HOW CORPORATE GOVERNANCE, CREDIT RISK AND PERFORMANCE LINK TOGETHER?

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ABSTRACT

Purpose: In this study, a research was conducted to compare link corporate governance, credit risk, and performance on conventional banking and islamic banking in Indonesia.

Methodology: This research used quantitative method with Generalized Structured Component Analysis (GSCA) for testing and analzing. In this study using conventional and sharia banking data in Indonesia for the period 2012-2016 which are listed on the Indonesia Stock Exchange and the Indonesian Financial Services Authority.

Finding: The result of research showed that on the conventional banking, profitability is influenced by the link together of corporate governance, liquidity and credit risk, while on the islamic banking, profitability is influenced by the link together of liquidity and credit risk.

Practical Implication: First, the existence and number of the Board of Commissioners and Audit Committee in conventional banking are able to support the achievement of performance. This should be maintained and improved.

Second, supervision is needed to manage distributing of sharia financing. Islamic banking has two indicators that play a role in the formation of credit risk which have the potential to reduce liquidity and profitability.

Third, it is necessary to trade-off for the management of islamic banking in managing their liquidity because the increase in liquidity has the potential to reduce profitability.

Novelty: The first study comparing the linkage between corporate governance, credit risk and performance in conventional and islamic banking in Indonesia using GSCA.

Keywords: corporate governance, credit risk, performance

INTRODUCTION

Discussion about corporate governance cannot be separated from the agency theory, where there is an agency problem between managers and principals. Agency problems that occur in banks can be broader, not only between managers and principals, but also with depositors, debtors and regulators, even regulators have a strong influence on corporate governance in banking (Ciancanelli & Reyes-Gonzalez, 2005; Macey & O'Hara, 2003; Marcinkowska, 2012).

Sound banking with good governance is intended to prevent a recurrence of the economic crisis caused by weak governance, including banking governance (Zhuang et al., 2001). On one side, Islamic banking as part of the financial and banking system in Indonesia will also face a variety of risks as well as conventional banking. With regulations regarding good corporate governance and risk management, regulator hope can assist Islamic banking in achieving performance while still considering the risk limits and interests of all stake holders as well as conventional banking.

This has attracted the interest of researchers to examine more deeply on islamic banking and compare it with conventional banking to continue previous research by Nurtrontong et al., (2018) on conventional banking. Three important components are corporate governance, credit risk and performance. The comparison between islamic and conventional banking with the collaboration of the three components using GSCA is a novelty in this study.

In the banking industry, the performance that is often considered by directors, commissioners, shareholders, employees and even regulators are liquidity and profitability. This was confirmed by Pradhan and Shrestha, (2016) that profitability and liquidity are important indicators for shareholders and depositors customers who are the main stakeholders of a bank.

Previous empirical studies on collaboration between corporate governance, risk management and performance still show inconsistent results. Hassan et al., (2017) founded that corporate governance proxied by Board Size, Shariah Advisory Board and Board Independence influenced the performance, especially liquidity. Chung et al., (2010) also showed the results of research that corporate governance affects liquidity performance because the better corporate governance will improve operational and financial transparency so that it will reduce information asymmetries. Abogun et al., (2013) also showed that corporate governance has a relationship with banking liquidity, where the independent audit committee and independent audit have a positive effect on liquidity. Research by Ghaffar,(2014) showed that corporate governance proxied by board size and board independence has a significant effect on profitability performance.

The same result was also shown by Najjar, (2012) that corporate governance has a positive relationship with performance, especially profitability. An interesting result was shown by Inam and Mukhtar, (2014) that corporate governance will improve banking performance in both liquidity and profitability. Likewise, research by Fidanoski et al., (2014) showed that the number of Supervisory Board members has a positive effect on profitability performance.

Different results of the relationship between corporate governance and performance is shown by Doğan and Yildiz, (2013) that Board Size had a significant negative effect on profitability performance, as well as research by Omoniyi et al., (2013) that corporate governance did not significantly influence bank profitability. Similar results are shown by the research of Syam and Najda, (2012) that the quality of the implementation of corporate governance has no effect on profitability and researched by Rashid et al., (2010) that there is no relationship between board composition and profitability.

Regulation regarding risk management issued by regulator with one of the main considerations is the composition of banking assets of more than 60 percent is credit. This shows that the biggest risk faced by banks is credit ((Vodová, 2003) and (Cibulskiene & Rumbauskaite, 2012)). Referring to the anticipated income theory, that the smooth payment of customers is a source of bank liquidity, so that it can be said that credit risk affects liquidity. Based on previous empirical research, that there are still inconsistent results between credit risk and liquidity performance, as well as credit risk and profitability performance.

According to Munteanu, (2012) that credit risk which was proxied by impaired loans negatively affected liquidity, as well as research from Alzoubi, (2017). Similar result was also shown by Megeid, (2013) that the higher the credit risk, the lower liquidity. Musyoki and Kadubo, (2012) stated that credit risk had negative effect on performance, especially profitability. Research from Lata, (2014) also showed that there was a significant influence on the increase in non-performing loans to the decrease in profitability. Research from Tabari et al., (2013) also founded that increasing credit risk will reduce profitability performance.

Different research results are shown by several researchers, including Vodová, (2003) that credit risk which was proxied by non-performing loans didn't significantly influence the performance, especially liquidity. Research from Sutrisno, (2016) and Muthaher, (2014) in Islamic banking also founded that credit risk didn't affect profitability.

The relationship of liquidity and profitability in previous studies also showed inconsistent results. R. A. Khan and Ali, (2016) founded that there was a positive relationship between liquidity and profitability in banks, liquidity is proxied by quick ratio and current ratio, while profitability is proxied by gross profit margin and net profit margin. Likewise research from Vieira, (2010), Ajanthan, (2013), Ibrahim, (2017) showed the result that there was a positive relationship between liquidity and profitability. Different research was shown by Maqbool, (2014) that liquidity had negative effect on profitability in Islamic banking, as well as research from Dahiyat, (2016) and Nimer et al., (2013) on banking in Jordanian.

Differences in the above research results and to compare islamic and conventional banking in Indonesia linkage between corporate governance, credit risk, performance (specially liquidity and profitability) continuing research from Nurtrontong et al., (2018) inspired researchers to research it on this study.

This research is expected to examine empirically the Agency Theory (Jensen & Meckling, 1976) that companies have good corporate governance will affect performance, the theory of anticipated income theory (Prochnow, 1949) that payment of installments of customers is a source of bank liquidity so that the inability of payment of customer installments or credit risk will decrease liquidity, the research concept from Lata, (2014), Musyoki and Kadubo, (2012), Tabari et al., (2013) and Kodithuwakku, (2015) that credit risk will decrease profability and the research concept from R. A. Khan and Ali, (2016), Oluwasegun & Samuel, (2015), Vieira, (2010), Ibrahim, (2017), and Ajanthan, (2013) that liquidity will increase profitability.

LITERATURE REVIEW AND HIPOTHESES

CORPORATE GOVERNANCE

Agency problems are closely related to information asymmetry between managers and principals, managers have more information than principals related to internal companies. Related to the problems that happened, Shleifer and Vishny, (1996) stated that Corporate Governance can be a tool that gives confidence to investors that they will get a return on invested funds. With good performance, the company is expected to be able to generate returns. Todorovic, (2013) stated that companies that have a good level of corporate governance implementation tend to be more profitable and have better performance.

In the banking industry, agency problems that occur can be wider than non-financial industries. Asymmetric information that occurs besides managers and principals can also occur between managers and depositors' customers, as well as regulators. The balance sheet composition of banks, in terms of liabilities is dominated by third party funds, then on the asset side, it was dominated by credit or financing and managers do not need to ask the depositors for permission to use the funds deposited for credit expansive, asymmetric information arises. Some banking crisis events that occurred in Indonesia in the period 1998-2004, for example caused by managers or principals embezzling customer funds for investment in securities that were not reported to regulators, granting credit to the group of owners or commissioners in amounts exceeding the limit or fictional engineering of lending, the impact is detrimental to customers who deposit their funds in the bank. This is one form of agency problems that occur in banks between managers, principals and regulators.

The banks have an intermediary function, this makes the capital structure different from non-financial companies. The relatively small position of bank capital against debt compared to non-financial companies (even position of debt can reach more than 80%) with the composition of debt is third party funds with short tenors (liquid), while on the asset side, loans are mostly long tenors (illiquid), making a mismatch between the position of debt and assets of the bank (Macey & O'Hara, 2003). Mismatch conditions can lead to bankruptcy due to weak banking governance, such as the events of the 1998-2004 period.

Based on the above conditions, super-strict supervision is required by regulator to oversee banking management, to minimize the occurrence of moral hazard from managers. For the matter, the regulator has a strong role in the corporate governance of the banking industry to support economic development and the running of the financial system. This makes the difference between corporate governance and non-financial industries. ((Ciancanelli & Reyes-Gonzalez, 2005), (Macey & O'Hara, 2003), (Cocris & Ungureanu, 2007), (Marcinkowska, 2012))

The events of banking in the period 1998 - 2004 in Indonesia were important note on the need for the importance of regulation of banking governance, so that it can be understood that good corporate governance is very necessary in carrying out banking business. Solomon & Solomon,

(2004) define the corporate governane as a system of checks and balances, both internal and external to the company, which guarantees that companies carry out accountability to all of their stakeholders and are socially responsible in all areas of their business activities. Furthermore, Solomon and Solomon, (2004) also stated that Corporate Governance has influence on performance, where companies with a weak corporate governance structure will produce worse performance than companies that have a better corporate governance structure. This shows that corporate governance is expected to support performance achievement.

IMPACT CORPORATE GOVERNANCE ON LIQUIDITY

Empirical study conducted by Florinita, (2014) on non-financial institution in Romania gave result that Governance Rating had positive impact toward liquidity, the better the value of Governance Rating will increase liquidity. Research of Hassan et al., (2017) on islamic banking in Pakistan founded that corporate governance proxied by Board Size, Shariah Advisory Board and Board Independence influenced the performance, especially liquidity.

Similarly, research of Abogun et al., (2013) on banking in Nigeria also showed that corporate governance is proxied by Independent Audit Committee and Auditor Independence founded that there was a significant and positive effect on liquidity. Same result research showed by Inam and Mukhtar, (2014) on banking in Pakistan that corporate govenance would improve liquidity performance, as well as research by Chung et al., (2010) that corporate governance increased liquidity because the better corporate governance would improve operational and financial transparency so that it would reduce information asymmetries.

According to Al-Matari et al., (2012) based on agency theory that a greater proportion of independent directors as a proxy for corporate governance would support better performance. Thus, referring to the previous studies above and agency theory, it is predicted that corporate governance has an impact toward liquidity performance. (**hypothesis-1**)

IMPACT CORPORATE GOVERNANCE ON PROFITABILITY

An empirical study conducted by Aggarwal, (2013) in India, Governance Rating that reflected the quality of gorporate governance had positive effect on profitability, the better the value of Governance Rating would increase profitability. The research results of Tornyeva and Wereko, (2012) in Ghana, Najjar, (2012) in Bahrain, and Ghaffar, (2014) in Pakistan also stated that corporate governance had positive effect on profitability. The three studies above also revealed that one of the important corporate governance attributes that influence profitability was Board Size. Likewise, the research of Inam and Mukhtar, (2014) in Pakistan showed that Corporate Govenance would improve profitability performance. The research of Todorovic, (2013) in Serbia also stated that companies with good levels of corporate governance implementation tend to be more profitable.

According to Al-Matari et al., (2012) based on agency theory that a greater proportion of independent directors as a proxy for corporate governance would support better performance. Thus, referring to the previous studies above and agency theory, it is predicted that corporate governance has an impact toward profitability performance. (**hypothesis-2**)

CREDIT RISK

Credit risk is an important part of bank management (Sree Rama Murthy, 2004). Credit risk is caused by the failure of customers or other parties in fulfilling obligations to the Bank in accordance with the agreed agreement ((Kolapo et al., 2012) and (Brown & Moles, 2014)). Credit risk is the biggest or critical risk for the Bank ((Vodová, 2003), (Cibulskiene & Rumbauskaite, 2012), (Megeid, 2013)), even able to cause a banking crisis (Vodová, 2003).

IMPACT CREDIT RISK ON LIQUIDITY

Some empirical studies such as conducted by Megeid, (2013) on conventional banking in Egypt, Gautam, (2016) on conventional banking in Nepal, Munteanu, (2012) on conventional banking in Romania, and Alzoubi, (2017) on islamic banking in some countries in Arabia showed that credit risk had negative effect on liquidity. The greater the problem loans mean the smaller the installment of the customer so that it minimizes liquidity.

The above conditions are in accordance with the anticipating income theory proposed by Prochnow, (1949) that the source of banking liquidity is the installment of customer payments. ((Alshatti, 2015), (Udoka & Anyingang, 2012). It means that the smooth installments of customer payments affect liquidity, the smoother customer payments or the smaller the credit risk affects the increase in banking liquidity. Referring to some of the previous studies above and anticipating income theory, it is predicted that credit risk has an impact toward liquidity (**hypothesis-3**).

IMPACT CREDIT RISK ON PROFITABILITY

Some empirical studies such as conducted by Lata, (2014) in Bangladesh, Musyoki and Kadubo, (2012) in Kenya, Tabari et al., (2013) in Iran, Kodithuwakku, (2015) in Srilanka showed that credit risk had negative impact to profitability. This means that deterioration of the quality of financing, it will reduce profitability. Referring to several previous studies above, that credit risk has a significant effect on profitability, it is predicted that credit risk has an impact toward profitability (**hypothesis-4**).

LIQUIDITY

In general, liquidity in banks is needed to meet the withdrawal of customer funds in the form of savings, current accounts, or other funding products, and to support the achievement of credit targets (Delis et al., 2009). With this liquidity function, making banks have different characteristics compared to other companies, which are often called liquidity providers, on the liability side, providing liquid funds meets the needs of withdrawing funds from third party fund customers, on the asset side providing funds to borrowing customers in forms of credit (Diamond & Dybvig, 1983).

Banks need to pay attention to liquidity management, because on the one hand as a liquity provider, on the one hand it also functions managing liquidity risk, both of which have an impact on customers both depositors and credit customers (small, medium and corporate), so that it can influence the economy. Failures in managing bank liquidity can result in bank destruction and can have a systemic impact. If one bank suffers bankrupty, deposit customers will interpret it as a signal regarding solvency problems in the entire financial sector so that it reacts with massive withdrawal of funds (Vlahu & Marinc, 2011), the subsequent impact will be to influence monetary and induce recession (Bernanke, 1983). The bankruptcy of the bank can disrupt the payment and trading system (Vlahu & Marinc, 2011). Failures or weaknesses in the management of liquidity have an impact on the banking crisis which subsequently results in a global financial crisis ((Komarkova et al., 2011), (Marozva, 2015)). For this reason, the management of banking liquidity is important in supporting the stability of the banking sector as a whole (Ghenimi & Omri, 2015).

IMPACT LIQUIDITY ON PROFITABILITY

Some empirical studies such as those of R. A. Khan and Ali, (2016) on commercial banking in Pakistan, Oluwasegun & Samuel, (2015) on banking in Nigeria, Ibrahim, (2017) on banking in Iraq, Vieira, (2010) on airlines companies in several continents, Ajanthan, (2013) in Sri Lanka gave result that liquidity had significant and positive effect on profitability. It means that liquidity supported the achievement of profitability. Referring to several previous studies above, it is predicted that liquidity has an impact toward profitability performance (**hypothesis-5**).

However, liquidity can have negative effect on banks, as can the study shown by Nimer et al., (2013), Dahiyat, (2016) and Maqbool, (2014).

PROFITABILITY

Muthaher, (2014) stated that profitability is the ability of banks to generate profits effectively and efficiently. Through this profit, companies can continue to grow and survive (Aremu et al., 2013), (Mwizarubi et al., 2015) as a source for wealth or asset accumulation ((Tabari et al., 2013), shows that the business being run has future prospects (Muthaher, 2014), can increase the value of shareholders (Aremu et al., 2013) and reflects the competitive position in the market (Tabari et al., 2013). In macro terms, profitable and strong banks will support financial stability and increase resilience to economic shocks, but on the contrary, companies with poor profitability and/or poor solvency will potentially go bankrupt (Altman, 1968).

The bank as one of the business industries is very dependent on the ability to generate profits. In its business journey, bank profitability can be influenced by internal and external factors ((M. M. S. Khan et al., 2014)), (Gul et al., 2011), (Aremu et al., 2013)). Internal factors tend to be managed by management, while external factors tend to be unable to be controlled by management, but can be monitored and prepared anticipation and mitigation steps. The research concept model is illustrated in Figure 1.

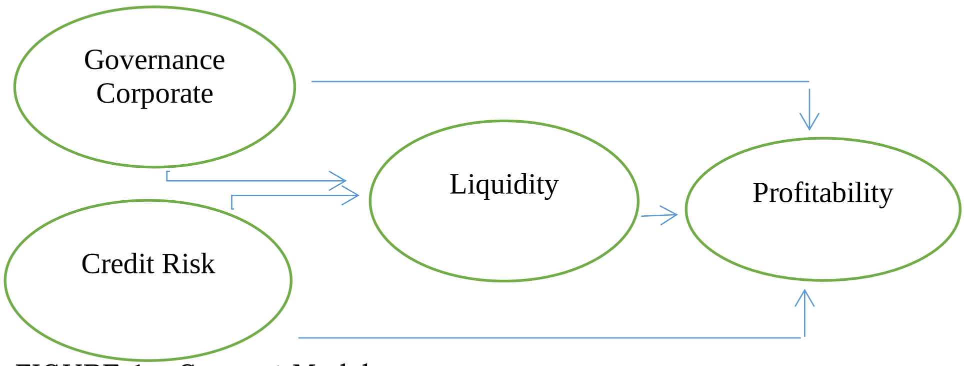

FIGURE 1 – Concept Model

METHODS

The study was conducted on conventional and islamic banking in Indonesia which were listed on the Indonesia Stock Exchange (IDX) and the Financial Services Authority (FSA) for the period of 2012-2016. Conventional banking were conventional commercial banks (Bank Umum Konvensional - BUK), while sharia banks were islamic commercial banks (Bank Umum Syariah - BUS), not a islamic business unit (Unit Usaha Syariah - UUS). UUS is not included as part of the research sample because its corporate governance is still joined with its conventional parent bank.

TABLE 1 – Sample Criteria

No	Description	Conventional (number)	Islamic (number)
1	Commercial banking which had been operating in 2012 and had published financial statements for five years in a row and had been listed on the IDX and FSA.	42	11
2	Available complete data needed: annual report, GCG report, and published financial statements	38	11
3	Commercial banking that had published financial statements must be in a state of successive profit for the 2012-2016 period	30	7

Analysis of the data used descriptive statistics to get a general picture of the collection of data collected and inferential statistics by the Generalized Structured Component Analysis (GSCA) method to provide conclusions. Variable description is in table 2.

TABLE 2 – Variable Description

Variable	**Indicator Name**	**Measurement**	**Banking**
Corporate Governance	Board of Commissioners (BOC)	total number of commissioners	Conventional & Islamic
	Proportion of Independent Commisioners (IC)	total number of independent directors divided by the total members of the board of commissioners	Conventional & Islamic
	Audit Committee (AC)	total number of audit committee	Conventional & Islamic

Credit Risk	Non Performing Loan (NPL) Ratio	total non-performing loan divided by total gross financing	Conventional
	Non Performing Financing (NPF) Ratio	total non-performing financing divided by total gross financing	Islamic
	Loan Loss Provision (LLP) Ratio	total loss provision divided by total financing	Conventional & Islamic
	Adverserly Classified Asset (ACA) Ratio	total adverserly classified asset divided by total productive asset	Conventional & Islamic

Liquidity	Loan to Deposit Ratio (FDR) Ratio	total loan divided by total third party funds	Conventional
	Financing to Deposit Ratio (FDR) Ratio	total financing divided by total third party funds	Islamic
	Asset Liquid to Total Asset (ALTA) Ratio	total liquid assets divided by total asset	Conventional & Islamic
	Asset Liquid to Total Deposit (ALTD) Ratio	total liquid assets divided by total deposits (short-term funding)	Conventional & Islamic
Profitability	Return on Asset (ROA) Ratio	earnings before tax divided by the	Conventional & Islamic

		average total asset.	
	Return on Equity (ROE) Ratio	earnings after tax divided by the average total capital	Conventional & Islamic
	Net Interet Margin (NIM)	net income divided by the average productive assets	Conventional
	Net Imbalan (NI) Ratio	net income from distribution of financing after deducting profit sharing divided by the average productive assets	Islamic

RESULTS

DESCRIPTIVE ANALYSIS

Descriptive analysis in this research uses data in table 3.

Table 3 – Decriptive statistics of variables for the 2012 – 2016 period

Variable	Indicator	Maximum	Minimun	Mean	Banking
Corporate Governance	BOC	9	2	4.83	Conventional
		6	3	3.71	Islamic
	IC	80	25	56.93 %	Conventional
		100	50	68.79 %	Islamic
	AC	8	3	4.03	Conventional
		5	2	3.34	Islamic
Credit Risk	NPL (NPF for Islamic Banking)	4.16%	0.00%	1.20%	Conventional
		4.85%	0.10%	1.94%	Islamic

	LLP	3.97%	0.01%	1.17%	Conventional
		3.34%	0.55%	1.60%	Islamic
	ACA	3.97%	0.00%	1.56%	Conventional
		6.54%	0.07%	2.43%	Islamic
Liquidity	LDR (FDR for Islamic Banking)	108.86%	43.36%	81.89%	Conventional
		105.66%	79.91%	92.27%	Islamic
	ALTA	63.98%	11.52%	26.43%	Conventional
		33.6%	8.04%	18.75%	Islamic
	ALTD	98.81%	14.89%	34.17%	Conventional
		45.09%	8.11%	23.55%	Islamic
Profitability	ROA	5.15%	0.15%	1.77%	Conventional
		3.81%	0.08%	1.11%	Islamic
	ROE	38.66%	0.70%	12.27%	Conventional
		57.98%	0.44%	8.89%	Islamic

	NIM (NI for Islamic Banking)	13.12%	1.53%	5.43%	Conventional
		13.94%	2.75%	6.22%	Islamic

INFERENTIAL STATISTICS.

Inferential statitics in this research uses data in table 4 and table 5.

Table 4 – Estimate Value of Indicator

Variable	**Construct Model**	**Indicator**	**Loading Estimate**	**Weight Estimate**	**Result**	**Banking**
Corporate Governance	Reflective	BOC	0.941	-	Accepted	Conventional
			0.861	-	Accepted	Islamic
		IC	-0.448	-	Rejected	Conventional
			-0.698	-	Rejected	Islamic

		AC	0.741	-	Accepted	Conventional
			0.613	-	Accepted	Islamic
Credit Risk	Formative	NPL (NPF for Islamic)	-	-0.580	Rejected	Conventional
			-	-0.312	Rejected	Islamic
		LLP	-	-0.952	Rejected	Conventional
			-	0.684	Accepted	Islamic
		ACA		1.601	Accepted	Conventional
			-	0.606	Accepted	Islamic
Liquidity	Formative	LDR (FDR	-	1.412	Accepted	Conventional

		for Islamic)	-	0.010	Rejected	Islamic
		ALTA	-	1.241	Accepted	Conventional
			-	2.882	Accepted	Islamic
		ALTD	-	-0.853	Rejected	Conventional
			-	-2.124	Rejected	Islamic
Profitability	Formative	ROA	-	1.109	Accepted	Conventional
			-	1.392	Accepted	Islamic
		ROE	-	-0.162	Rejected	Conventional
			-	-0.804	Rejected	Islamic

		NIM (NI for Islamic)	-	0.036	Rejected	Conventional
			-	-0.239	Rejected	Islamic

Based on table 3, for the 2012-2016 period, the average size of the Board of Commissioners and Audit Committees in both conventional and sharia banking has met the minimum number of regulatory provisions (PBI no.8/4/PBI/2006 and POJK no.55/POJK.04/2015), which is a minimum of 3 people. When referring to table 4, the loading estimate of BOC and AC showed positive value and above 0.5 both conventional and Islamic banking, this decsribed that both indicators were able to explain mechanism of corporate governance. So based on table 3 and 4, it can be concluded that the number and availability of BOC and AC are the biggest factors forming corporate governance.

Based on table 4, in conventional banking, weight estimate of LLP indicator showed positive value and above 0.5, while in Islamic banking, there are two positive value indicators and above 0.5, namely LLP and ACA. This illustrates that in conventional banking there was one indicator that formed the credit risk variable, whereas in Islamic banking there are two indicators that formed credit risk. When referring to table 3, for the 2012-2016 period, the average LLP of conventional banking is of 1,17%, while the average LLP and ACA of Islamic banking are 1.6%and 2.3%. Based on table 3 and 4, it can be concluded that credit risk in Islamic banking had a risk level higher than conventional banking, which can be seen from the number of indicators forming the variable and greater average of ACA.

Based on table 4, in conventional banking there are two indicators of liquidity variables that have weight estimate positive value and above 0.5, namely LDR and ALTA, while in Islamic banking, there are also two indicators that are positive but only one that is above 0.5 namely ALTA. This shows that the tendency of liquidity variables in conventional banks is stronger because it is composed of two indicators (LDR and ALTA). This is also supported from the data in table 3, that in the 2012-2016 period, the average ALTA was higher in conventional banking at 24.63%, and the LDR average was 81.89%. Even though the average Islamic banking LDR is larger, because its weight estimate is small, it cannot explain variable of liquidity.

Based on table 4, both conventional and islamic banking, there is only one indicator that can explain profitability variables, namely ROA because only this indicator has weight estimate positive value and above 0,5. Based on the data in table 3, during the 2012-2016 period, the profitability of conventional banking was relatively better because it had a greater average ROA.

Table 5 – Estimation Result & p-Value of Path Coefficient

Influence of Variable	Estimate	SE	CR	p	Conclusion	Banking
Corporate Governance on Liquidity	0.626	0.052	12.04*	0.000	Significant	Conventional
	0.450	0.042	10.73*	0.000	Significant	Islamic
Corporate Governance on	0.360	0.101	3.57*	0.000	Significant	Conventional
	0.154	0.108	1.42	0.163	Not Significant	Islamic

Profitability						
Credit Risk on Liquidity	0.285	0.054	5.32*	0.000	Significant	Conventional
	-0.478	0.076	6.31*	0.000	Significant	Islamic
Credit Risk on Profitability	-0.367	0.065	5.66*	0.000	Significant	Conventional
	-0.730	0.077	9.49*	0.000	Significant	Islamic
Liquidity on Profitability	0.132	0.062	2.12*	0.000	Significant	Conventional
	-0.634	0.072	8.81*	0.000	Significant	Islamic

Hypothesis-1

Based on table 5, the estimation results and P value in Islamic banking showed corporate governance had significant effect on liquidity with positive direction, meaning that hypothesis-1 was accepted. This is in accordance with research by Nurtrontong et al., (2018) in conventional banking.

Hypothesis-2

Based on table 5, the estimation results and P value in Islamic banking showed that corporate governance had no effect on profitability, meaning that hypothesis 2 was rejected. This is not in accordance with research by Nurtrontong et al., (2018) in conventional banking.

Hypothesis-3

Based on table 5, the estimation results and P value in Islamic banking showed that credit risk had significant effect on liquidity with negative direction, meaning that hypothesis 3 was accepted. This is consistent with research by Nurtrontong et al., (2018) in conventional banking, but with different direction.

Hypothesis-4

Based on table 5, the estimation results and P value in Islamic banking showed that credit risk had significant effect on profitability with negative direction, meaning that hypothesis 4 was accepted. This is consistent with research by Nurtrontong et al., (2018) in conventional banking.

Hypothesis-5

Based on table 5, the estimation results and P value in Islamic banking showed that liquidity had significant effect on profitability with positive direction, meaning that hypothesis 3 is accepted. This is consistent with research by Nurtrontong et al., (2018) in conventional banking, but with different direction.

DISCUSSION

IMPACT CORPORATE GOVERNANCE ON LIQUIDITY

Based on above results, the research showed that corporate governance had significant effect toward liquidity in islamic banking and also was relevant to previous research by Nurtrontong et al., (2018) in conventional banking. BOC and AC had an important role in the corporate governance mechanism, especially regarding the supervision of the directors' performance in achieving liquidity. An increasing number of Board of Commissioners and/or Audit Committees on islamic and conventional banking would increase supervision of bank performance, in terms of liquidity.

This result confirmed previous research such as Chung et al., (2010), Florinita, (2014), Abogun et al., (2013), Inam and Mukhtar, (2014) and Hassan et al., (2017). This research also supported the agency theory that implementation of corporate governance would support achieve performance especially liquidity through active supervision from BOC and AC.

IMPACT CORPORATE GOVERNANCE ON PROFITABILITY

Based on above results, the research showed that corporate governance had no significant effect toward profitability in islamic banking and wasn't relevant to previous research by Nurtrontong et al., (2018) in conventional banking. Although BOC and AC on Islamic banking were able to support the achievement of liquidity performance, but based on this research, it were not able to support profitability performance. This result indicated that the achievement of profitability performance in islamic banking had not been generated from the corporate governance mechanism, especially the variables of BOC or AC, but could come from other factors outside of corporate governance or other indicators outside of BOC and AC. This is an important difference from previous research by Nurtrontong et al., (2018) that corporate governance had impact on profitability through existence and amount of BOC and AC in conventional banking.

Result of research on islamic banking confirmed previous research such as Omoniyi et al., (2013), Syam and Najda, (2012) and Rashid et al., (2010) that corporate governance didn't affect on profitability, but didn't confirm research of Tornyeva and Wereko, (2012), Najjar, (2012), Ghaffar, (2014), Todorovic, (2013), and as did by Nurtrontong et al., (2018). The existence and number of BOC and AC need to be evaluated to improve supervision of the directors's performance in achieving profitability. This is one of the important findings in this research.

IMPACT CREDIT RISK ON LIQUIDITY

Based on above results, the research showed that credit risk had significant effect on the liquidity in Islamic banking and was relevant to previous research by Nurtrontong et al., (2018) in conventional banking but with different direction. LLP ratio and ACA ratio have an important role in the formation of credit risk in islamic banking. An increase in LLP and ACA ratio would reduce liquidity, because the formation of reserves was sourced from bank income which was one of the main factors of sources of liquidity. This was in accordance with anticipating income theory, because the smooth payment from customers is source of banking liquidity. This result was different from previous research by Nurtrontong et al., (2018), where if in conventional banking, credit risk would increase liquidity.

Result of research on islamic banking confirmed previous research such as Gautam, (2016), Megeid, (2013), (Laurine, 2013), Munteanu, (2012), Alzoubi, (2017) that deterioration in the quality of financing would reduce liquidity. The high ratio of LLP and APB needed to be a concern for Islamic banking and regulators because it had the potential to reduce liquidity. The better management of credit risk would increase liquidity, and vice versa.

IMPACT CREDIT RISK ON PROFITABILITY

Based on above results, the research showed that credit risk had significant effect on the profitability in islamic banking and was relevant to previous research by Nurtrontong et al., (2018) in conventional banking. An increase in LLP and ACA would reduce profitability because it was sourced from bank income. The result of study indicated that in islamic and conventional banking, the deterioration of credit would reduce profitability.

Result of research on islamic banking confirmed previous research concepts such as Lata, (2014), Musyoki and Kadubo, (2012), Tabari et al., (2013), and Kodithuwakku, (2015). The high ratio of LLP and ACA should be a concern for Islamic banking and regulators because it had the potential to reduce profitability. The better management of credit risk would increase profitability, and vice versa.

IMPACT LIQUIDITY ON PROFITABILITY

Based on above results, the research showed that liquidity had significant effect on the profitability in islamic banking and was relevant to previous research by Nurtrontong et al., (2018) in conventional banking but with different direction. An increase in liquidity would potentially reduce profitability. The ALTA ratio, which is quite good, apparently hadn't been able to support the increase in profit and even tended to reduce profit. This indicated that in the islamic banking liquid assets did not contribute to achieve the profit, which is different from previous research by Nurtrontong et al., (2018) in conventional banking that their liquid assets contributed to increase the profit. This is most likely due to the position and structure of liquid assets. This condition should be a concern for regulator and management of islamic banking that the management of liquid assets is too large, which had the potential to reduce profitability. This is one of the important findings in this research.

This research also is in accordance with the trade-off theory where there is trade-off in liquidity management. If it is too high, it will potentially reduce profitability, but the liquidity position is in safe condition. If it is small, it will potentially increase profitability, because a lot of liquidity is distributed into financing to get profitability, but the liquidity position is less secure due to anticipate the withdrawal from depositors' customers.

Result of research on islamic banking confirmed previous research of Nimer et al., (2013), Maqbool, (2014) and Dahiyat, (2016) that an increase in liquidity would tend to reduce profitability, but didn’t confirm previous research concept by R. A. Khan and Ali, (2016), Oluwasegun and Samuel, (2015), Vieira, (2010), Ibrahim, (2017), and Ajanthan, (2013) that liquidity affected the increase in profitability.

Overall based on above discussion, the research showed that in islamic banking, collaboration of credit risk and liquidity would affect profitability except corporate governance. Whereas in conventional banking, collaboration of corporate governance, credit risk and liquidity affected achievement of profitability.

MANAGERIAL IMPLICATION

There are some managerial implications that can be useful input for regulators and management of islamic and conventional banking. Firstly, the existence and number of the BOC and AC in conventional banking are able to support the achievement of performance (liquidity and profitability). This should be maintained and improved. Secondly, supervision is needed to manage distributing of sharia financing. Islamic banking has two indicators that play a role in the formation of credit risk, namely LLP and APB ratio. Both of these have the potential to reduce liquidity and profitability. Thirdly, it is necessary to trade-off for the management ofiIslamic banking in managing their liquidity because the increase in liquidity has the potential to reduce profitability.

CONTRIBUTION

There are several contributions to the literature. Firstly, supporting agency theory (Jensen & Meckling, 1976), that mechanism of corporate governance could influence performance, in conventional banking toward liquidity and profitability, whereas in islamic banking toward liquidity. Secondly, supporting ancipated income theory (Prochnow, 1949), that an increase in credit risk in islamic banking will reduce liquidity. Thirdly, support the research concept of Lata, (2014), Musyoki and Kadubo, (2012), Tabari et al., (2013) and Kodithuwakku, (2015) that on conventional and islamic banking, credit risk could decrease profitability. Fourthly, the effect of liquidity on profitability in islamic banking supported trade-off theory.

CONCLUSION

It can be concluded that research on conventional banking showed that corporate governance could affect performance both liquidity and profitability, while in islamic banking, corporate governance could affect performance especially liquidity only. In general, the result of this study support agency theory.

Then credit risk in conventional and islamic banking could affect liquidity, but in a different direction. On islamic banking, an increase in credit risk will tend to reduce liquidity which is in accordance with anticipated income theory. However, this needed attention from regulator and management of islamic banking because the LLP and APB ratios are two important indicators of credit risk variable which can potentially reduce liquidity.

Other research results is credit risk could affect profitability with same direction both of conventional and Islamic banking. An increase in credit risk will tend to reduce profitability. This can be understood because an increase in credit risk will reduce bank income.

The last result is liquidity could affect profitability both conventional and islamic banking but with different direction. High liquidity for conventional banking was able to support the achievement profit, but for islamic banking, high liquidity tends to reduce profit. The condition of Islamic banking is in accordance with the trade-off theory so it needs to get the attention of regulators and management. The results of the study as a whole provide that in conventional banking, collaboration between corporate governance, credit risk and liquidity can affect profitability, whereas in islamic banking, collaboration between credit risk and liquity can affect profitability.

LIMITATION AND SUGGESTION

Firstly, there are indicators that have negative values or too small in loading estimate or weight estimate so they cannot be used for explained the variable even there is only one indicator that can explain the variables. Some examples are ACA indicator in conventional banking and ROA indicator in conventional and islamic banking. This is due to the NPL and LLP indicators on conventional banks have negative value in weight estimate. Likewise, ROE and NIM indicators in conventional banking are negative and too small in weight estimate, causing only ROA indicators to be used to explain profitability variable. In future research, it can add other indicators to the variables. This is to anticipate the possibility of indicators that are negative value or too small.

Secondly, there is different result impact corporate governance on profitability between conventional and islamic banking. It provide opportunity for further research to study in more depth better. Further research can do qualitative research or add other indicators. Some important indicators for further studies are educational background, risk oversight committee, concurrent positions in other companies, syariah advisory board.

Thirdly, there is different direction impact credit risk on liquidity between conventional and islamic banking. It provide opportunity for further research to study in more depth better why on islamic banking supports the theory of anticipating income, but not on conventional banking.

Fourthly, there is different direction impact liquidity on profitability between conventional and islamic banking. It can also be continued with further studies.

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