Ilomata International Journal of Tax & Accounting
P-ISSN: 2714-9838; E-ISSN: 2714-9846
Volume 3, Issue 3 July 2022
Page No. 290-296

Market Risk Disclosure: A Study on Systemic Banks in Indonesia

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Received : June 7, 2022
Accepted : July 19, 2022
Published : July 31, 2022

Citation: Setyawan, H., & Supriyanto, E. (2022). Market Risk Disclosure: A Study on Systemic banks in Indonesia. Ilomata International Journal of Tax and Accounting, 3(3), 290-296.
https://doi.org/10.52728/ijtc.v3i3.507

ABSTRACT: This study was conducted to determine the extent to which the disclosure of market risk, especially the risk of the market carried out by banks in Indonesia. Observation of the disclosure in this study using method by Scannella and Polizzi (2018) which carried out quantitative and qualitative assessment. This study focuses on four banks in Indonesia that have a systemic impact and have Islamic subsidiaries. The year of observation is for three years from 2018 to 2020.
The results showed that that in general using checklist provided by Scannella and Polizzi, (2018) the results show insufficient image of market risk disclosure among Indonesian large banks. For instance, graphical information about Value at Risk (VaR), back testing, and also stress testing. Furthermore, information about expected shortfall need to be more expanded.

Keywords: market risk disclosure, banking

INTRODUCTION

Awareness on corporate risk disclosure began to grow when the Institute of Charted Accountants in England and Wales (ICAEW) through its paper in 1998 recommends that companies deliver information about corporate risk management through annual reports (Chatzitheodorou et al., 2021; Corbet et al., 2022; Ellili & Nobanee, 2017; Kaifala et al., 2021; Si & Li, 2022; G.-J. Wang et al., 2022; K. T. Wang et al., 2021). The topic of risk disclosure then became a topic of scrutiny among researchers. They conducted their studies on companies both in developed and developing countries, for example in the UK and Canada (Linsley et al., 2006; Linsley & Shrives, 2005) Saudi Arabia (Ahmad et al., 2017; Al-Maghzom et al., 2016; Moumen et al., 2015) Indonesia (Aryani, 2017; Mukhibad et al., 2020) Pakistan (Ashfaq et al., 2016), Malaysia and Bangladesh (Kabir et al., 2019).

With regards to disclosure in banking industry, the financial crisis that hit the world recently made people aware of the strategic role of correct and effective market risk information (Boyle et al., 2022; Jing et al., 2022; Pierri & Timmer, 2022). This is important for the achievement of an efficient and stable financial market (Crimmel & Elyasiani, 2021; Godspower-Akpomiemie & Ojah, 2021). Disclosure of banking risk needs serious attention because it plays an important role in building trust among stakeholders (Fang et al., 2020; Ouyang & Wang, 2022). In addition, it also plays a role in strengthening market discipline (Scannella and Polizzi, 2018).

The complex banking business reduces the ability of stakeholders outside the bank to assess the business practices they carry out. The large information asymmetry makes it difficult for outsiders to evaluate the level of risk taken by banking management (Healy & Palepu, 2001; Jorion, 2009). Today's investors are more concerned with the complexity and lack of transparency related to banking risk profiles. Thus, investors want more access to information about the risk profile of the banking industry (Rajab & Schachler, 2009). Transparency of the banking risk profile will reduce uncertainty in the assessment thereby increasing trust in banks (Acharya et al., 2009).

Given the importance of information on market risk exposure by banks, this matter should be a concern. However, research on market risk disclosure by banks is still very limited, especially in Indonesia. In addition, the fact that Indonesia has sharia banking industry makes this research interesting to do with banking settings in Indonesia. This study focuses on 4 banks in Indonesia that have a systemic impact and have sharia subsidiaries. This research use the quantitative assessments as proposed by Scannella and Polizzi, (2018).

Based on the knowledge gap above, there is a problem which relates to limited knowledge that explains the extent of market risk disclosure of banking with a systemic impact in Indonesian context quantitatively. Based on the research problem above, the research questions in this study were proposed as follows "to what extent does the level of market risk disclosure of banking that have systemic impact in Indonesia quantitatively"?

Banks as financial intermediaries play an important role in the economy. In carrying out its business, banks face various risks ranging from legal risk, operational risk, financing risk, market risk, etc. For this reason, banks need to have an effective risk management. Banking is one of the most regulated industries. One of the regulations related to risk management internationally is contained in the Basel agreement starting from Basel I, II, III. Islamic banking as part of the banking industry also experiences risk exposure. However, there are some differences in risk exposure due to the uniqueness that underlies the Islamic banking business model (Setyawan, 2018).

Market risk is one of the most important risks in banking. By the Basel Committee on Banking Supervision (BCBS) market risk is defined as the risk of loss both "on balance sheet/in the balance sheet" and "off balance sheet/off balance sheet" due to movements in market prices. The meaning of this definition is that there are fluctuations in market prices of financial instruments or portfolios of financial instruments that pose a risk of loss. The main drivers of market risk include fluctuating commodity prices, equity prices, interest rates, credit spreads, foreign exchange rates (Basel Committee, 2019). Market risk has become increasingly important with various developments such as securitization of financial assets, financial market volatility, internationalization of banking activities, market uncertainty etc. These things should be reflected in the disclosure of market risk.

Disclosure of market risk means publication by banks of timely and reliable information that enables users to accurately assess financial conditions, performance, business activities, risk profiles, and banking risk management practices. This situation will in turn make the financial markets carry out their market discipline functions effectively (Scannella and Polizzi, 2018).

Reliable and timely disclosure of market risk exposures experienced by banks will trigger the creation of conditions for the market to carry out its disciplinary function effectively. Based on this perspective, there are two trades off problems that occur. The first trade off issue is between transparency and bank secrecy. There are always certain aspects of confidentiality that must be maintained by banks to guard against speculation and predatory behaviour by market participants/stakeholders. The second trade off problem is between the information needs of shareholders and the tendency of banks to hide information. In other words, the trade-off between the rights of shareholders to know whether the bank's market risk is still tolerable or not; with the interest of the bank to avoid disclosing detailed information regarding market risk exposure in order to maintain its competitive advantage.

IFRS 7 Financial Instruments: Disclosures was first published in 2005 and has been amended several times since. The standard replaces IAS 30 and part of IAS 32 by placing the entire regulation regarding disclosure of financial instruments into the new standard. In Indonesia, most of the contents of IFRS 7 were adopted into PSAK 60 Financial Instruments: Disclosures. IFRS 7 disclosures classify into two categories of information about the significance of financial instruments and information on the nature and extent of risks on the financial instrument.

Quantitative disclosure reveals the extent to which the entity is exposed to risk based on internal information for key management. They include a summary of quantitative data on the exposure of each risk at the reporting date; disclosure of credit, liquidity, market risks and how to manage these risks.

Market risk / market risk in IFRS 7 is defined as the risk that the fair value or cash flows of a financial instrument will fluctuated due to changes in market prices. Market risk reflects interest rate risk, currency risk and other price risk (www.iasplus.com).

METHOD

The research object selected in this study is a systemic impact bank in Indonesia. Four of them are selected from the list of systemic impact banks. The four banks also have Islamic subsidiaries. The assessment is carried out on both the publication of the parent company and the Islamic subsidiary. The research was conducted for 3 reporting periods, namely from 2017 to 2019.

The data needed in this study is secondary data. Secondary data is data obtained not from respondents directly but related to the object of research. In this study, data on banking annual reports and other relevant banking publications are used. The sources of data in this study are the OJK website, BI website, the website of each bank that is the sample of this study.

The population in this study is the overall banking which is predicted to have systemic effects in Indonesia (according to its size i.e total assets). The sample in this study are four banks with the largest asset size among systemic impact banks in Indonesia. Data were obtained from the websites of Bank Indonesia (Indonesian Central Bank), Indonesia Financial Services Authorithy and each of the banks that were sampled for this research.

This study uses an appropriate quantitative and qualitative assessment measure (Scannella & Polizzi, 2018). Quantitatively, market risk disclosure is assessed using the following checklist:

1. Market risk definitions
2. Value at Risk (VaR) definitions
3. Expected Shortfall (ES) definitions
4. Back testing definition
5. Average VAR
6. Average ES
7. VAR at the end of the year

8. Limitations of VAR
9. Limitations of ES
10. Explanation of the VAR model used
11. Explanation of back testing models used
12. Presence of graph about annual VAR fluctuations
13. Stress testing explanations
14. Stress testing results
15. Market risk level of aggregation reported

RESULT AND DISCUSSION

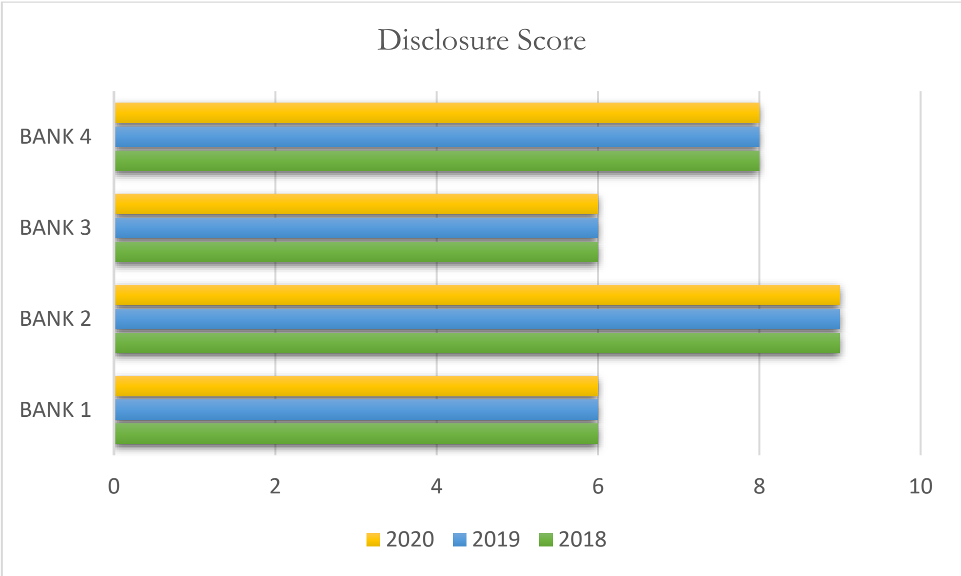
Based on the size of commercial banks in Indonesia, four banks have the potential to have a systemic impact (Bank 1, 2, 3, and 4). In addition to having a potential systematic impact, the four banks also have Islamic subsidiaries. In this part the disclosure will be analysed quantitatively.

	bank 1			bank 2			bank 3			bank 4		
	18	19	20	18	19	20	18	19	20	18	19	20
Quantitative												
Market risk definition	1	1	1	1	1	1	1	1	1	1	1	1
Value at Risk (VaR) definition	0	0	0	1	1	1	0	0	0	1	1	1
Expected Shortfall (ES) definition	0	0	0	0	0	0	0	0	0	0	0	0
Back testing definition	0	0	0	1	1	1	1	1	1	0	0	0
Average VaR	1	1	1	1	1	1	0	0	0	1	1	1
Average ES	0	0	0	0	0	0	0	0	0	0	0	0
VAR at the end of the year	0	0	0	1	1	1	0	0	0	1	1	1
Limitations of VAR	1	1	1	0	0	0	0	0	0	0	0	0
Limitations of ES	0	0	0	0	0	0	0	0	0	0	0	0
Explanation of the VaR model used	0	0	0	1	1	1	1	1	1	1	1	1
Explanation of back testing models used	1	1	1	1	1	1	1	1	1	1	1	1
Presence of annual VaR fluctuations graph	0	0	0	0	0	0	0	0	0	0	0	0
Stress testing explanations	1	1	1	1	1	1	1	1	1	1	1	1
Stress testing results	0	0	0	0	0	0	0	0	0	0	0	0
Market risk level of aggregation reported	1	1	1	1	1	1	1	1	1	1	1	1
Total	**6**	**6**	**6**	**9**	**9**	**9**	**6**	**6**	**6**	**8**	**8**	**8**

Table 1. Disclosure items and score

Quantitatively, the first Bank is quite lacking in making disclosures. With regard to Value at Risk, the Bank provide explanation on the limitation of VaR as well as the calculation result of average VaR. However, there are weaknesses in the absence of Value at Risk definition and no adequate explanation on VaR model being utilised. It also doesn't provide back testing definition. Similarly, the third Bank shows relatively weak disclosure. The positive things are that it gives back testing definition and explanation on the VaR model used. The negative side are that it lacks definition of VaR and numbers of average VaR as well as end of year VaR. Both banks have got score 6 out of 15.

On the other hand, the Bank number 2 provides quite a lot with regard to VaR. Those include VaR definition, calculation results of average VaR and end of year VaR. It also presents clarification on the method being used in the VaR calculation. In addition, it also makes back testing definition available. The bank has got score 9 out of 15. Likewise, the Bank number 4 also gives better impression. If compared to Bank 2, it only fails to supply back testing definition. The Bank's score is 8 out of 15.



Graph 1. Disclosure score for each bank from 2018 to 2020

Overall, in respect of Expected Shortfall (ES) all banks are deficient in coming up with its definitions, average number, and limitation. As for VaR, none of the banks' disclosures examined is equipped with graph about annual VAR fluctuations. In addition, there is no presence of stress testing results for all the Banks being studied.

CONCLUSION

It can be concluded that in general using checklist provided by Scannella and Polizzi, (2018) the results show poor picture of market risk disclosure among Indonesian large banks. There is a development in the disclosure of VaR. However more things need to be done to make a betterment to the situation. For instance, pictorial information about VaR, back testing, as well as stress testing. Furthermore, information about expected shortfall need to be expanded even more.

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