



# Critical Analysis on Risk Management Implementation to Bassel III Study at Islamic Banking Indonesia

Ramayuli\*<sup>1</sup>Asyari\*<sup>2</sup>Dipa Teruna\*<sup>2</sup>Asep Supriatna\*<sup>2</sup>

<sup>\*1</sup>Lecturer at STIE Muhammadiyah Jakarta

<sup>\*2</sup>Lecturers at FEB Nasional University Jakarta

## Abstract

Bank Indonesia issued regulations related to regulation of Islamic banking business risks using Bank Indonesia regulation no. 3/22/PBI/2001 dated 13 December 2001 concerning Transparency of Bank Financial Conditions in order to create market discipline. In the banking industry cycle, Islamic banks along with conventional banks have an important role to play in maintaining monetary policy. OJK's policy in assessing sharia banking is based on Maqasid sharia. is to adopt the rules of Basel III. Islamic banking requires DPS approval to prevent errors in processes and transactions from sharia aspects, Islamic banking also requires opinions and even DSN fatwas as oversight of business management activities according to Islamic rules. The purpose of this study is to examine management rules, liquidity risk, market discipline risk on the implementation of Basel III. Hypothesis Testing and Regression Testing with panel data through the evIEWS application 9. The results of the study illustrate the obligation to apply the Basel III Accord standard with several requirements to be an aspect of bank performance stability. Management rules have a positive effect on the implementation of Basel III. Liquidity risk and compliance risk have a significant positive effect on the implementation of Basel III.

**Keyword:** Liquidity risk, market discipline risk, management rule, Basel III.

Received 06 Feb., 2023; Revised 16 Feb., 2023; Accepted 18 Feb., 2023 © The author(s) 2023.  
Published with open access at [www.questjournals.org](http://www.questjournals.org)

## I. Introduction

In general, the risks faced by Islamic banking are relatively the same as those faced by conventional banks. However, Islamic banking has its own uniqueness in dealing with risks because it must follow sharia principles (Umam, 2013: 134).

Banking industry stability affects the effectiveness of monetary policy implementation (Warjiyo, 2000). This is demonstrated by the functioning of the banking system as an intermediary institution for the reallocation of funds from the public to other forms of funding products that can run well. It is necessary to know how stable the banking industry is to accommodate the implementation of monetary policy. The most common feature that distinguishes Islamic and conventional banks is the presence of interest. Islamic banks that follow Islamic law avoid all transactions that contain interest, but replace it with sharing of profits or losses and trade in goods and services (Siddiqi 2000).

Al-Omar, H., Al-Mutairi A (2008) explains that increasing bank capital is more sensitive to risk and provides incentives to improve the quality of risk management implementation at banks. Because of the bank's capital structure due to regulatory provisions, additional debt will increase risk if it is not offset by additional equity to meet the portion determined by the regulator (Amorello L; 2016). Arifin N.M (2012) Liquidity risk causes changes in bank performance. Causes of liquidity risk include the component of liquid assets and dependence on external funding, monitoring factors.

Al Tamimi and Al-Mazrooei (2007); Hussain and Al-Ajmi (2012) concluded that commercial banks face credit risk and operational risk as part of the most important risks. Considering that banks face various risks that impact their performance, it is important for management to mitigate these risks by implementing effective risk management. Managers can apply comprehensive risk management principles for each type of risk such as credit risk, liquidity risk, and operational risk, because each risk contributes to bank performance (Ayadi R., 2012; Bilal & Salim, 2016; Boora & Jangra, 2019).

Research related to the implementation of Basel III globally has been conducted by Masood and Fry (2012), Bilal and Salim (2016), Kozarevic and Polic (2016), Sheng (2013), Salami (2012), Hussain et al. (2012). Attar D. et al. (2014) and Soyemi et al. (2014) found that there is a significant effect of the effectiveness of risk management on bank performance. Olamide et al. (2015, Massood O & Fry J. (2012) found that there is no relationship between risk management and bank performance.

Bank Indonesia Regulation Number 5/8/PBI/2003 concerning Implementation of Risk Management for Commercial Banks. Subsequently in December 2010, the Basel Committee on Banking Supervision (BCBS) issued two Basel III documents, namely: "Basel III: A global regulatory framework for more tough helty banks and banking systems (revised edition published in June 2011)", and "Basel III: International framework for measuring, standardizing and monitoring liquidity risk" (DeduV and Nitescu 2012). The strength of Islamic banks has been proven by the great history of Islamic banks written through financial crises where almost all conventional banks failed, but not a single Islamic bank was reported to have failed.

OJK's policy in assessing banking health is by adopting Basel III rules which were legally implemented in 2018. Capital arrangements in Basel III are having quality capital. The regulator hopes that this rule change will reduce the risk of a bank crisis and that banks will have sufficient reserve funds to deal with shocks in the financial market.

The Basic Principles in Islamic Finance (CPIFR) for banking have been officially adopted by the IMF in 2018, the core principles of which were developed by the Islamic Financial Services Board (IFSB) in collaboration with the Basel Committee on Banking Supervision (BCBS). CPIFR is aimed at realizing effective banking supervision that complements the Basel Core principles, by adding five new principles specifically for the Islamic banking sector.

Studies on the implementation of Basel III provide economic and efficiency benefits (Maria & Eleftheria, 2016; Kozarevic&Polic, 2016;) concludes as follows: The benefits of implementing Basel III include efficient risk and portfolio management, effective risk and financial supervision, transparency in declarations financial statements, high sensitivity to risk and balanced risk returns.

### **Theory gaps**

Al-Omar, H., Al-Mutairi A (2008) describes the results of the study. Liquidity risk and capital structure variables have a significant influence on the implementation of the basel and measure banking performance. increasing bank capital is more sensitive to risk and provides incentives to improve the quality of risk management implementation at banks. Alkassim (2005), concluded that liquidity risk affects the profitability of conventional and Islamic banks.

Keister and McAndrews (2009) in their research explained that The Fed's Rules had an effect on the implementation of the basel in American banking. According to Keister, the Fed's liquidity policy and banking conditions are closely related. The Fed's new rules regarding the obligation to hold liquidity have an effect on increasing US banking liquidity. The decline in the amount of credit disbursed by banks in America also resulted in an increase in excess liquidity and bank reserves.

Berger and Bouwman (2009), Nguyen (2015) explain the results of their research that market risk has a positive effect on the implementation of basel 3 relating to the minimum capital requirement to prevent market risk, as well as the creation and management of American banking liquidity. American banking capital and liquidity are closely related. Apart from capital, banking assets also affect the magnitude of liquidity risk, which is pillar 3 of the Basel Accord.

## **II. Review of Literature.**

### **Maqasid ash-shariah concept.**

Maqashid Syariah means principles or guidelines that comply with sharia law. According to Abu Zahra there are three principles of Maqasidh Sharia: (Khan and Ahmed, 2001)

1. Tadzib al-fardh/individual who educates, where every Muslim must do good deeds, avoid any harmful behavior in society, it also aims to ensure that every action is carried out in accordance with sharia principles. Good deeds are intended, namely not doing business illegally or which is prohibited by religion, also harming other people.
2. Iqamah al-' is/upholds justice, namely the obligation of every Muslim to act fairly for all human beings, everyone has the same position in Islam and surrenders to God, and all activities must be expressed to build trust and not cheat or cheat towards others.
3. Maslahah / public interest, a Muslim who should consider other people in carrying out his duties, which means that it must be done for the public interest.

### **Principles of Risk Management**

Implementation of Risk Management For Islamic Commercial Banks and Sharia Business Units, there are 10 (ten) risks that must be managed by the bank. The ten types of risk are credit risk, market risk, operational risk, liquidity risk, compliance risk, legal risk, reputation risk, strategic risk, yield risk and investment risk (Bank Indonesia Regulation No. 13/23/PBI/2011 concerning Implementation of Risk Management for Sharia Commercial Banks and Sharia Business Units).

Risk anticipation in Islamic banking aims to:

- (a) Preventive. In this case, sharia banking requires DPS approval to prevent erroneous processes and transactions from sharia aspects. In addition, sharia banking also requires opinions and even DSN fatwas if Bank Indonesia views DPS approval as inadequate or beyond its authority.
- (b) Detectives. Supervision in sharia banking includes two aspects, namely banking aspects by Bank Indonesia and sharia aspects by DPS. Sometimes there are different understandings of a transaction whether it violates sharia or not.
- (c) Recovery Correction of an error can involve Bank Indonesia for banking aspects and DSN for sharia aspects (Karim, 2013: 258).

### **Implementation of Basel III.**

Basel Committee on Banking Supervision (1997), explains that liquidity risk in banks occurs due to the inability of banks to accommodate a decrease in liabilities or to fund an increase in assets. When a bank does not have sufficient liquidity, the bank cannot obtain sufficient funds at a reasonable cost, either by increasing debt or by converting assets, so this affects bank profitability.

### **Sharia Compliance Theory**

Sharia compliance is an important part of the Islamic Finance industry, and it is often useful to measure this risk constantly in a Muslim-majority country like Indonesia to convince customers to be satisfied with sharia compliance in Islamic banks. The importance of the Sharia risk rating for Islamic banks is to measure their level of Sharia commitment because all banks will not have the same level of commitment in Sharia compliance, and this happens in such a way based on the compliance process and the complexity of the bank.

According to Law Number 40 of 2007 Article 109, states:

1. Companies that run businesses based on sharia principles besides having a Board of Commissioners have a Sharia Supervisory Board;
2. The Sharia Supervisory Board as referred to in paragraph (1) consists of one or more sharia experts appointed by the GMS on the recommendation of the Indonesian Ulama Council (MUI);
3. The Sharia Supervisory Board as referred to in paragraph (1) is guidance and advice to the Board of Directors and oversees the Company's activities to comply with Islamic principles.

### **Sharia Bank Compliance Risk**

The main objective of banking risk management is to ensure that the risk management process that occurs in the bank's business can minimize the possibility of negative impacts from weaknesses in the juridical aspect, absence, and/or changes in laws and regulations based on BI rules.

In connection with this legal risk, the things that need to be considered are:

- a. The obligation to have written policies and procedures;
- b. The obligation to carry out legal aspect analysis procedures for new products and activities;
- c. The obligation to have a work unit that functions as a 'legal watch', not only on positive law but also on the DSN fatwa and other provisions.
- d. The obligation to assess the impact of changes to provisions/regulations on legal risk;
- e. The obligation to apply sanctions consistently;
- f. The obligation to conduct regular reviews of contracts, contracts and bank agreements with other parties in terms of effectiveness and enforceability (Karim, 2013: 278).

Operational risk is a risk caused by inadequate or non-functioning internal processes, human error, system failure or those that affect bank operations. There are three factors that are the main cause of this risk, namely: Infrastructure such as technology, policy, environment, security, disputes, and so on; Process; and Resources (Karim, 2013: 275).

The operational risk categories are:

- a. Internal process risks:

- 1) Marketing negligence;
- 2) Money laundering;
- 3) Transaction error.
- b. Human risk;
  - 1) Employee training is not qualified;
  - 2) high employee turnover;
  - 3) Bad management practice.
- c. External risk;
  - 1) Natural disasters;
  - 2) Fire;
  - 3) External fraud (Rianto, 2013: 181)

Compliance Risk Management Risks caused by non-compliance with existing provisions, both internal and external regulations, are as follows:

- a. Provisions on Statutory Reserves, Net Open Position, Non-Performing Financing, and Maximum Limits for Providing Financing;
- b. Provisions in the supply of products;
- c. Provisions in the provision of financing;
- d. Provisions in reporting both internal reports, reports to Bank Indonesia and reports to other third parties;
- e. Tax provisions;
- f. Provisions in the contract agreement;
- g. Fatwa of the National Sharia Council (Karim, 2013: 276).

Regulations regarding bank capital requirements will create a better capital structure. This situation provides several considerations for management in optimizing the capital structure, including: protecting the company in the face of possible large losses, meeting shareholder expectations, and fulfilling regulatory interests (Shepherd-Walwyn and Liiterman 2008), (Arifin, 2012)

### **Liquidity Risk**

Decker (2000) shows that liquidity risk will affect the increase in credit risk and market risk. The requirement for Islamic banks to increase minimum capital aims to avoid liquidity risk and market risk. BCBS (2001) makes an approach that encourages each bank to continuously improve risk management and long-term investment control by setting minimum capital requirements so that their determination of capital requirements will be more accurate. With this approach, banks are expected to develop their own model to assess risk that can be used in determining their capital requirements.

### **Market Risk**

To mitigate liquidity risk, Islamic banks must have strong market discipline in accordance with Pillar 3 of the Basel Accord II, where liquidity risk can be mitigated if banks have good Asset Liabilities Management (ALM) and apply market discipline in managing investment portfolios. from public funds to healthy productive assets and improve bank intermediation functions that can encourage an increase in sharia financing.

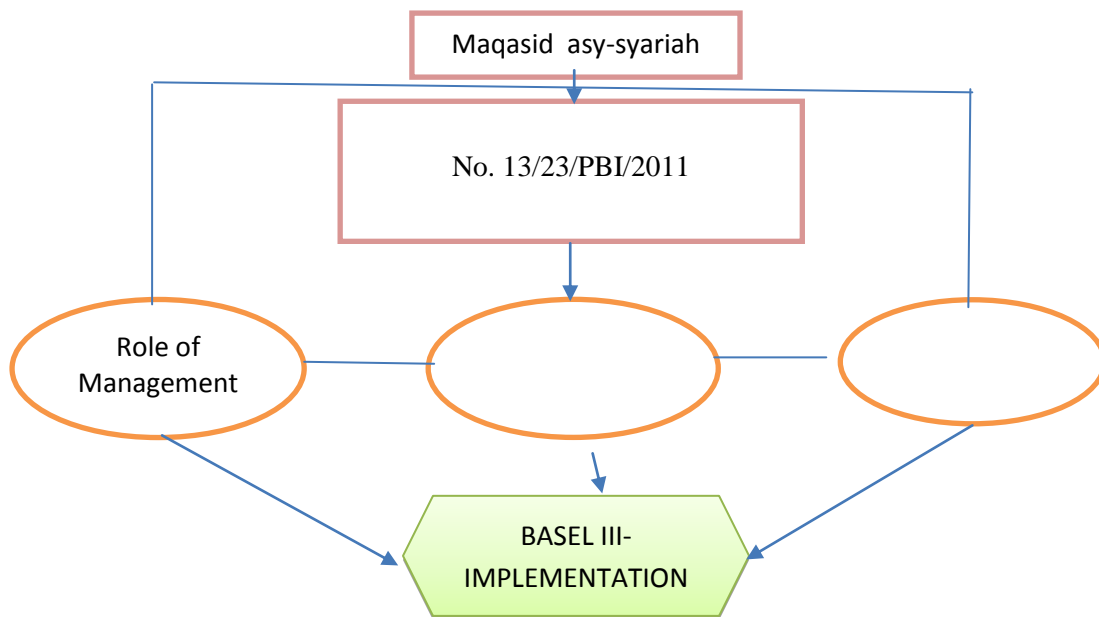
The Sharia Board performs a very important shariah supervisory task for the Islamic finance industry, failure to do so could have a devastating effect on this institution. The poor quality of Sharia supervision by board members causes inefficiency in evaluating, monitoring and supervising the application of banking business activities between the Islamic Finance Industry and stakeholders.

The function and role of the Sharia Supervisory Board in Islamic banks has a strong relationship with the management of Islamic banking risk, namely reputation risk which in turn gives an impression on other risks, such as liquidity risk. Islamic banking activities must apply sharia principles in economic transactions and apart from things that are prohibited by Islam such as usury, gambling, speculation and others.

Regarding this, it is suggested that there are three additional results for the Sharia risk rating assessment approach which are grouped into Performance of the Sharia Supervisory Board

1. Implementation of Sharia Supervisory duties. Sharia independence of board members and active or passive DPS participation in the supervision of Islamic banks.
2. Qualified Sharia Board Members (DPS) with various banking experiences, skills, and expertise in fiqh lead to better supervision and product and performance diversification.
3. Composition of knowledge, qualified board members with a good level of education, play an important role in enhancing enterprise competitiveness. Composition of sharia background knowledge also determines the effectiveness of supervision.

### III. Research purposes.



### III. Research methodology

This study uses a quantitative descriptive method with panel data on the financial statements of Islamic banks for 2018 – 2021. The panel data hypothesis test with the help of eviews 9 tests the effect of Management Rules on Basel III implementation, Liquidity risk on Basel III implementation and Market Risk on Basel III implementation.

Operational Variables :

Bank Management Rules (Role of Management)

Variable Liquidity risk in the proxy LCR

Market Risk Variable in proxy for ROA

Implementation of Basel III

Research Analysis Unit (population and research sample). Sharia Commercial Bank

1. PT. Sharia Aceh Bank
2. PT. BPD Nusa Tenggara Barat Syariah
3. PT. Bank Muamalat Indonesia, Tbk
4. PT. Bank Victoria Syariah
5. PT. Bank Jabar Banten Syariah
6. PT. Mega Syariah Bank
7. PT. Bank Panin Dubai Syariah, Tbk
8. PT. Bukopin Sharia Bank
9. PT. Syariah BCA
10. PT. Sharia National Pension Savings Bank
11. PT. Islamic Aladin Bank
12. PT. Indonesian Sharia Bank, Tbk

### IV Research Results and Discussion

The legal provisions that must be complied with for Islamic banks are Bank Indonesia Rules No. 13/23/PBI/2011. Islamic banking in carrying out its duties must pay attention to the objectives of Islamic banks, namely maqashid sharia. Maqashid Sharia is the values and goals of syara' which are implied in all or most of its laws. These values and suggestions are seen as the goal (maqashid) of the secrets of the Shari'a determined by the syar'i in every legal provision. The size of sharia conformity is measured by three ratios, namely the Islamic investment ratio, the Islamic income ratio, and the profitsharing ratio.

The results of the panel data regression test in the study that tested the variables of management rules, liquidity risk and market risk on the implementation of Basel 3. Can be seen in the common effect model table below:

Dependent Variable : BASEL III

Method: Panel Least Squares

Date: 03/01/2022 Time: 17.35

Sample: 2018 2021

Periods included : 4

cross-sections included : 12

Total panel (balanced) obs : 48

Variable	Coefficient	Std. Error	t-statistic	Prob.
C	0.625004	0.846078	0.913502	0.0039
RM	0.421125	0.008377	2.354222	0.0012
LCR	0.419621	0.013463	2.247993	0.0001
ROA	0.321754	0.003745	2.541711	0.0003
R- squared		0.74289	Mean dependent var	0.042682
Adjusted R-squared		0.67369	S.D. dependent var	0.166357
SE.of regression		0.16211	Akaike info criterion	0.784237
Sum squared resid		7.62142	Schwarz criterion	0.721746
Log likelihood		120.675	Hannan Quinn criteri	0.759214
F-statistic		2.39849	Durbin Watson stat	1.485649
Prob(F-statistic)		0.00007		

Eviews.9

Table 4 : Regression results with the implementation of Basel III using the least square panel model of the fixed effect.

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	3,1320	0,1228	2,0116	0,1362
RM	0,4500	0,0316	2,6152	0,0008***
LCR		0,2505	0,0529	2,2344 0,0078**
ROA		0,3344	0,0213	2,1427 0,0004***
<i>Cross –section fixed</i>				
<i>R-squared</i>	0.7165			
<i>Adjusted R-squared</i>	0.6388			

Ket : eviews 9. 2022.

signifikan on level 10%, 5%, 1%

The results of the first hypothesis test, management rules have a significant effect on the implementation of Basel III. In accordance with Bank Indonesia circular letter PBI No. 13/1/PBI/2011 in order to maintain bank liquidity and operations as well as credit risk, it is required to guarantee capital adequacy to require bank soundness. Basically the implementation of Basel III aims to avoid the negative impact of conditions of credit risk, market risk and slow economic recovery. Management policy is an effort to strengthen resolution for systemic banks in order to increase the ability of the banking sector to absorb global financial and economic crises.

The results of the second hypothesis test of liquidity risk have a significant positive effect on the implementation of Basel III. This confirms that to mitigate liquidity risk, large banks must have strong market discipline in accordance with Pillar 3 of the Basel Accord III, where liquidity risk can be mitigated if banks have good Asset Liabilities Management (ALM) and implement market discipline in managing public funds in healthy productive assets and enhancing the bank intermediation function which can encourage economic growth. The results support the research of Samuel 2015, Dahiyat 2016, Rahman and Saeed 2015, Olarewaju and Adeyemi 2015, Chung Hua Shen 2016.



The results of the third hypothesis test of market risk have a significant effect on the implementation of Basel III.

Financial markets related to the banking business have a risk of placing investment assets in a dynamic portfolio with a relatively high risk of price changes. This requires intensive monitoring. The Financial Services Authority (OJK) as the bearer of the task of regulating the health of banks and supervising financial services activities has issued a Consultative Paper on Liquidity Coverage Ratio (LCR) as a measure of bank liquidity adequacy based on Basel III. LCR is meant to ensure that banks have sufficient stock of unencumbered High Quality Liquid Assets (HQLA) consisting of cash and/or assets that can be easily liquidated for liquidity needs in a 30-day stress scenario calendar period.

## V. CONCLUSIONS AND SUGGESTIONS

### 1. Conclusion

Based on the analysis and calculations in this study, it can be concluded that the application of Basel 3 rules and prerequisites is influenced by many things, including the lack of policy commitment and financial system stability rules that have been determined internally by Islamic banking. In addition, the requirement to provide minimum capital to maintain the liquidity of Islamic banks is still considered quite heavy for management so that liquidity risk will have an influence on the implementation of the Basel. The existence of market uncertainty in the investment portfolio of Islamic banking will affect the achievement of implementing Basel.

### 2. Suggestion

In order to encourage the development of Islamic banking as an instrument in the money market, it is necessary to pay attention to an understanding of the Basel standard for Islamic banks in maintaining banking risk, placing liquidity and capital availability to anticipate credit risk in order to achieve ease and certainty in obtaining third party funds. Banks strive to find economic sectors that can be maximized as targets for bank business expansion when economic conditions are not good and the real sector is at high risk.

## References

- [1]. Abdullah, M., Shahimi S., Ismail, A.G. (2011), Operational risk in Islamic banks: Examination of issues. *Qualitative Research in Financial Market*, 3(2), 131-151.
- [2]. Al Tamimi, H.A.H., Al-Mazrooei, F.M. (2007), Banks' risk management: A comparison study of UAE national and foreign banks. *The Journal of Risk Finance*, 8(4), 394-409.
- [3]. Al-Tamimi, H. (2008). Implementing Basel II: An Investigation of the UAE Banks' Basel II Preparations. *Journal of Financial Regulation and Compliance*, 16(2), 173-187.
- [4]. Ali, M. (2006), *Manajemen Risiko (Strategi Perbankan dan Dunia Menghadapi Tantangan Globalisasi Bisnis)*. Jakarta: PT Raja Grafindo Persada.
- [5]. Alkassim, F.A. (2005), The profitability of Islamic and conventional banking in the GCC countries: A comparative study. *Journal of Review of Islamic Economics*, 13, 5-30.
- [6]. AL-Omar, H., AL-Mutairi, A. (2008), Bank-specific determinants of profitability: The case of Kuwait. *Journal of Economic and Administrative Sciences*, 24(2), 20-34.
- [7]. Ariffin, N.M. (2012), Liquidity risk management and financial performance in Malaysia: Empirical evidence from Islamic bank. *Aceh. International Journal of Social Sciences*, 1(2), 77-84.
- [8]. Basel Committee on Banking Supervision (BCBS). (2017c). HighLevel Summary of Basel 3 Reforms. Bank for International Settlements. Retrieved from [https://www.bis.org/bcbs/publ/d424\\_hlsummary.pdf](https://www.bis.org/bcbs/publ/d424_hlsummary.pdf)
- [9]. Berger, A. N., & Bouwman, C. H. S. (2009). Bank liquidity creation. *Review of Financial Studies*, 22(9), 3779-3837. <https://doi.org/10.1093/rfs/hhn104>.
- [10]. Bilal, Z., & Salim, B. (2016). Does Basil III Implementation Impact on Financial Performance? Evidence from Omani's Commercial Banks. *International Journal of Economics and Financial Issues*, 6(3), 963-970. Retrieved from <https://www.econjournals.com/index.php/ijefi/article/view/2426>.
- [11]. Chaudhry, M., Chatrath, A., Kamath, R. (1995), Determinants of bank profitability. *American Journal of Business*, 10, 41-46.
- [12]. Diamond, Douglas W, and Raghuram G.Rajan, 2009, "A Theory of Bank Capital", Working Paper, University of Chicago.
- [13]. Diamond, Douglas W, and Raghuram G.Rajan, 2001, Liquidity risk, liquidity creation, and financial fragility: a theory of banking, *Journal of Political Economy* 109: 287-327.
- [14]. Dedu, V., & Nitescu, D. (2012). Basel III – Between Global Thinking and Local Acting. *Theoretical and Applied Economics*, 6(571), 5-12. Retrieved from <http://store.ectap.ro/articole/731.pdf>
- [15]. Emira, dkk. 2013. "Comparative Analysis Of Risk Management In Conventional And Islamic Bank", *International Buseness Research*, Vol. 6. No. 5.
- [16]. Gizaw, M., Kebede, M., Sujata, S. (2015), The impact of credit risk on profitability performance of commercial bank in Ethiopia. *African Journal of Business Management*, 9(2), 59-66.
- [17]. Goyal, Krishn A. 2010. "Risk Management in Indian Banks: Some Emerging Issues". *The Indian Economic Journal*, Vol. 1, No. 1.
- [18]. Henz and Berg. 2010. "Risk Management, Procedure, Methods, And Experiences," *Journal RT & A*, Vol. 1, No. 2.
- [19]. Hidayat, SE., Al-Khalifa, MD., and Aryasantana( 2012)" A Survey on Level of Effectiveness of Liquidity Risk Management of Islamic Bank in Bahrain" *International Research Journal of Finance and Economics*, Issue 91, p 39-45.
- [20]. Hussain, H.A., Al-Ajmi, J. (2012), Risk management practice of conventional and Islamic banks in Bahrain. *The Journal of Risk Finance*, 13(3), 215-239.
- [21]. Hussein A. Hassan Al Tamimi, H. Miniaoui, WalaaWahid( 2015); *Financial Risk and Islamic Bank, Performance in The Gulf Cooperation Council Countries; The International Journal of Business and Finance Research*. Vol 9 No. 5, 2015 pp 103-112
- [22]. *Ikatan Bankir Indonesia*. 2014. *Memahami Bisnis Syariah*. Jakarta: Gramedia Pustaka.

- [23]. Karim, Adiwarman. 2013. *Bank Islam: Analisis Fiqh dan Keuangan*. Jakarta: Raja Grafindo Persada.
- [24]. Kartika Sari, Lisa. 2014. "Penerapan Manajemen Resiko Pada Perbankan Syariah Di Indonesia" dalam *EJournal Unesa*.
- [25]. Keister, T., & McAndrews, J. (2009). *Federal Reserve Bank of New York Staff Reports*. New York, (406).
- [26]. Khan and Ahmed. 2001. "Risk Management: An Analysis of Issues in Islamic Financial Industry," *Occasional Paper*, No. 5. Jeddah: Islamic Development Bank (IRT).
- [27]. Makiyan, Nezammudin. 2014. "Risk Management And Challenge In Islamic Banking" dalam *Journal Of Islamic Economic, Banking And Finance*.
- [28]. Masood, O., & Fry, J. (2012). Risk Management and Basel-Accord Implementation in Pakistan. *Journal of Financial Regulation and Compliance*, 20(3), 293-306. <https://doi.org/10.1108/13581981211237981>
- [29]. McAleer, M., Jiménez-Martín, J.-Á., & Pérez-Amaral, T. (2013). Has the Basel Accord Improved Risk Management During the Global Financial Crisis? (Tinbergen Institute Discussion Papers No. 13-010/III). Tinbergen Institute. Retrieved from <https://www.uem.es/data/cont/docs/518-2013-11-05-1226.pdf>
- [30]. Muhammad. 2011. *Manajemen Bank Syariah*. Yogyakarta: STIM YKPN.
- [31]. Nwakanma, P. C., Mgbataogu, I., & Sc, M. (2014). Determinants of Excess Liquidity : The Nigerian Experience, 7(6), 174–186.
- [32]. Nguyen, V. H. T., & Boateng, A. (2015). Bank excess reserves in emerging economies: A critical review and research agenda. *International Review of Financial Analysis*, 39, 158–166. <https://doi.org/10.1016/j.irfa.2015.02.005>
- [33]. Nowak, R. (2011). How Effective is Global Financial Regulation? The Basel Accords' Role in Mitigating Banking Crises. Duke University Honors Thesis, North Carolina. Retrieved from <https://sites.duke.edu/djepapers/files/2016/10/NowakRobert.pdf>.
- [34]. Olamide, O., Uwalomwa, U., Ranti, O.U. (2015), The effect of risk management on bank's financial performance in Nigeria. *Journal of Accounting and Auditing: Research and Practice*, 1, 1-7.
- [35]. Peria, M.M, dan S.L. Schmukler. (2011). "Do depositors punish banks for bad behavior, Market discipline, deposit insurance and banking crises". *International Corporate Finance*
- [36]. Rivai, V., Veithzal, A.P. (2007), *Bank and Financial Institution Management, Conventional, and Sharia System*. Jakarta: PT Raja Grafindo Persada.
- [37]. Salami, I. (2012). International Financial Standards and the Application of Basel 3 in Emerging and Frontier Markets. *Law and Financial Markets Review*, 6(5), 336-342. <https://doi.org/10.5235/LFMR6.5.336>.
- [38]. Sheng, A. (2013). *Basel III and Asia*. (pp. 1-35). Fung Global Institute. Retrieved from [http://andrewsheng.net/files/WP\\_Basel\\_III.pdf](http://andrewsheng.net/files/WP_Basel_III.pdf).
- [39]. Soyemi, A.K., Olabisi, O., Iwoyo, A. (2014), Risk management practices and financial performance: Evidence from the Nigerian deposit money banks (DMBs). *The Business and Management Review*, 4(4), 345-354.
- [40]. Valensi, Mega. (2013). *Who Disciplines Indonesian Banks? A Study of Market Discipline in Indonesia 1980-1999*. Unpublished PhD Thesis, Monash University, Melbourne, Australia.