the other hand, Bank Indonesia evaluates, assesses the soundness of the bank, and carries out the necessary supervisory actions in order to maintain financial system stability.<sup>7</sup>

The growth of banking in Indonesia has been rapid since Pakto 88, where at that time the government facilitated the establishment of new banks until the eve of the banking crisis in 1997. The banking crisis has become a dark milestone in the banking business arena. The government at that time acted decisively and did not even hesitate to give heavy sanctions to banks that had poor performance and there were even some banks that had to be liquidated, this could be a very valuable lesson. The growth of Islamic banking in Indonesia is in accordance with Law No.10 of 1998, concerning amendments to Law No.7 of 1992 concerning Banking. This law allows banks to operate fully in sharia or by opening a special branch of sharia. So that since the emergence of restructuring of the national banking sector, many Islamic banks have emerged. Development of Sharia Banks according to Rizal Yaya, in 1963, in Mit Ghamr village, one of the regions in 454 Egypt was formed a rural financial institution called Mit Ghamr Saving Bank which was founded by economists named Dr. Ahmad El Najjar. The success of Mit Ghamr Bank inspired many parties to do the same, including the following:

1. The Egyptian government under Gamal Abdul Naser's government formed an Naser Social Investment with an urban basis in 1992

According to Mustafa The establishment of the bank was fullythrough the effort of Dr Ahmad al-Najjar and was done in a disclosed manner and did not use the Islamization platform as it might wrongly be interpreted as a manifestation of Islamic fundamentalism.<sup>8</sup>

This attempt was a result of a combination of the idea of German Savings Bank that was based on rural banking, with a general framework of Islamic values. The operation of the bank of that time was based on Islamic principles that are free from elements of interests, either to the depositors or from the borrowers.

Bank Indonesia. 2011. Surat Edaran Bank Indonesia Nomor 13/24/DPNP Perihal Penilaian Tingkat Kesehatan Bank Umum. URL: www.bi.go.id. Diunduh pada 18 Juli 2018.
 Sintha, L., Primiana, I., & Nidar, S. R. 2016. Bank Health Analysis Based On Risk Profile, Earnings And Capital. Journal Actual Problems Of Economics, 7, 386 –396.

The success of Mit Ghamr received praise and recognition from the Ford Foundation through its report in June 1967 because it had gained the support of the Different from the Local Islamic Bank in Pakistan, the customers of Mit Ghamr Bank must have deposits at the bank to qualify them for loans. This second attempt was seen as a success when new branches were opened at every area in Egypt, with increase in the whole amount of deposits. The existence of the bank had also helped the people around the Nile to no longer depend on loans that charged high rate of interest for the purpose of funding majority of the countryside residents, especially the farmers who regarded the bank as their own. However, the existence of the bank was shortlived. The whole operation of Mit Ghamr Bank was taken over by the National Bank of Egypt and Egypt Central Bank in mid-1967, which changed the whole bank operation to the riba system. This act of shutting down and taking over was done by the government of Egypt for political reasons and also, it had not gained the support of the powers in Egypt.<sup>9</sup>

Nevertheless the problem was solved in 1971 with the founding of Nasser Social Bank in Egypt as a trader's bank that is interest-free, even when the charter that was formed did not refer to Sharia at all. The main objective of the bank was a social one, and in the beginning its operation was given exemption from the Law of Banking and Credit, 1957. This bank was originally under the Egypt Treasury Ministry but later was transferred to Ministry of Social Welfare and Egypt Insurance. Most of the capital for the bank was contributed from the budget excess of the Ministry of Egypt, government's budget, as well as contributions from Egypt Wakaf (Endowment) Ministry. Nasser Social Bank was the first Islamic bank in the city area that promoted social activities such as interest-free loans for small projects based on principles of loss-sharing, helping the poor and fulfilling the need of university students. <sup>11</sup>

2. Communities of scholars and professionals in the Philippines formed Bank Amanah in 1973.

<sup>&</sup>lt;sup>9</sup> Pratama, B. A. 2010. Penyaluran Kredit Perbankan (Studi pada Bank Umum di Indonesia Periode Tahun 2005 - 2009). 19 (2), 135–148.

<sup>&</sup>lt;sup>10</sup> Mohamad, M. T., Abdullah, M. Y., & Mohamad, M. A. 2013. *The historical development of modern Islamic banking: A study in South-east Asia countries. X* (xx).

Oktaviani M A, & Hari Basuki Notobroto. 2014. Perbandingan Tingkat Konsistensi Normalitas Distribusi Metode Kolmogorov-Smirnov, Lilliefors, Shapiro-Wilk, dan Skewness-Kurtosis. *Jurnal Biometrika Dan Kependudukan*, *3*(2), 127–135.

The first Islamic bank in the Philippines embodied the Philippine Amanah bank (PAB) on 2nd August 1973 as a specialized government institutions by Philippine President Ferdinand Marcos with a paid capital of 100 million pesos. 12 Embodiment PAB is in response to the kingdom due to an insurgency by Muslims in southern Philippines, where the embodiment is to meet the specific needs of Muslims. In fact, no reference was made to the Islamic banking operations when PAB was Chartered. PAB is technically under the same category as other banks specifically as the Philippines and Development Bank Land Bank of the Philippines. Although PAB designed to meet the banking needs of the Muslim community in particular in the Philippines, its main role is to assist the rehabilitation and reconstruction work in Mindanao, Sulu and Palawan. 13 PAB has eight branches located mostly in major cities of the southern province of Islam, including one in Makati in the north, in addition to head office located in Zamboanga City in Mindanao. Several major government financial institutions own the controlling stock of the PAB, which has an authorized share capital of 100 million. The government has a total subscription of 30 million, while four government financial institutions have a P5 million stake each.

3. The Islamic conference organization (OIC), which has members from various Muslim countries, established the Islamic Development Bank (IDB) in 1973 and began operating in 1975 with its head office in Jeddah.

In 1972, foreign ministers of Islamic countries founded a special committee for the purpose of preparing an Islamic bank together. Consequently in 1975, Islamic Development Bank (IDB) was established with paid capital of 2 billion dinar, with its headquarter in Jeddah. The establishment of the bank was the result of two meetings of Islamic countries finance ministers that took place in 1973 and 1974. This bank was the sole international Islamic finance institution that was established in the effort to aid the economic and social progress of Islamic countries, especially the members of OIC4 and the Muslim ummah by adhering to all principles and Sharia. In 1975, a number of Islamic banks that were tradeoriented and aimed to offer an alternative in form of Islamic banking

Bank Indonesia. 2011. Nomor 13 / 1 / PBI / 2011 Tentang Penilaian Tingkat Kesehatan Bank Umum. Retrieved from http://www.bi.go.id/id/peraturan/perbankan/Pages/pbi\_130111.aspx

<sup>&</sup>lt;sup>13</sup> Murdiyanto, A. 2015. *Bal Di Kasus pada laporan Bi Periode 2009-2015*. (10), 453–463.

and replace the current conventional banking system were established in a few Islamic countries. There were two types of Islamic institutions as well as Islamic principle companies and investments. The first group of institutions was Dubai Islamic Bank, founded in 1975 (Mumin, 1999). From there in 1977 three Islamic banks were established as public limited companies, which were Kuwait Finance House in Kuwait, Faisal Islamic Bank in Egypt and Faisal Islamic Bank in Sudan by Pangeran Muhammad al-Saud. In the same year the International Islamic Bank Association was founded and based in Jeddah for the purpose of advancing the cooperation and coordination all the activities between the Islamic banks (Dakian quoted in Mohamad, Abdullah, & Mohamad, 2013). 14

After IDB operated, various Islamic banks grew and developed in various countries including Indonesia with the establishment of Bank Muamalat Indonesia in 1992. The development of Islamic banks was quite rapid demanding that banks compete fiercely to seize opportunities to grow, foster profits, maintain and maintain the company's survival. <sup>15</sup>

The development of an increasingly competitive sharia banking industry has also brought about changes in strategy in competition, marketing, human resource management and handling transactions between banks and customers, as well as companies with other companies. The growth of Islamic banks in line with Indonesia's high population growth is a profit, according to the Central Bureau of Statistics (BPS) based on 2014 and 2015 Census data, Indonesia's population reaches 254.9 million, with the majority being Muslim (above 80%) representing market share especially for Islamic banks, supported by the increasing awareness of Muslims to religious well, including in managing their money. Indonesia should be the pioneer and direction for the development of Islamic finance in the world..

According to Dr. Halim Alamsyah Deputy Governor of Bank Indonesia as the country with the second largest Muslim population, Indonesia should be the pioneer and direction for the development of Islamic finance in the

Alamsyah, H. (2012). Perkembangan dan Prospek Perbankan Syariah Indonesia: Tantangan Dalam Menyongsong MEA 2015. *Milad Ke-8 Ikatan Ahli Ekonomi Islam (IAEI)*, (April 2012), 1–8. Retrieved from https://s3.amazonaws.com/academia.edu. documents/34477024 /6bf00812e40b4d0cb140ea80239c4966PerkembanganProspek PerbankanSyariahIndonesiaMEA201.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3 A&Expires=1507199240&Signature=uNwIEUNCaTPTrqm5iS2OfBWzA%2Fs%3D&response-cont.

<sup>&</sup>lt;sup>15</sup> Murdiyanto, A. 2015. Bal Di Kasus pada laporan Bi Periode 2009-2015. (10), 453–463.

world. This is large, including: (i) a large Muslim population becomes a potential customer of the Islamic finance industry; (ii) a bright economic outlook, reflected in relatively high economic growth (in the range of 6.0% - 6.5%) supported by solid economic fundamentals; (iii) increasing Indonesia's sovereign credit rating to investment grade which will increase investor interest in investing in the domestic financial sector, including the Islamic finance industry; and (iv) have abundant natural resources that can be used as underlying sharia financial industry transactions. Establishing a good strategy improves performance and will encourage growth and self-adjusting to environmental changes both internally and externally. Islamic banking, which is an organization that is trusted by the community, is certainly not only pursuing high returns but must pay attention to the benefit of the people, improve the economy and improve welfare. <sup>16</sup>

The REC method is one method of assessing the level of performance or banking health that can be seen from several financial ratios, such as the Loan to Deposit Ratio (LDR), Non Performing Loans (LDR), Retrun On Assets (ROA), and Capital Adequacy Ratio (CAR).

The following are outlined several previous studies related to the REC assessment of both Islamic banks and conventional banks which still have a research gap, this is indicated by the existence of different results from several studies that have been conducted. If the bank is able to manage the bank's corporate governance well then this will affect the bank's performance or assessment well too.

Research related to bank soundness using the REC method conducted by Fitria that the conventional ROA value of conventional banks is higher than that of sharia commercial banks means that the ability to generate profits at conventional commercial banks is better than Islamic commercial banks. The results of Al-Deehani, El-Sadi, and Al-Deehani research show that there are differences in Return on Assets between Islamic banks and conventional banks. The research was conducted in 25 banks in the GCC region (12

Alamsyah, H. (2012). Perkembangan dan Prospek Perbankan Syariah Indonesia: Tantangan Dalam Menyongsong MEA 2015. *Milad Ke-8 Ikatan Ahli Ekonomi Islam (IAEI)*, (April 2012), 1–8. Retrieved from https://s3.amazonaws.com/academia.edu.documents/34477024

<sup>/6</sup>bf00812e40b4d0cb140ea80239c4966PerkembanganProspekPerbankanSyariahIndonesiaM EA201.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1507199240&Signature=uNwIEUNCaTPTrqm5iS2OfBWzA%2Fs%3D&response-cont.

conventional banks and 13 Islamic banks) during 2001 to 2013.<sup>17</sup> Similar results were also shown by Thamrin, Liviawati, and Wiyati, Different from the results of research conducted by Nathan, Mansor, and Entebang and Yudianto that there were no differences in financial performance seen from Return on Assets between Islamic banks and conventional banks.

The results of the study on Capital Adequacy Ratio were carried out by that there were differences in the Capital Adequacy Ratio between conventional banks and Islamic banks. The study was conducted in 75 banks (55 conventional banks and 20 Islamic banks) in Kuwait, United Arab Emirates, Saudi Arabia, Oman, Oatar and Bahrain in 2003 to 2011. Different results were shown by Ardiansyah and Aryya that there were no difference in Capital Adequacy Ratio between conventional banks and Islamic banks. 18

From the previous studies related to the assessment of financial performance in several Islamic banks, in assessing the financial performance of a bank with the REC method there are differences in the calculation of the ratio. As research conducted by Khalil and Fuadi on aspects of earning bank health assessment by using the ratio of ROA, ROE, and BOPO. But in contrast to the research conducted by in the Earning aspect, the assessment uses ROA, ROE, and NIM ratios.

Related to the comparison of financial performance assessments in both Islamic banks and conventional banks where most of the research results state that there is no significant effect on financial performance of Islamic banks with conventional banks, we focus our research by analyzing bank financial performance sharia a number of 11 banks for the period 2014-2017. Our research aims to determine whether there are significant differences in the assessment of Islamic banks in terms of Risk Profile, represented by the ratio of Non Performing Loans (NPL), and Loan to Deposit Ratio (LDR), and Earning is represented by the Return on Assets (ROA) ratio and Capital is represented by the Capital Adequacy Ratio (CAR) ratio in 2014-2017 and can be analyzed by Islamic banks with the title "GOOD" or "NOT GOOD"

 $<sup>^{\</sup>rm 17}$  Thurai Murugan Nathan, Shazali Mansor, dan Harry Entebang. Comparison Between Islamic and Conventional Banking: Evidence from Malaysia. International Journal of Islamic Banking and Finance, Vol. 4, No.1. 2014.

<sup>&</sup>lt;sup>18</sup> Khalil, M., Fuadi, R. 2016. Analisis Penggunaan Metode Risk Profile, Good Corporate Governance, Earning, And Capital (Rgec) Dalam Mengukur Kesehatan Bank Pada Bank Umum Syariah Di Indonesia Periode 2012-2014.Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA), Vol. 1(1) Halaman 20-35. Jakarta.

based on the soundness of the bank using the REC method which can be used as a reference for other studies.

This study aims to analyze financial performance using the REC method in Islamic banking in 2014-2017. In addition to knowing the existence of a significant difference in the assessment of Islamic banks in terms of Risk Profile, the ratio of Non Performing Loans (NPL), and Loan to Deposit Ratio (LDR) was represented, and Earning represented the Return on Assets (ROA) ratio and Capital represented by the ratio Capital Adequacy Ratio (CAR) in 2014-2017.

#### **METHOD**

The variables used in this study are *Non Performing Loans* (NPL), *Loan to Deposit Ratio* (LDR), *Return On Assets* (ROA) and *Capital Adequacy Ratio* (CAR). To find out the performance of Islamic banking using the REC method.

Quantitative analysis using two independent samples t uji(Independent samples t-test) to determine the ratio between the variables to
be tested, but if the conditions or assumptions independent t-test can not be
fulfilled because the data were not normally distributed then test different
will use the Mann Whitney test for different test Mann Whitney does not
require that the data should be normally distributed. Before conducting a
comparative test, the analysis of banking financial performance ratios is done
first by describing veriabel ratio of Non Performing Loans (NPL), ratio
of Loan to Deposit Ratio (LDR), Calculate the ratio of Return on
Assets (ROA), Calculate the Capital Adequacy Ratio (CAR).

After calculating using financial ratio analysis using the RGEC method, then the next step is to calculate the value of the statistical variable. To find the average value ( *mean* ) of financial performance ratios using the RGEC method in Islamic banking the following formula is used:

$$\bar{x} = \frac{\Sigma x}{n}$$

We look for Sharia banking financial performance in Indonesia by calculating the average of all Islamic banking performance in Indonesia which is used as a research sample in the form of summing up the total performance of 11 Islamic banking for 3 years divided by tenor / time period studied

According to Ghozali to detect the normality of data can be done by Kolmogorov-Smirnov test. The analysis of the Kolmogorov-Smirnov test results was carried out by determining the testing hypothesis first, H 0: Data is normally distributed, and H 1: Data is not normally distributed.

The next analysis in this study uses the Variance Homogeneity Test Using Levene's Test. Levene test (Levene test) or risk test for similarity of variety (risk Test for Equality of Variance) is used to test whether the sample has the same variant. To find out whether the two samples are homogeneous or not, it is necessary to test the variance homogeneity first with a significant level of  $\alpha = 5\%$ .

After analyzing *Levene Test*, the next analysis process is Parametric or Non Parametric Test. The choice of the type of parametric or non parametric test in hypothesis testing is closely related to the distribution of population data to be tested. If the population data distribution to be tested is normal, then the testing process can be used with the parametric statistical test approach. Whereas if the data distribution is not normal or unknown distribution, it can be used non parametric statistical test approach. <sup>20</sup>

#### 1. Different Test

This analysis method is a type of parametric test because the requirements of the different test t independent samples of the data must be normally distributed and have the same variance in order to know whether or not there are differences between the two parties. *T* ujipurpose is to compare average unrelated group (unpaired) with one another. Do the two groups have the same average value or not significantly the same.<sup>21</sup>

# 2. Determine the level of significance

Hypothesis testing using *t*- test test two independent samples (*Independent sample t-test*) with level significance  $\alpha = 5\%$ . In this case if the opportunity error  $\alpha = 5\%$ , the confidence level is 95%. This means that the decision-making error in rejecting the correct hypothesis is a maximum of 5%.

<sup>&</sup>lt;sup>19</sup> Ghozali, Imam, *Aplikasi Analisis Multivariate Dengan Program SPSS*. (Semarang: Badan Penerbit Universitas Diponegoro, 2011) 90.

<sup>&</sup>lt;sup>20</sup> Oktaviani M A, & Hari Basuki Notobroto. 2014. Perbandingan Tingkat Konsistensi Normalitas Distribusi Metode Kolmogorov-Smirnov, Lilliefors, Shapiro-Wilk, dan Skewness-Kurtosis. *Jurnal Biometrika Dan Kependudukan*, *3*(2), 127–135.

<sup>&</sup>lt;sup>21</sup> Ghozali, Imam, *Aplikasi Analisis Multivariate Dengan Program SPSS*. (Semarang: Badan Penerbit Universitas Diponegoro, 2011) 82.

In this study decision making by comparing the value of T-Calculate with the value of T-Table If the value of T-Calculates  $\geq$  the value of T-Table then H 0 is accepted.thanIf the value of T-Calculate  $\leq$  value of T-Table then H 0 is rejected.

By looking at the probability value of significance:

1). Significance probability < 0.05	H0 is accepted.
2). Significance probability> 0.05	H0 rejected.

The Mann Whitney Test is a non-parametric test choice if the independent test cannot be done because the assumption of normality of the data cannot be fulfilled. This test is an alternative if the data is not normally distributed and not homogeneous. The Mann Whitney test is the same as the independent test sample sample t-test, but the Mann Whitney test is used to find out two samples that are not related or paired with each other.

Hypothesis testing uses the Mann Whitney test with a significance level of  $\alpha = 5\%$ . In this case, if the probability of error is  $\alpha = 5\%$ , then the confidence level is 95%. This means that the decision to make a mistake in rejecting the correct hypothesis is a maximum of 5%. In this research the decision making is done with the following criterialf the value of Asymp.Sig (2-Tailed) <0.05, then there is a difference significant, which means accepted.If the value of Asymp.Sig (2-Tailed)> 0.05, then there is no significant difference, which means it is rejected.

#### RESULT AND DISCUSSION

Ratio Analysis of Banking Financial Performance. According to figure 1, during 2014-2017 it can be seen that 11 Islamic banks in Indonesia which were used as the study sample the majority experienced a significant increase in performance even though there were several banks experiencing fluctuating CAR performance.

In independent Islamic banks the value of CAR fluctuated at a value of 14.12% in 2014 and 2015 and then dropped to 14.10% and increased again in 2017 to 15.89%. at Mega Syariah CAR bank which was obtained at 19.26%, 18.74%, 2.53%, 22.19% respectively from 2014 to 2017. Muamalat

bank had a CAR of 13.91% in 2014 and then dropped to 12% in 2015, increased again in 2016 to 12.74%, and 1,625 in 2017.

Capital Adequacy Ratio (CAR)

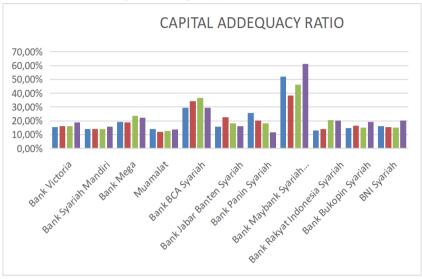


Figure 1. CAR Movement Chart for 2014-2017

With a safety threshold value of at least 8%, 11 Islamic banking in Indonesia protects customers and is able to maintain overall financial system stability during 2014-2017. This is because the greater the value of CAR reflects the better banking ability in facing the possibility of risk of loss.

# **Data Analysis, Hypothesis Testing and Discussion**

Comparative Analysis of Banking Performance (Data Sample Test)

Kolmogorov Smirnov Test

CAR (Capital Adequacy Ratio)

Table 1 show that the comparison of CAR (*Capital Adequacy Ratio*) of 11 Islamic Bank between 2014 to 2017 are normally distributed data. This is because the value of the results of KS Test data with SPSS series 22.0, the significance level of CAR data for each Islamic bank from 2014 to 2017 worth> 0.05, which means CAR data from 2014 to 2017 can be used for data in the calculation of the next comparative data. Following are the significance values of the CAR for 2014-2017:

 Table 1: CAR Significance Value from One-Sample Kolmogorov-Smirnov

	Test	
Year	Significance	Information
	value	
2014	0.309	Normal
2015	0.645	Normal
2016	0.450	Normal
2017	0.179	Normal

# FDR (Fund to Deposite Ratio)

Based on table 2, we can know together that the value of the ratio of FDR (*Fund to Deposite Ratio*) of 11 Islamic Banking in 2015 until 2017 are normally distributed data, whereas in 2014, FDR data not normally distributed due to FDR data during 2014 has occurred n extreme values in a data set ( $\sum$  11 Bank) that will generate distribution *skewness* (slant) . This is because the value of the results of KS Test data with SPSS series 22.0, the significance level of FDR data from 2015 to 2017 worth> 0.05, which means that FDR data from 2015 to 2017 can be used for data in the calculation of subsequent comparative data while the FDR value in 2014 it is possible not to be used as data in the next comparative calculation. The following is the significance value of FDR data from 2014 - 2017:

**Table 2:** FDR Significance Value from *One-Sample Kolmogorov-Smirnov Test* 

Year	Value of significance	Information	
2014	0.020	Abnormal	
2015	0.978	Normal	
2016	0.193	Normal	
2017	0.115	Normal	

NPF (Non Performing Financing)

Based on table 3., we can know together that the comparative value of NPF (*Non Performing Financing*) out of 11 Islamic Banking in 2014 until 2017 are normally distributed data. This is because the value of the results of KS Test data with SPSS series 22.0, the significance level of NPF data from 2014 to 2017 worth> 0.05, which means CAR data from

2014 to 2017 can be used for data in the calculation of the next comparative data. The following are the significance values of the 2014-2017 NPF data:

**Table 3:** NPF Significance Value from *One-Sample Kolmogorov-Smirnov* Test

Year	Significance value	Information
2014	0.414	Normal
2015	0.682	Normal
2016	0.984	Normal
2017	0.979	Normal

ROA (Return On Asset)

Based on table 4., we can know together that the value of the ratio of ROA (Capital Adequacy Ratio) of 11 Islamic Banking in 2014, 2016, and 2017 are normally distributed data, while in 2015, ROA data not normally distributed due to ROA data during 2014 has occurred n extreme values in a data set ( $\Sigma$  11 Bank) that will generate distribution skewness (slant). This is because the value of the KS Test data with SPSS series 22.0, the significance level of the 2014 to 2017 ROA data worth> 0.05, means that ROA data from 2014, 2016 and 2017 can be used for data in comparative data computation calculations. next. Following are the significance values of the 2014-2017 ROA data:

**Table 4:** Value of significance of ROA from *One-Sample Kolmogorov*-Smirnov Test

Year	Significance value	Information
2014	0.524	Normal
2015	0.049	Abnormal
2016	0.177	Normal
2017	0.072	Normal

Levene's Test

**Table 5:** Results of Levene Test Analysis **Test of Homogeneity of Variances** 

·	Levene Statistics	df1	df2	Sig.
CAR	0,141	3	40	0,935
FDR	0,666	3	40	0,578

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NPF	0,131	3	40	0,941
ROA	1,205	3	40	0,320

Source: Results of Authors' Primary Data Using SPSS Version 22.0 (2019) Information:

df1 = number of data groups-1 (4-1 = 3)

df2 = amount of data - number of data groups (44 - 4 = 40).

From the calculation results *Levene Test* in table 4.9, it can be seen that the level of significance of CAR, FDR, NPF, and ROA is 0.935; 0.578; 0,941; 0.320 out of a total of 11 Sharia Banking as samples in this study. Because the significance is more than 0.05, it can be concluded that the four groups of data regarding the performance of Islamic banking are based *Risk Profile* and *Earning & Capital* (REC) 2014-2017 period has the same variant. Number *Levene Statistics* shows that the smaller the value, the greater the significance of homogeneity. So that H0 is accepted, while H1 is rejected.

Result Of Analysis of Comparative Performance of RGEC Islamic Banking With Test-Hypothesis t

**Table 6:** Comparison of REC Performance of Islamic Banking With Hypotheses Test-*t Mann-Whitney U2014-2017* period

			CAR	FDR	NPF	ROA
Mar	Mann-Whitney U		1,000	0,000	6,000	0,500
V	Vilcoxon W		11,000	10,000	16,000	10,5
	Z		-2,033	-2,337	-0,607	-2,3
Asym	p. Sig. (2-tailed)		0,042	0,019	0,544	0,02
Exact Sig. [2*(1-tailed Sig.)]			$0,057^{b}$	$0,029^{b}$	$0,686^{b}$	0,03
Monte Carlo Sig. (2-	Sig.		$0,052^{c}$	$0,027^{c}$	$0,718^{c}$	0,05
tailed)	99% Confidence Interval	Lower Bound	0,046	0,022	0,706	0,05
		Upper Bound	0,058	0,031	0,729	0,06
Monte Carlo Sig. (1-	Sig.		0,024 <sup>c</sup>	$0,013^{c}$	0,361 <sup>c</sup>	0,03

tailed)	99% Confidence Interval	Lower Bound	0,020	0,010	0,348	0,02
		Upper Bound	0,028	0,016	0,373	0,03

- a. Grouping Variable: LABEL
- b. Not corrected for ties.
- c. Based on 10000 sampled tables with starting seed 624387341.

Based on table 4.10, the results of the hypothesis test Independent sample t-test indicate that:

1. CAR, shows the value of sig (2-tailed) is 0.42> 0.05 so Ho is rejected.

That is, there is no difference in risk of the capital adequacy

ratio which serves to accommodate the risk of losses that may be faced by one Islamic Bank with other banks for the 2014-2017 period.

Based on Bank Indonesia regulations, banks including healthy banks must have a CAR of at least 8%. This is based on conditions determined by BIS (Bank for International Settlements). According to Lis Sintha, CAR has a significant effect on the proble-matic and negative effect means that below the lower CAR, the possibility of banks having higher problematic conditions. Because the bank cannot cover the risk of losses arising from investment funds in assets productive which contains risks and may not be used to finance fixed assets and investments .This can cause financial disruption. Thus, it can be formulated that CAR has a negative effect on the health of the bank.

2. FDR, shows the value of sig (2-tailed) is 0.19> 0.05 so Ho is rejected.

That is, there is no significant difference regarding the ratio of financing to third party funds received at one Islamic Bank with other Islamic banks during the 2014-2017 period.

This is supported by the results of research by Suryani (2011), stating that the trend equation obtained is Y = 96.57 - 1.83 X. The results of this equation indicate that the trend of Financing to Deposit Ratio (FDR) is a negative trend where there is a tendency to decline every year. Based on the results of this calculation, it can be predicted that the Financing to Deposit Ratio (FDR) will be obtained in 2011 and 2012 with the code X = 3.5, and X = 4.5.

3. ROA, shows the value of sig (2-tailed) is 0.022 <0.05 so Ho is accepted.

This means that there are significant earnings differences in one Islamic Bank with other Islamic banking in the 2014-2017 period. This is supported by research (Sintha et al., 2016), below the higher ROA, the possibility of bank failures is getting smaller. Thus, it can be formulated that ROA has a negative influence on the health of the bank.

4. NPF, shows the value of sig (2-tailed) is 0.544> 0.05 then Ho is rejected.

This means that there is no significant difference regarding the performance of non-performing loans consisting of substandard, doubtful and loss loans classified as one Islamic Bank with other Islamic banking for the 2014-2017 period. The results of this study are consistent with the research conducted by (Pratama, 2010) which concluded that NPF had a negative effect on financing and the level of liquidity or health of Islamic banking

In the Risk Profile variable as measured by NPF and FDR, it obtained a significant value> = (0.05), and it can be concluded that NPF and FDR did not significantly affect the bank's health predictions. The results of the study allow us to state that NPF, FDR have no significant difference in the bankruptcy prediction of the bank.

In terms of income variables, the regression analysis results on ROA have a significant effect on bank health predictions. This shows the influence of any increase in ROA will be followed by an increase in the level of health of Islamic banks in Indonesia. If not, a reduction in ROA will be followed by a further decline in bank health. The results support the research conducted by Titik Aryati & Hekinus Manao which states that ROA has a significant influence on the prediction of (conventional) banks that have problems.<sup>22</sup>

Capital is measured by the CAR ratio. It can be concluded that CAR does not have a difference in risk of the capital adequacy ratio (does not affect the predictions of bank health) which serves to accommodate

<sup>&</sup>lt;sup>22</sup> Sintha, L., Primiana, I., & Nidar, S. R. 2016. *Bank Health Analysis Based On Risk Profile, Earnings And Capital*. Journal Actual Problems Of Economics, 7, 386-396.

the risk of losses that may be faced by one Islamic Bank with other banks for the 2014-2017 period. This research supports research conducted by L.S. Almilia and W. Herdiningtyas (quoted in Sintha et al., 2016) state that CAR has a significant influence on the condition of troubled banks.

This happened because Bank Indonesia regulations on CAR stated that commercial bank CAR must be at least 8%. But banks tend to maintain a CAR of no more than 8% because this means idle or even wasteful funds, because in fact the bank's main capital is trust, while the 8% CAR is only intended by Bank Indonesia to adjust to the conditions of international banking.

But in reality, profitable businesses do not have to enter an 8% CAR as long as there is public trust. Public trust in banks may arise due to a factor of government guarantees on funds held in banks.

## CONCLUSION AND RECOMMENDATION

The results of this statistical analysis use linear regression and hypothesis testing above the 5% significance level indicates that the profactor

#### Recommendation

- 1. For future researchers who will use research on bank rankings based on REC performance measures (Risk Profile, Earnings, and Capital) is Creating a new parameter to determine the category of REC values so that the ranking results become more objective in accordance with the results of the calculations obtained.
- 2. Include all types of conventional commercial banks as research samples (State Banks, Foreign Exchange BUSN, Non-Foreign Exchange BUSN, Regional Development Banks, Mixed Banks, Foreign Banks) so that more objective comparison analysis can be carried out on REC performance (Risk Profile, Earnings, Capital) between each Islamic bank and conventional banking.
- 3. At REC size (Risk Profile, Earnings, Capital) can use risk profile in accordance with Bank Indonesia regulations on eight risks and can use all indicators or parameters for factors earnings and factors capital.
- 4. For banks, in order to maintain the rank or title and improve the health condition of the bank in the following years.

## REFERENCES

- Bank Indonesia. 1998. UU No.10 tahun 1998, Tentang Perubahan Terhadap UU No. 7 tahun 1992. Jakarta
- Bank Indonesia. 2004. Peraturan Bank Indonesia Nomor: 6/10/PBI/2004 tanggal 12 April 2004 perihal Sistem Penilaian Tingkat Kesehatan Bank Umum. Jakarta.
- Bank Indonesia. 2011. Peraturan Bank Indonesia Nomor: 13/1/PBI/2011 tentang Penilaian Tingkat Kesehatan Bank Umum. Jakarta.
- Bank Indonesia. 2011. Surat Edaran Bank Indonesia Nomor 13/24/DPNP Perihal Penilaian Tingkat Kesehatan Bank Umum. URL: www.bi.go.id. Diunduh pada 18 Juli 2018.
- Bank Indonesia. Booklet Perbankan Indonesia 2009, Direktorat Perizinan dan Informasi Perbankan. Jakarta.
- Djamil, Faturrahman. 2012. *Penyelesaian Pembiayaan Bermasalah di Bank Syariah*. Jakarta: Sinar Grafika
- Ghozali, Imam. 2011. *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- Khalil, M., dan Fuadi, R. 2016. *Analisis Penggunaan Metode Risk Profile, Good Corporate Governance, Earning and Capital (RGEC) dalam Mengukur Kesehatan Bank Pada Bank Umum Syariah di Indonesia Periode 2012 2014.* Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi
  (JIMEKA). Vol. 1, No. 1, 20 35.
- Nathan, Thurai Murugan, Shazali Mansor, dan Harry Entebang. *Comparison Between Islamic and Conventional Banking: Evidence from Malaysia*. International Journal of Islamic Banking and Finance, Vol. 4, No.1.2014.
- Thamrin, M., Liviawati, and Rita Wiyati. (2011), Analisis Perbandingan Kinerja Keuangan Bank Umum Syariah dengan Bank Umum Konvensional serta Pengaruhnya Terhadap Keputusan Investasi. Pekbis Jurnal, Vol. 3, No. 1: 406-412.Wibowo, 2014. Manajemen Kinerja. Edisi keempat. Jakarta: Rajawali Pers.
- Al-Deehani, T. M., El-Sadi, H. M., & Al-Deehani, M. T. Performance of Islamic banks and conventional banks before and during economic downturn. *Investment Management and Financial Innovations*, 12 (2), 238–250. 2015.
- Alamsyah, H. (2012). Perkembangan dan Prospek Perbankan Syariah Indonesia: Tantangan Dalam Menyongsong MEA 2015. *Milad Ke-8*

- Ikatan Ahli Ekonomi Islam (IAEI), (April 2012), 1–8. Retrieved from https://s3.amazonaws.com/academia.edu.documents/34477024/6bf00812e40b4d0cb140ea80239c4966PerkembanganProspekPerbankanSyariahIndonesiaMEA201.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1507199240&Signature=uNwIEUNCaTPTrqm5iS2OfBWzA%2Fs%3D&response-cont.
- \_\_\_\_\_. Analisis perbandingan kinerja keuangan berdasarkan risk profile, good corporate governance, earnings, and capital (rgec) pada bank umum konvensional dan bank umum syariah periode 2011-2014. 2344–2360. 2016.
- Bank Indonesia. 2011. *Nomor 13 / 1 / PBI / 2011 Tentang Penilaian Tingkat Kesehatan Bank Umum*. Retrieved from http://www.bi.go.id/id/peraturan/perbankan/Pages/pbi\_130111.aspx
- Faly, Q. P. 2005. Pengukuran Kinerja Bank Syariah Dengan Dengan Metode RGEC. Jakarta. 185–201.
- Kementerian Sekretariat Negara Republik Indonesia. (2011). *No 11 tahun 2011 Tentang Otoritas jasa Keuangan.* Jakarta
- Khalil, M., Fuadi, R. 2016. Analisis Penggunaan Metode Risk Profile, Good Corporate Governance, Earning, And Capital (Rgec) Dalam Mengukur Kesehatan Bank Pada Bank Umum Syariah Di Indonesia Periode 2012-2014. Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA), Vol. 1(1) Halaman 20-35. Jakarta.
- Otoritas Jasa Keuangan. 2015. Salinan peraturan otoritas jasa keuangan republik indonesia nomor 8/pojk.03/2014 tentang Penilaian tingkat kesehatan bank umum syariah dan unit usaha syariah. Jakarta
- Mohamad, M. T., Abdullah, M. Y., & Mohamad, M. A. 2013. *The historical development of modern Islamic banking: A study in South-east Asia countries.* x(xx).
- Murdiyanto, A. 2015. Bal Di Kasuspadalaporan Bi Periode 2009-2015. (10), 453–463.
- Oktaviani M A, & Hari Basuki Notobroto. 2014. Perbandingan Tingkat Konsistensi Normalitas Distribusi Metode Kolmogorov-Smirnov, Lilliefors, Shapiro-Wilk, dan Skewness-Kurtosis. *Jurnal Biometrika Dan Kependudukan*, *3*(2), 127–135.
- Pratama, B. A. 2010. Penyaluran Kredit Perbankan (Studi pada Bank Umum di Indonesia Periode Tahun 2005 2009). 19(2), 135–148.

Sintha, L., Primiana, I., & Nidar, S. R. 2016. *Bank Health Analysis Based On Risk Profile, Earnings And Capital*. Journal Actual Problems Of Economics, 7, 386–396.