RISK ANALYSIS OF ISLAMIC BANKING IN INDONESIA

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Abstract

This study aims to explain the risks of Islamic banking in Indonesia. The risks presented are in the form of financing risk as measured by NPF, stock risk as measured using using risk and return of stock, and predictions are made on the amount of distribution of Islamic bank financing in the next 3 years. This study is descriptive with a quantitative approach. The data used for financing risk and prediction of the amount of fiancing are overall data on Islamic banking in Indonesia. While the data for stock analysis only uses the stocks of Panin Syariah dan BRI Syariah banks. The results showed that Islamic banks have higher financing risks than conventional banks with lower ROA. Panin Syariah dan BRI Syariah stocks have an average negative weekly return with a fairly high risk rating. While the amount financing of Islamic banks as a whole is predicted to increase in the next 3 years.

Keywords: *Risk, Islamic, Bank.*

Abstrak

Penelitian ini bertujuan memaparkan risiko perbankan syariah di Indonesia. Risiko-risiko yang dipaparkan berupa risiko pembiayaan yang diukur dengan NPF, risiko saham yang diukur menggunakan risiko dan return saham serta dilakukan prediksi terhadap jumlah penyaluran pembiayaan bank syariah pada 3 tahun berikutnya. Penelitian ini bersifat deskriptif dengan pendekatan kuantitatif. Data yang digunakan untuk risiko pembiayaan dan prediksi jumlah pembiayaan adalah data keseluruhan perbankan syariah di Indonesia. Sementara data untuk analisis saham hanya menggunakan saham bank Panin Syariah dan BRI Syariah. Hasil penelitian menunjukkan bahwa bank syariah memiliki risiko pembiayaan yang lebih besar daripada bank konvensional dengan ROA yang lebih kecil. Untuk saham bank Panin Syariah dan BRI Syariah memiliki rata-rata return tahunan mingguan dengan peringkat risiko yang cukup tinggi. Sementara jumlah pembiayaan bank syariah secara keseluruhan diprediksi meningkat pada 3 tahun mendatang.

Kata kunci: Risiko, Perbankan, Syariah, Pembiayaan, Saham

Introduction

Every business organization that aims to make a profit in its activities will face risks that can impact on reducing profits to cause losses. Banking as a financial sector business entity is also not far from the risk problems that may be faced. Indonesia has a dual banking system where there are conventional banks and Islamic banks operating in the same country and these two types of banks also face risks. According to Misman and Bhatti (2010: 3) conventional banks must face five main risks, namely credit risk, intrest rate risk, liquidity risk, underwriting risk and operational risk, and Islamic banks also face the same risk. This means that Islamic bank risk management must also be prepared to accept the risks faced by conventional banks.

Islamic banks have a good development, in terms of total assets continue to increase every year. Indonesian Islamic banking statistics issued by the Otoritas Jasa Keuangan (OJK) show that to December 2018 the total assets of Islamic commercial banks reached 316.7 trillion rupiah, continuing to increase compared to the previous three years. Apart from the development of a good Islamic financial market lacks tools in risk management (Swartz, 2012: 3800). This is caused to the strong focus of Islamic finance on short-term financing (How et al., 2005 in Swartz, 2012: 3800). Islamic banking needs to develop their own risk management better so that it can result in better performance as well. The instruments in sharia banking are quite divers which are adapted to their respective contracts. In Indonesia, according to Islamic banking statistics released by OJK there are at least six types of contracts developed by Islamic banks, namely mudharabah, musyarakah, murabahah, qard, istishna' and ijarah, so of the six contracts it is necessary to develop better risk management of each type of contract.

The financial crisis in 2008 that began in 2007 is a wrong example of a bank that does not respect the interaction between growth and risk (Cucinelli, 2015: 60). In that year, subprime mortgages were known in which high risk financing was provided to low income customers with adjusted interest rates that impacted on high non-performing loans. The risk of non-performing loan is very difficult to be avoided by banks but can be minimized. Non-performing loan needs to be suppressed by the lowest possible banking because the impact is huge both for internal banking and the economy of a country. In Islamic banks, non-performing loan is known as non-performing financing (NPF) where the maximum standard is strictly stated according to OJK is 5%.

This study aims to explain the risk of Islamic banking in Indonesia as measured by NPF and then compared to conventional banking. In addition, the risk and return of Islamic banking in the capital market will also be calculated, which in this study Islamic banking is represented by Bank Panin Syariah and Bank Rakyat Indoensia Syariah (BRI) as Islamic banks that go public in Indonesia and then this study will provide predictions of Islamic bank financing the next three years.

Literature Review

Company Risk

Risk analysis is a twin pair of profitability analysis, both of which are used as a company attraction (Hanafi and Halim, 2014:199). Portfolio theory also revals a positive relationship between risk and return. Good risk management can have implications for a good level of profitability as well and can be an assessment for investors in putting their funds in the company. Risks can arise when there is an uncertainty about the outcome that is unknown. In the business dictionary risk is defined as the probability or threat of damage, injury, liability, loss, or other negative events caused by external or internal vulnerabilities and it can be neutralized through preventive measures (Helmy, 2012:13).

Risks can be grouped into two according to type, namely systematic risk and unsystematic risk. Systematic risk or also known as market risk is a risk that is difficult to avoid because it is usually caused by macroeconomic factors such as inflation, interest rate policies, national recession and so forth. While unsystematic risk or also known as specific risk is a risk that is experienced by business intitutions and does not have a national impact. Specific risks to the company can be eliminated by diversification (Hanafi and Halim, 2014: 201).

According to Flefel (2009: 31) if the risk is successfully handled well, the risk can provide an opportunity for a company to generate higher profits. There are five techniques that can be used to deal with risk, namely retention, adaptation, avoidance, risk reduction and transfer. In the sharia framework, investors can be use risk as an incentive to get greater returns but must avoid the problem of gambling and gharar.

Risks to Islamic Banks

Islamic bank is a bank that carries out all of its operations in accordance with Islamic Sharia regulations. In Islamic banks no conventional bank elements are used that are not in accordance with Islamic fiqh rules which avoid usury, gharar and maysir in any form. This uniqueness also provides identical risks for Islamic banks. In practice selling assets to customers who need financing, but the assets must be owned by an Islamic bank in advance to comply with Islamic sharia regulations. This shows the majority of Islamic bank transactions to price risk due to the acquisition of valuable assets which in turn introduce new risks to Islamic banking (Swartz, 2012: 3800). So that the risk of Islamic banks arises from the structure arranged by the bank itself and the principles that must be be followed in every product arrangement.

The development of Islamic banking products, especially in Indonesia, is currently modeled on a lot of conventional bank products which are then developed in the form of sharia. This can make risk management in Islamic banking tend to handle risks faced with conventional system guidelines (Asian Institute of Finance, 2013: 3). Yet according to Venardos (2006) Islamic banks will face greater challenges in identifying and managing risks than conventional banks because of the complexity that arises from the nature of risk in each contract and profit and loss concept of each particular financing concept. The unique risks of Islamic banks can be seen in the following table:

Table 1

Unique Risk of Islamic Banks

Risk Type	Depinition
Risk of non-compliance with sharia	Risk arising from failure to comply with sharia rules and principles.
Risk of return	The impact of unexpected potential returns due to changes in the rate of return.
Ignored commercial risks	Is a risk that may be faced by banks due to commercial pressure in paying returns that exceeds the level of acquisition of assets financed by investment account holders. Banks first share part or all of the profits to retain fund providers and prevent them from withdrawing funds.
Equity investment risk	Risk arising from partnerships with the aim of participating in certain financing or business activities described in the contract, where financing providers play a role in business risk.

Source: Joroen P.M.M. Thijs (Chief Risk Officer Berhad Islamic Bank of Malaysia)

Islamic Bank Financing Risk

Credit or financing risk, according to Adiwarman (2013:260), is a risk that results from a counterparty failure to fulfill its obligations or called non performing fiananancing. This risk is related to the failure of the customer in paying his debt to the bank. The credit risk is considered as the most important risk faced by banks in relation to wealth owners (Elgari, 2003:8). The same thing was also expressed by Flefel (2009:43), according to him credit risk was considered the main risk for both conventional and Islamic banks. It was further explained that lending to conventional banks was replaced with investments in the form of partnerships by Islamic banks, therefore, Islamic banks have the opportunity to experience credit risk because the value of traded commodities may change at any time. Explained by Ilias (2012) there are several Islamic banking contracts that have credit risk as the main risk.

Murabahah, istishna' and qard contracts are financing from the types of receivables if we refer to the financial statements of Islamic banks in Indonesia, so that these types of contracts are the most vulnerable to credit risk. The salam contract raises commodity debt and not cash but still involves credit risk, while mudharabah and musyarakah are partnership contracts and funds provided by banks to non-debt entrepreneurs but both can also bear credit risk if there is negligence and if sales are suspended (Elgari, 2003:9). Previously explained that this credit risk is a major risk so that the main concern in handling risk lies in credit risk. Good risk management techniques are needed to minimize this. According to Helmy (2012: 16) the techniques used by Islamic banks to reduce credit risk are the same as those used by conventional banks, with no credit rating agency, banks only rely on the client's track record with the bank and collect information about the client's creditworthiness through information sources and networks local communities such as checking client profiles, workplaces, addresses, monthly salaries and so on.

Market Risk

According to Ekinci (2016: 428) market risk is the risk of loss in a liquid portfolio arising from market price movements consisting of interest rates, currency risk, equity and commodities. The essence of financial market risk reflects that the actual return on an asset portfolio may be very different from the estimated return, this is the reason that the size of financial market risk is very important to be maintained through successful risk management (Bask, 2010: 180).

Flefel (2009: 46) opine the risk of Islamic bank market is concentrated in banking books that are appropriate for Murabahah, Ijarah, Salam, Musyarakah and Murabahah. Therefore credit risk and market risk must be managed together. It was further explained that market risk is Islamic banks refers to the potential ampact of adverse price movements such as the benchmark interest rate, price risk, foreign exchange risk (FX), and price fluctuations in the price risk of securities and sukuk. Market risk may also arise from decreasing returns on investment accounts (savings). To protect againts this risk, Islamic banks create special funds aimed at supporting clients in the case of undesirable results.

Research Methods

This research is descriptive in nature which is a study of problems in the form of the current facts of a population (Indriantoro and Supomo, 2014: 26). To analyze the risk in this study using two approaches. The first approach uses the financial ratio approach. The non performing financing (NPF) ratio is used to describe the credit risk that will be compared with the profits obtained by banks which are illustrated by return on assets (ROA). Then also compared these ratios with the same ratio of conventinal banks. Data from financial ratios are obtained from Statistik Perbankan Syariah (SPS) and Statistik Perbankan Indonesia (SPI) issued by OJK. The research period used for the first analysis was 2014 until 2018.

The second analysis uses stock approach. In this analysis banking risk is illustrated by the the risk of its stocks as been from the standard deviation, in addition it will also be seen the average weekly return. To calculate stock returns the following approach is used:

$$\mathrm{Ri} = \frac{\mathrm{Pt} - \mathrm{Pt}{-1}}{\mathrm{Pt}{-1}}$$

In Indonesia, Islamic banks that go public are Panin Syariah and BRI Syariah, so these banks are made as representatives of Islamic banks in this analysis. The data used is the closing price of the weekly stock in 2018. The analysis was carried out in 2018 because BRI Syariah was only officially listed on the stock exchange in that year, while the Panin Syariah had gone public since 2014. Panin Syariah and BRI Syariah stock were than compared with 11 other banking stocks, 4 finance company stock, 4 scurities company stocks, and 4 insurance company stocks, all of which were selected using the random sampling method.

The last part of the analysis will be a prediction of each Islamic banking financing contract in Indonesia. The data used in making predictions is annual data from the period 2007 to 2018. The prediction method used is the trend projection method with the equation:

$$Y = a + bx$$

Results and Discussion

Risk and Return Using Ratio Analysis

The results showed that the financing risk (NPF) of Islamic banks was higher than conventional banks, while the profitability ratio illustrated by ROA from Islamic banks was still far lower than conventional banks.

Table 2

NPF and ROA of Islamic and Conventional Banks

Years	Islamic Bank	Conventional bank

	NPF	ROA	NPL	ROA
2014	4.95%	0.41%	2.16%	2.85%
2015	4.84%	0.49%	2.49%	2.32%
2016	4.42%	0.63%	2.93%	2.23%
2017	4.76%	0.63%	2.93%	2.45%
2018	3.26%	1.28%	3.36%	2.55%

In table 2 above, there is considerable diffrence from NPF ratiosof Islamic and conventional banks. Even the severity of Islamic bank NPF in 2014 and 2015 the figure is very close to 5% as a maximum NPF which is categorized well by OJK. This high NPF shows that Islamic banks are still not good in selecting prospective debtors who fail to pay their loans to banks. Islamic bank financing is directly related to the real sector, and the real sector is directly related to economic growth. So that the cause of the high NPF on Islamic banks can be influences by the real sector which has stalled due to the economy that has not been so stable. When viewed from 2014-2017 the mining sector always contributed a high NPF of more than 8% even reaching more than 11% in 2016. This is because mining equipment rental costs continue to increase even reaching 8%. But what is encouraging for the past five years the NPF of Islamic banks has continued to decline and is inversely proportional to conventional banks that have increased until returning to decline in 2018.

Table 2 also shows the profitability performance measured by ROA shows that Islamic banks are still far behind conventional banks. Even the great thing is that conventional banks always create an ROA value of more than 1.5% which is a very good category according to creteria set by Bank Indonesia (BI). This can actually be considered reasonable because the assets of Islamic banks are only about 6% compared to conventional banks so that the ability to produce profits is still not as good as conventional banks. Moreover, the NPF of Islamic banks is still quite high which makes the provision of losses increase so that it can have an impact on profit decline. However, if seen from table 2 shows the increased profitability performance and even touched 1% in 2018 and is inversely proporsional to conventional banks which can only increase in 2017 and 2018 after continuing to decline in the previous two years.

Risk and Return Using Stock Analysis

As previously explained that Islamic banks on the Indonesia stock exchange only have Panin Syariah and BRI Syariah, so this bank is used as a sample in this analysis. Panin Syariah's stock code is PNBS and BRI Syariah is BRIS which will be compared with stocks of other industries such as conventional banking stock, financial companies, securities companies, and insurance companies. Analysis of stock movements can illustrate the performance of existing banks both in terms of return or the resulting risk.

Table 3

Risk and Stock Return of Islamic Banks and Other Financial Companies

Stock Code	Average Weekly Return	Weekly Return Ranking	Std. Deviation	Std. Deviation Ranking
BBRI	0.13%	10	0.0432	17
BBTN	-0.32%	19	0.0695	7
BMRI	0.44%	7	0.0438	16
BRIS	-0.37%	21	0.0458	15
PNBS	-0.73%	24	0.0578	9
BINA	-0.65%	23	0.1248	3
BTPN	0.77%	5	0.0575	10
BBKP	-1.10%	25	0.0566	11
BNGA	-0.40%	22	0.0481	14
NISP	-0.01%	13	0.0300	21
BJTM	-0.13%	16	0.0328	19
BJBR	-0.09%	14	0.0334	18
ADMF	0.38%	8	0.0317	20
BPFI	1.36%	3	0.1239	4
HDFA	1.07%	4	0.2156	1
IMJS	2.11%	2	0.0526	12
APIC	0.38%	9	0.0157	24
ARTA	4.00%	1	0.1562	2
PEGE	0.04%	12	0.1136	5
TRIM	-0.29%	17	0.0287	22
PNIN	0.72%	6	0.1044	6
AMAG	-0.09%	15	0.0526	13
LPGI	-0.34%	20	0.0579	8

ASRM	0.09%	11	0.0187	23

Table 3 above shows that Panin Syariah and BRI Syariah have negative average weekly returns, which means investing in Panin Syariah and BRI Syariah stocks will result in losses. This is due to the continued decline in stock prices from Panin Syariah and BRI Syariah. The Panin Syariah bank's stock price in December touched 50 rupiah which is the lowest price of Panin Syariah stocks since it first go public. If observed the rising trend in the weekly share price of Panin Syariah is only 14 times in 2018. This could be due to market response to the decline in Panin Syariah's net profit by 21.92% during the third quarter of 2018 which caused a decrease in earning per share of 1.48 rupiah to 0.72 rupiah. Likewise, BRI Syariah touched its lowest price in December since it first go public. While the banking stocks analyzed in this study were only banks Mandiri, BRI, and BTN which recorded an average of positive weekly returns during 2018.

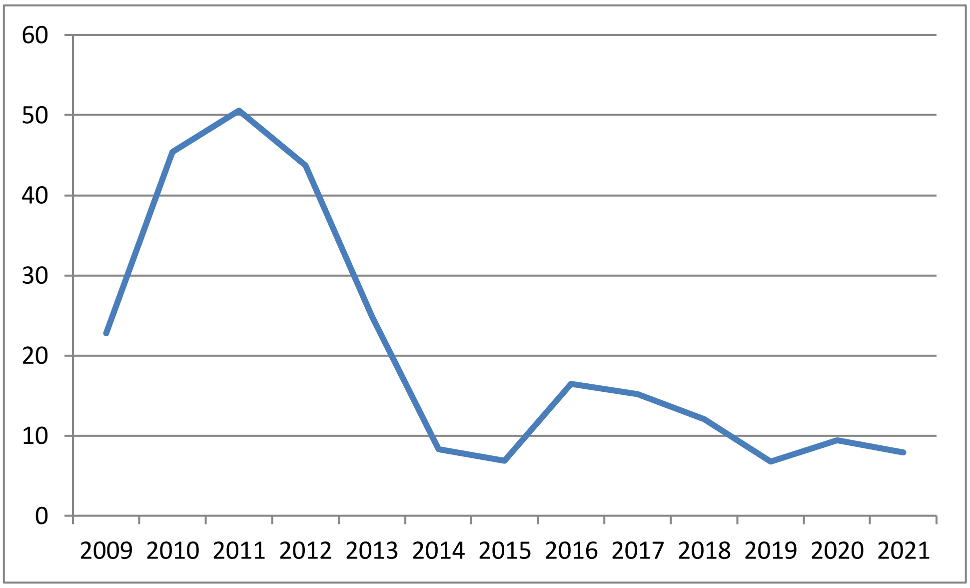
In investment theory it is stated that hogh returns are associated with high risks as well, and vice versa. Arthavest stock (ARTA) have the highest return and the second highest risk after stock of Radana Bhaskara (HDFA). Likewise with Panin Syariah and BRI Syariah stock which have a negative return even ranks low among the samples, but both Islamic bank stocks have relatively high risk, even Panin Syariah stock are among the top 10 highest risks among the sample. Generally we can rank the risk and return relationship by calculating the coefficient of variation (CV), but because Panin Syariah and BRI Syariah stocks have a negative return, the coefficien of variation that will be generated is also negative. In addition there will be no investors who want losses in their investments. This means that Panin Syariah and BRI Syariah banks need efficiency in their operations and also better risk management. If investor want to invest in Islamic financial sector stocks, they can choose Arthavest (ARTA) stock which have a fairly commensurate risk and return.

Financing Prediction

The results of the prediction calculations conducted found that in the next three years namely 2019, 2020, and 2021 there will be an increase in the amount of financing provided by Islamic banks continuously compared to previous years. Financing provided by Islamic Banks in 2018 amounted to 320.19 trillion rupiah while the result of prediction analysis showed that in 2019 there were 341.82 trillion rupiah or an increase about 10.02%, then in 2020 374.04 trillion rupiah increased 9.42% and in 2021 there were 403.46 trillion rupiah, increasing by 7.86%. This increase also means that the potenttial risks faced by Islamic banks will increase so that better risk management is needed. The increase in the amount of financing for 2019-2021 could be due to regional banks that have been converted to Islamic banks in recent years, namely Aceh regional banks and NTB regional banks. With the addition of the number of Islamic banks automatically increase the distribution of financing. Moreover, there are several regional banks that want to immediately convert to Islamic banks such as West Sumatra regional banks and Riau Kepri regional banks. If it seen that the trend of channeling financing from Islamic banks hs continued to increase over the past 10 years, this shows that Islamic banks have continued to improve to show their existence in the financial sector in Indonesia even amid the crisis that struck in 2008. Even after the crisis, the percentage of financing growth channeled by Islamic banks is very high.

Figure 1

Percentage of Growth in Islamic Bank Financing 2008-2021



However, from the total total financing for the next 3 years, it is predicted that not all types of financing will increase, but there are some financing that has decreased. Table 4 shows that the types of financing that increased in 2019-2021 compared to previous years were mudharabah, murabahah and ijarah while musyarakah, istishna' and qardh did not consistently increase. Murabahah contract will always dominate financing in Islamic banks even the portion of financing is always above 50%. The choise of murabahah as the most financing for Islamic banking may be due to the lower risk because the nature of recievables compared to mudharabah and musyarakah which are profit sharing, thus banks can better maintain their profitability and show better risk management.

Table 4

Predicted Results of Financing (in Billion Rupiah)

Years	Mudharabah	Musyarakah	Murabahah	Qardh	Istishna'	Ijarah
2007	5.578	4.406	16.553	540	351	516
2008	6.205	7.411	22.486	959	369	765
2009	6.597	10.412	26.321	1.829	423	1.305
2010	8.631	14.624	37.508	4.731	347	2.341
2011	10.229	18.960	56.365	12.937	326	3.839
2012	12.023	27.667	88.004	12.090	376	7.345
2013	13.625	39.874	110.565	8.995	582	10.481
2014	14.354	49.336	117.371	5.965	633	11.620
2015	14.820	60.713	122.111	3.951	770	10.631
2016	15.292	78.421	139.536	4.731	878	9.150
2017	17.090	101.561	150.276	6.349	1.189	9.230
2018	15.866	129.641	154.805	7.674	1.609	10.597
2019	**18.895**	**114.224**	**179.824**	**7.885**	**1.183**	**13.526**
2020	**19.999**	**128.550**	**195.918**	**7.150**	**1.315**	**14.409**
2021	**20.998**	**143.298**	**211.213**	**5.975**	**1.462**	**15.045**

Conclusions

The growt of Islamic banks in Indonesia is quite good, as seen from the total assets they have continued to increase. However, good growth is inseparable from the risks that may be faced so that good risk management is needed. In general, Islamic banks face the same risks as conventional banks. However, Islamic banks are banks that are unique so there are special risks faced by Islamic banks. These risks are the risk of non-compliance with sharia, risk of return, ignored commercial risk, and equity investment risk.

This study conducted three analyzes. The first is the risk analysis with financial ratios that show the risk of Islamic bank financing as measured by NPF is still higher than conventional banks and the return generated is also still much lower than conventional banks although it continues to experience an increasing trend. The second analysis uses a stock analysis in which Panin Syariah bank and BRI Syariah bank as representatives of Islamic bankson the stock exchange recorded poor performance. The average weekly return of Panin Syariah and BRI Syariah shows a negative number, while the risk is quite high and ranks 9 and 15 of the 24 samples of the financial industry studied. The third analysis predict the amount of financing for the next 3 years (2019-2021) where an overall increase in financing occurs in Islamic banks. But of the 6 types of financing only mudarabah, murabahah and ijarah continued to increase.

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