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The Influence of Risk Management, Third-Party Funds and Capital Structure on Banking Sector Financial Performance in Indonesia and Thailand with Corporate Governance as Moderating Variable in 2015-2019

Abstract. *The banking sector plays an important role in the country's economic growth. International experience shows that a weak banking sector not only threatens the long-term stability of a country's economy. It can also cause a financial crisis which can lead to economic crisis. Therefore, it is important to identify and investigate the factors on which the financial performance of banks depends. The purpose of this study is to analyze the influence of risk management, third-party funds and capital structure on banking sector financial performance in Indonesia and Thailand with corporate governance as moderating variable. The authors use return on assets (ROA) as the key indicator of bank efficiency. The data used in this study are secondary data, including nonperforming loan (NPL), loan-to-deposit ratio (LDR), operating expenses to operating income (BOPO), net interest margin (NIM), third party funds (TPF), debt-to-equity ratio (DER), return on assets (ROA), corporate governance. The data was obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) and the Thai Stock Exchange (www.set.or.th). The sample used in this study is 20 conventional banks listed on the Indonesia and Thailand Stock Exchange from 2015-2019. The methodological basis of this study is the use of the Structural Equation Model (SEM) with Partial Least Square (PLS). Data processing was performed in the WarpPLS 7.0 software. The study results show that NPL and LDR have a negative and significant influence on the financial performance of banks. At the same time, the BOPO and DER do not affect the financial performance of banks. The NIM and TPF have a significant and positive influence on the bank's financial performance. In addition, corporate governance does not moderate risk management relationship to the bank's financial performance. The results of this study can benefit bank shareholders and customers, and bank management.*

Keywords: *nonperforming loan, loan-to-deposit ratio, ratio of operating expenses and operating income, net interest margin, third party funds, debt-to-equity ratio, return on assets, corporate governance, banking sector.*

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Вплив ризик-менеджменту, фондів третіх сторін та структури капіталу на фінансові результати банківської діяльності в Індонезії та Таїланді з розглядом корпоративного управління як модеруючої змінної у 2015-2019 роках

Анотація. *Банківський сектор відіграє важливу роль в економічному зростанні країни. Міжнародний досвід свідчить, що слабкий банківський сектор не тільки загрожує довгостроковій стабільності економіки країни, але також може спричинити фінансову кризу, яка може перерости в економічну. У зв'язку з цим, важливо своєчасно виявити та дослідити фактори від яких залежить ефективність діяльності банків. Метою цього дослідження є аналіз впливу ризик-менеджменту, фондів третіх осіб та структури капіталу на фінансові результати діяльності банків в Індонезії та Таїланді з розглядом корпоративного управління як модеруючої змінної. В цій статті ефективність роботи банку автори оцінюють на основі показника рентабельності активів (ROA). Дані, використані в цьому дослідженні, є вторинними даними щодо наступних показників: проблемний кредит (NPL), коефіцієнт позичкових депозитів (LDR), співвідношення операційних витрат та операційного доходу (BOPO), чиста процентна маржа (NIM), кошти третіх сторін (TPF), коефіцієнт боргу до власного капіталу (DER), рентабельність активів (ROA), корпоративне управління. Дані отримані з офіційного сайту Індонезійської фондової біржі (www.idx.co.id) і Тайської фондової біржі (www.set.or.th). Вибірка, використана в цьому дослідженні, – це 20 звичайних банків, які котирувалися на фондовій біржі Індонезії та Таїланду в період 2015-2019 років. Методологічною основою даного дослідження є використання моделі структурного рівняння (SEM) з частковим найменшим квадратом (PLS). Обробку даних проведено в програмі WarpPLS 7.0. Результати дослідження показують, що частка проблемних кредитів та коефіцієнт позичкових депозитів негативно та істотно впливають на фінансові результати банків. У той же час співвідношення операційних витрат та операційного доходу та коефіцієнт боргу до власного капіталу не впливають на фінансові результати банків. Чиста процентна маржа та кошти третіх сторін мають значний та позитивний вплив на фінансові результати банку. Крім того, корпоративне управління не пом'якшує вплив ризик-менеджменту на фінансові результати банку. Результати цього дослідження можуть принести користь банку, акціонерам і клієнтам, а також керівництву банку.*

Ключові слова: *проблемний кредит, коефіцієнт позичкових депозитів, співвідношення операційних витрат та операційного доходу, чиста процентна маржа, кошти третіх осіб, коефіцієнт боргу до власного капіталу, рентабельність активів, корпоративне управління, банківський сектор.*

INTRODUCTION

The banking sector plays an important role in the country's economic growth. Banks are business entities that collect funds from the community in the form of deposits and distribute funds to the community in the form of credit and or other forms in order to improve the standard of living of many people. So, an important factor in the development of banking is the public confidence in banks.

In conditions of dynamic market competition, measuring performance accurately is very important and becomes the center of attention for every organization (Irawati et al., 2019). Banking growth in Indonesia has been positive in the last five years. Statistical data obtained from the Financial Services Authority (OJK) website, show that commercial bank assets in Indonesia in 2015 amounted to 6,095,908 billion rupiah while in 2019 amounted to 8,562,974 billion rupiah, so there was an increase of 40% over the last five years. While net profit increased by 50% from 104,628 billion rupiah in 2015 to 156,487 billion rupiah in 2019.

The internal factors that have been widely identified as determinants of banking sector development are risk management, third-party funds and capital structure and corporate governance. Each of these factors can significantly affect the financial performance of the bank. Therefore, there is an obvious need to study such an impact.

LITERATURE REVIEW

Financial performance

Financial performance is a subjective measure of how well a bank can use its assets and generate revenues. According to Flamini, et al. (2009), return on assets (ROA) is a measure of a bank's profitability that reflects a bank's management ability to make a profit from a bank's

assets. Return on asset also provides information about added value for the company that leads to better performance of that company. The authors of this study also used return on assets as an indicator of bank efficiency.

Risk management

Banking is characterized by different types of risks. Therefore, an integral part of corporate governance in banks is risk management. Risk management is a set of methodologies and procedures used to identify, measure, monitor, and control risks arising from all business activities of banks (POJK Number 18/POJK.03/2016). The application of risk management can detect the maximum losses that may arise in the future and additional capital needs if the impact of projected losses can result in the amount of capital below the minimum provisions required by Bank Indonesia's supervisory authority. Managers can apply comprehensive risk management principles to any type of risk such as credit risk, liquidity risk, and operational risk, because each risk contributes to the bank's performance. Attar & Islahuddin (2014); Soyemi, Ogunleye & Ashogbon (2014) found that there is a significant influence of the effectiveness of risk management on bank performance. In contrast, Olamide, Uwalomwa & Ranti (2015) found that there was no relationship between risk management and bank performance. Husain & Abdullah (2008) divides bank risk into credit risk and liquidity risk. Their research shows that such risks do not affect profitability. According to Isanzu (2017), risk management should be implemented in order to reduce the negative impact of credit risk on a bank's financial performance.

Third party funds

The main source of bank funds is Third Party Funds (TPF) – funds that have been collected by commercial banks from the community usually in the form of current deposits (demand deposits), saving deposit, and deposit deposits (time deposit). According to Banking Law No. 10, Year 1998, the calculation of TPF is as follows: TPF = Giro + Savings + Deposits. This source of funds is the most important source of funds for the bank's operational activities and becomes a benchmark for the bank's success if it can finance its operations from this source of funds (Hermuningsih et al., 2020). Allocation of funds can be realized in the form of loans or better known as credit (Basha, 2017; Ergeç & Kaytancı, 2017; Naz, Shah, & Kutan, 2017). Third-party funds represent funds or money that comes from customers or residents who invest in several programs, namely deposits, current accounts, and time savings. Meanwhile, according to Oktaviani & Pangestuti (2012) Third party funds are the largest source of funds for banks to conduct their operations distributing credit.

Capital structure

The profitability of banking is also influenced by the capital structure (Pinto et al., 2017). Fahmi (2015) states that the capital structure is as follows: "The capital structure is an illustration of the form of the company's financial proportion that is between the capital held that is derived from long-term liabilities and its own capital (shareholders' equity) which is the source of financing of a company". According to Halim, (2015) the capital structure is as follows: "The capital structure is a comparison between total debt (foreign capital) and total capital alone / equity)". The reason the author chose the Debt-to-Equity Ratio (DER) indicator as a measure of capital structure, because this indicator describes the source of company funding with the consideration that the greater the total debt it will increase the risk of the company to face bankruptcy. This will be a negative response for investors. According to Nugrahani & Sampurno (2012), the investors tend to be more interested in certain DER levels for less than one or more.

Awunyo-Vitor & Badu (2012) studied the capital structure and performance of registered banks in Ghana. The results of their study showed a negative relationship between capital structure and financial performance. Capital structure decisions are essential for any business organization. This decision is important because of the need to maximize returns and the impact of those decisions on a company's ability to handle a competitive environment. According to Allahham (2015), the capital structure has not fully impacted the financial performance of a country's banks. Ramli et al. (2019) found that that the characteristics of the company and the state directly affect the financial performance of the company.

Corporate governance

It is widely recognized that better corporate governance practices improve a company's performance (Adams & Mehran, 2012; Chung et al., 2003). The Organization for Economic Co-operation and Development (OECD) (2015) defines corporate governance as a kind of relationship between shareholders, boards, management, and others with an interest in a company. According to Bank Indonesia regulations, corporate governance is bank governance that applies the principles of transparency, accountability, accountability, independence (independence), and fairness. Corporate governance is concerned with two theories, namely agency theory and stewardship theory. Agency theory states about the importance of company owners (shareholders) handing over the management of the company to professionals who are more understanding and professional in running a business (Hutabarat & Huseini, 2006). An agency theory is more often used because it reflects the reality.

According to Shahid et al (2019) corporate governance can help create a conducive and responsible relationship between every element of the company between the board of commissioners, board of directors, and shareholders in order to improve the company's performance. In addition, corporate governance has a positive influence on financial performance (Haris et al., 2019). In this case the implementation of corporate governance can reduce agency problems and conflicts of interest and the efficiency of corporate governance can be increased if the influence and responsibility of the board of commissioners is increased. Meanwhile, according to Yatim & Yusoff (2014), the corporate governance practice contributes greatly in achieving improved bank performance, which is very important for the sustainability of the entire financial system. To support

this proposition, one can bring up the fact that the organizational relationship between the banking supervisor and the Central Bank has been formed in many separate ways in different countries (Goodhart &Hartmann, 1998). Despite the generally accepted idea that good corporate governance improves a company's performance, several studies have reported a negative relationship (Manurung et al, 2019; Pathan & Faff, 2013; Shahwan, 2015). Other studies have found no association between corporate governance and performance (Park &Shin, 2004; Wintoki et al, 2012).

RESEARCH HYPOTHESIS

Bank Indonesia Regulation No. 13/1/PBI/2011 on Commercial Bank Rating states that the higher the value of Nonperforming Loan (NPL) (above 5%) then the bank is more unhealthy. Theoretically the higher the NPL value, the more unhealthy the bank, because of the high credit risk that must be borne by the bank. Increasingly unhealthy bank conditions will greatly affect stakeholder investment decisions. This causes the bank's profitability to decline. Husain & Abdullah (2008) divides bank risk into credit risk and liquidity risk. However, their study showed that such risks did not affect profitability. According to Isanzu (2017), risk management should be implemented in order to reduce the negative impact of credit risk on a bank's financial performance. Ariyanti (2010) stated that the smaller the ratio of nonperforming loan, the smaller the risk borne by banks. Conversely, the greater the nonperforming loan, the greater the risk of credit failure that has the potential to lower interest income and decrease income. According to Mardiana (2018), nonperforming loan partially has no significant effect on financial performance. According to Kajirwa &Katherine 's (2019) study, credit risk has a significant negative effect on banking financial performance. An increase in the ratio of nonperforming credit to total loans & down payments becomes a reduction in the bank's financial performance. Therefore, we can form the following hypothesis:

H_1: The nonperforming loan effects on the bank's financial performance.

Olamide et al. (2015) found that there was no relationship between liquidity risk as measured by the Loan-to-Deposit Ratio (LDR), and the bank's financial performance as measured by the ROA for the 14 banks listed on the Nigerian Stock Exchange for the period 2006-2012. (Attar & Islahuddin, 2014) concluded that liquidity risk management does not affect the bank's financial performance. Kumar (2019) also found that liquidity risk did not have a significant negative effect on ROA. Ariffin (2012) found that liquidity risk affects the bank's financial performance. The findings also suggest that liquidity risk management will be followed by ROA and ROE. Capriani & Dana (2016) Liquidity risks have a significant positive effect on bank profitability. Soyemi et al (2014) examined liquidity ratios and financial performance as measured by ROA and ROE. They found that banks' risk management practices were against banking financial performance. Meanwhile, according to Saiful & Ayu (2019) liquidity risk management has a positive effect on the bank's performance against ROA. Therefore, we can form the following hypothesis:

H_2: The loan-to-deposit ratio effects on the bank's financial performance.

According to Bank Indonesia, operational efficiency is measured by comparing total operating costs with total operating income or often called BOPO. According to Aulia & Prasetiono (2016) to show the efficiency of a bank is to determine the level of BOPO, it must be known operational costs and operating income first. The smaller the BOPO, the better because the bank has an excellent level of efficiency. The existing BOPO category consists of very poor efficiency rates above 96%, very good less than 80%. Operational efficiency or BOPO basically affects the bank's performance, i.e. to show whether the bank has used all of its factors of production appropriately (Wibowo &Syaichu, 2013). According to Yusuf & Surjaatmadja (2018), BOPO has a significant negative effect on ROA. According to Mardiana (2018), BOPO has a partial effect on financial performance. According to Shahid et al. (2019), the operational risks related to positive company performance turned into negative relationships that indicate increased operational risk decreased the company's performance. Therefore, we can form the following hypothesis:

H_3: The operating costs and operating income effect on the bank's financial performance.

Net Interest Margin (NIM) is strongly influenced by changes in interest rates as well as the quality of productive assets. According to the results of research De Silva et al. (2020), the net interest margin has a significant effect on the probability of a bank. Sofie,et al. (2020) found that net interest margin significantly affected the profitability of banks of return on asset (ROA). The research of Sari & Endri (2019) shows that the relationship between NIM and ROA variables is positive and significant. This result is in line with the profitability theory where the environment triggers banks to increase the NIM ratio partially in accordance with the direction of the bank towards the desired position determined by Bank Indonesia by 1.5%. The growth value of large bank assets will be followed by increased capital and more ability to generate ROA. Therefore, we can form the following hypothesis:

H_4: The net interest margin effects on the bank's financial performance.

The third-party funds (TPF) have a positive effect on the profitability of a bank (Hermuningsih et al., 2020). Savings funds in banks are also used by banks for their operational activities (Gumilarty & Indriani, 2017). According to Tanjung (2019) that third party funds have a positive and significant effect on the bank's performance. This means that the more third-party funds that can be collected by banks, the higher the bank's performance. Katuuk et al. (2018) explained that third-party funds have a significant influence on return on assets in commercial banks in Indonesia. In addition, Edo & Wiagustini (2014)

found that same thing that the variable of TPF against ROA in banks on the Indonesia Stock Exchange had a positive and significant effect. Therefore, we can form the following hypothesis:

H_5: The third party funds effect on the bank's financial performance.

Pinto et al. (2017) stated that capital structure has a significant effect on the financial performance of banks in a country. While Allahham (2015) revealed that the Capital Structure has not fully impacted the financial performance of a country's banks. According to Ramli et al. (2019), the characteristics of the company and the state not only directly affect the financial performance of the company. Awunyo-Vitor & Badu (2012) studied the capital structure and performance of registered banks in Ghana. Velnampy & Niresh (2012) examined the relationship between capital structure and profitability of ten Sri Lankan banks registered over the last 8-year period from 2002 to 2009. Mujahid & Akhtar (2014) studied the impact of capital structures on bank performance in Pakistan. The results showed that the capital structure had a positive impact on the bank's performance. Anarfo (2015) examined the capital structure and performance of banks in sub-Saharan Africa using total debt ratios as proxies for capital structures as they include short- and long-term debt ratios. The results showed that the capital structure of banks in Africa was statistically insignificant. Pinto & Quadras (2016) examined the impact of capital structures on the financial performance of Indian banks. According to Desai & Pitroda (2015) that the capital structure has a positive influence on financial performance. Therefore, we can form the following hypothesis:

H_6: The capital structure effects on the bank's financial performance.

Good corporate governance, based on OECD principles, should provide appropriate incentives and rewards with the Board and management to oversee the interests of the company and its shareholders for effective monitoring and efficient use of resources. According to Shahid et al. (2019), the corporate governance has a positive effect on the relationship between risk management and bank financial performance. Dikko & Alifiah (2020) found that corporate governance of the company affects the Bank's performance in providing adequate information to support the bank's corporate governance which has the function of advising the management of the overall strategic system of control and monitoring, which will result in better bank performance. It is widely recognized that better corporate governance practices improve a company's performance (Adams & Mehran, 2012; Chung et al., 2003). Despite the generally accepted idea that good corporate governance improves a company's performance, several studies have reported negative relationships (Manurung, Effrida, &Gondowonto, 2019; Pathan & Faff, 2013; Shahwan, 2015).

Other studies have found no association between corporate governance and performance (Park &Shin, 2004; (Wintoki et al., 2012). Corporate governance provides an effective structure and framework for regulating and monitoring a bank's performance by building strong principal-agent relationships (Adams &Mehran, 2003). Given the importance of deregulation, globalization, increased risk, and investor protection, as well as the positive role of banking economic growth, According to Yatim & Yusoff (2014) Corporate governance has a significant importance to the sustainability of the banking industry, as corporate governance practices help build sustainable value for the banking industry both the organization for Economic Cooperation and Development (OECD 1999) and the Basel Committee on Banking Supervision (BCBS 1999; Bcbs in 2006) produced and made recommendations on best corporate governance practices for the financial system, which are essential for sustainable economic growth (Ferdous et al., 2014). According to Yatim & Yusoff (2014), this corporate governance practice contributes greatly in achieving the improvement of bank performance, which is very important for the sustainability of the entire financial system corporate governance review of the financial sector is still limited and rare. From the above research, the hypothesis can be formulated, namely:

H_7: The corporate governance effects on the relationship between risk management and bank's financial performance.

RESEARCH METHODOLOGY

Data collection

The data used in this study are secondary data including nonperforming loan (NPL), loan-to-deposit ratio (LDR), operating expenses to operating income (BOPO), net interest margin (NIM), third party funds (TPF), debt-to-equity ratio (DER), return on assets (ROA), corporate governance during the period 2015-2019. The data was obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) and the Thai Stock Exchange (www.set.or.th). The sample used in this study is 20 conventional banks listed on the Indonesia and Thailand Stock Exchange in the period 2015-2019. In this study, the authors used the purpose sampling method with the aim to obtain a representative sample that matches certain criteria and conditions.

Operationalization of research variables

Financial performance

Financial performance is the comparison between profit and assets or capital that generates profit.

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

Risk management

Risk management is a set of methodologies and procedures used to identify, measure, monitor and control risks arising from all of the bank's business activities. It calculated by the following formulations:

$$NPL = \frac{Problem\ Credits}{Total\ Credits}$$

$$LDR = \frac{Credits}{Third\ Party\ Funds} * 100\%$$

$$BOPO = \frac{Operating\ Expenses}{Operating\ Income} * 100\%$$

$$NIM = \frac{Net\ Income}{Productive\ Assets} * 100\%$$

Third-party funds

Third Party Funds (TPF) is the total accumulated deposits from public (non bank) at commercial banks. According to Banking Law No. 10, Year 1998, the calculation of TPF is as follows: TPF = Giro + Savings + Deposits.

Capital structure

Capital structure is the particular combination of debt and equity used by a company to finance its overall operations and growth. It calculated by the following formula:

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

Corporate Governance

Corporate governance mechanisms include indicators of institutional ownership percentage, composition of the board of directors, composition of independent commissioners and composition of audit committees.

Data analysis methods

This research is quantitative research with the analysis of the collected data. In this study, the authors use panel data that is a combination of data between time and data between individuals or between spaces and processed with WarpPLS version 7.0 software. The authors use Partial least squares analysis (PLS). PLS provides accurate results even with low theoretical support and can estimate causal-predictive models and is a development of pathway analysis and multiple regression (Latan & Ghozali, 2017). The stages of analysis using Partial least squares structural equation modeling (PLS-SEM) are conceptualizing models, determining algorithmic analysis methods, determining resampling methods, describing path diagrams, evaluating models and reporting results (Latan & Ghozali, 2017).

RESULTS AND DISCUSSION

Descriptive statistics variables

Descriptive statistical analysis is used to describe the data of variables in a study. In descriptive statistics can be known the characteristics of data distribution in the form of sample number for research, minimum value, maximum value, middle value, average value and the rate of spread of data from each variable. Researchers conducted data on 20 conventional banks in Indonesia and Thailand in 2015-2019. The results of the descriptive test can be seen as follows:

Table 1

Descriptive Statistics of Indonesian and Thailand Banks

	ROA	NPL	LDR	BOPO	NIM	TPF	DER	KI	KD	KK
Mean	1.713	2.161	94.983	84.275	4.865	1233777.000	604.272	8.675	7.980	5.990
Median	1.445	1.910	95.820	69.885	4.340	4520855.000	665.025	0.640	8.000	5.000
Maximun	4.190	6.100	163.100	423.660	12.000	6955208.000	1139.580	99.740	15.000	12.000
Minimun	0.000	0.200	7.660	26.810	0.380	3046248.000	0.880	0.100	3.000	2.000
Standard Deviation	1.037	1.382	17.947	70.657	2.019	1909690.000	309.058	24.364	2.601	2.389

Note: ROA = Return on assets; NPL = Nonperforming loan; LDR = Loan-to-deposit ratio; BOPO = Operating expenses to operating income; NIM = Net interest margin; TPF = Third party funds; DER = Debt-to-equity ratio; KI = Percentage of institutional ownership; KD = Composition of the Board of Directors; KK = Composition of independent commissioners; n totaled 100.

Source: Secondary Data Analysis (2021).

The average value for return on assets (ROA) variable is 1,713. The standard deviation value is 1.037. The bank with the lowest profit rate was CIMB THAI Bank (Thailand) in 2018 at 0,000, while the bank with the highest profit rate, namely Bank Rakyat Indonesia (Indonesia) in 2015 amounted to 4,000.

The average value for nonperforming loan (NPL) variable is 2,161. The standard deviation value is 1,382. The lowest value for nonperforming loan is 0.200. While the greatest risk of credit or nonperforming loan is 6,100.

The average value for loan-to-deposit ratio (LDR) variable of 20 conventional banks in Indonesia and Thailand during the period 2015-2019 is 94,983. The standard deviation value is 17,947. The bank with the lowest LDR liquidity rate was 7,660. While the largest LDR is 163,100.

The average value for operating expenses to operating income (BOPO) variable is 84,275. The standard deviation value is 70,657. The bank with the lowest BOPO liquidity rate was 26,810. While the largest BOPO is 423,660.

The average value for net interest margin (NIM) variable is 4,865. The standard deviation value is 2,019. The bank with the lowest NIM was 0.380. While the largest NIM is 12,000.

The average value for third party fund (TPF) variable is 1233777 USD. The standard deviation value is 1909690 USD. Bank with the lowest TPF was 3046248 USD. While the largest TPF is 6955208 USD.

The average value for debt-to-equity ratio (DER)

variable is 604,272. The standard deviation value is 309,058. Bank with the lowest DER was 0.880. While the largest DER is 1139.58.

It was found that the value of corporate governance consisting of the percentage of institutional ownership, composition of the board of directors, composition of independent commissioners has an average value for the percentage of institutional ownership of 8,675, composition of the board of directors of 7,980, composition of independent commissioners of 5,990. It means that the average number owned by the company in the form of institutional ownership percentage of 867.5%, composition of the board of directors as many as 8 people, composition of independent commissioners as many as 6 people. The results showed that banks on the Indonesia and Thailand Stock Exchanges in 2015-2019 averaged the composition of institutional ownership percentage, composition of the board of directors, composition of independent commissioners sufficient.

Evaluation of Inner Model

Analysis of structural models (inner models) is carried out to show the strength of estimation between latent variables or constructs with the aim of knowing the influence between variables / constructs in the model (Latan & Ghozali, 2017). Here is the fit and quality indices model of WarpPLS 7.0:

Average path coefficient (APC) = 0.261, P = 0.002

Average R-squared (ARS) = 0.653, P < 0.001

Average adjusted R-squared (AARS) = 0.639, P < 0.001

Average block VIF (AVIF) = 1.820, acceptable if <= 5, ideally <= 3.3

Average full collinearity VIF (AFVIF) = 1.845, acceptable if <= 5, ideally <= 3.3

Tenenhaus GoF (GoF) = 0.731, small >= 0.1, medium >= 0.25, large >= 0.36

Sympson's paradox ratio (SPR) = 1.000, acceptable if >= 0.7, ideally = 1

R-squared contribution ratio (RSCR) = 1.000, acceptable if >= 0.9, ideally = 1

Statistical suppression ratio (SSR) = 1.000, acceptable if >= 0.7

Nonlinear bivariate causality direction ratio (NLBCDR) = 0.875, acceptable if >= 0.7

Based on the fit and quality indices model above, structural model testing for independent and dependent variables in this study showed that the general result output result had a fairly good fit, where all values met the rule of thumb.

Hypothesis Test Results

The next stage after conducting model analysis is hypothesis testing. Hypothesis testing is done to see the effect of an independent variable on a dependent variable in a PLS. To find out the influence of each variable, it can be seen from the probability value of the coefficient path. A hypothesis can be accepted or rejected statistically by looking at its significant value. The significance rate used in this study was 5%.

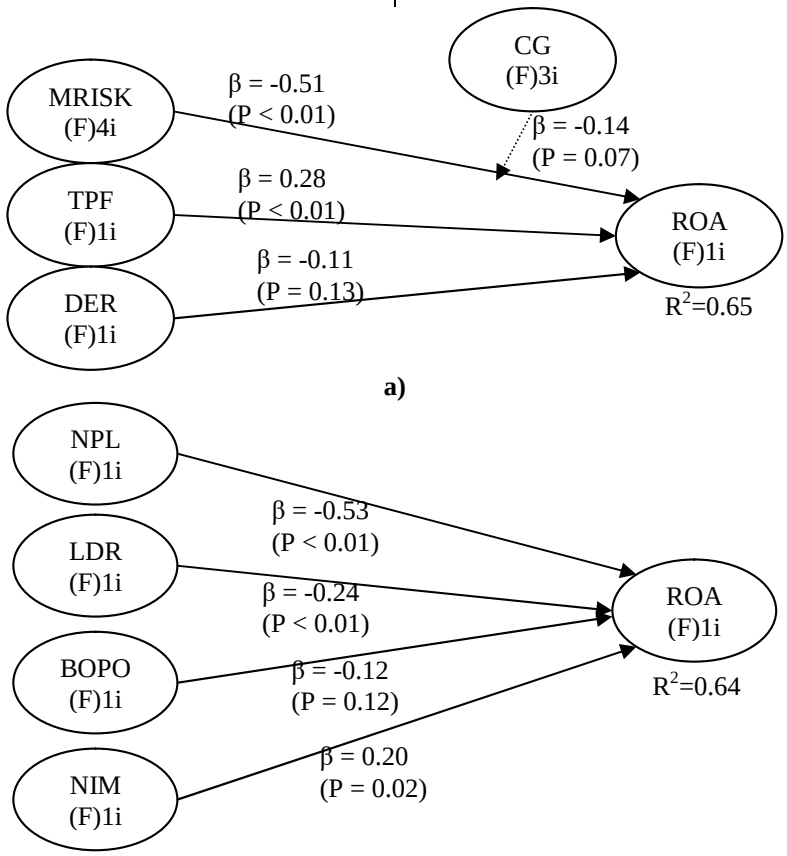

Figure 1. ***Model Analysis***

Source: Processed data (WarpPLS output 7.0)

Table 2

Hypothesis Testing

Hypothesis	Variable			Path Coefficient	P-value	Information
H_1	NPL	à	ROA	-0.527	<0.001	Significant Effect (Negative Direction)
H_2	LDR	à	ROA	-0.237	0.007	Significant Effect (Negative Direction)
H_3	BOPO	à	ROA	-0.116	0.116	No effect
H_4	NIM	à	ROA	0.205	0.016	Significant Effect (Positive Direction)
H_5	TPF	à	ROA	0.276	0.002	Significant Effect (Positive Direction)
H_6	DER	à	ROA	-0.11	0.130	No effect
H_7	M.Risk*CG	à	ROA	-0.144	0.069	No effect

According to Kajirwa & Katherine's (2019) study, credit risk has a significant negative effect on banking financial performance. Other studies confirm these results (Attar & Islahuddin (2014); Soyemi, Ogunleye, & Ashogbon (2014); Isanzu (2017); Ariyanti (2010)). From the results of this study it can be concluded that NPL has a significant negative influence on the financial performance of banks. Therefore, the H_1 hypothesis was accepted.

According to Attar & Islahuddin (2014); Soyemi, Ogunleye, & Ashogbon (2014); Ariffin (2012), LDR negatively affects the financial performance of banks (ROA). From the results of this study it can be concluded that LDR can have a significantly negative effect on the financial performance of banks that may be caused by several things. Therefore, the H_2 hypothesis was accepted.

The results of this study confirm the results of a research conducted by Olamide, Uwalomwa, & Ranti (2015), which found that there was no relationship between BOPO and bank performance. This means that a lower BOPO rate in Indonesian and Thai banking companies reduces the company's performance (ROA). Therefore, the H_3 hypothesis was rejected.

The results of this study are in line with the statement that net interest margin (NIM) significantly affects the profitability of banks (ROA variable). Sari & Endri (2019) show that the relationship between NIM and ROA variables is positive and significant. According to the results of research De Silva et al. (2020), the net interest margin (NIM) has a significant effect on the profitability of a bank. Attar & Islahuddin (2014); Soyemi, Ogunleye, and Ashogbon (2014) had the same research results. From the above information it can be concluded that NIM affects the bank's performance (ROA). Therefore, the H_4 hypothesis was accepted.

Katuuk et al. (2018) explained that third-party funds have a significant influence on return on assets (ROA) in commercial banks in Indonesia. Hermuningsih et al. (2020); Gumilarty & Indriani (2017); Edo & Wiagustini (2014) have the same research results. The results of this study indicate that NPL has a significant negative influence on the bank's financial performance. Therefore, the H_5 hypothesis was accepted.

The authors of this study found that there is no relationship between DER and bank's financial performance. Awunyo-Vitor & Badu (2012); Ramli et al. (2019); Velnampy & Niresh (2012); Mujahid & Akhtar (2014); Anarfo (2015) has the same research results. It can be stated that DER has no effect on the bank's financial performance (ROA variable). Therefore, the H_6 hypothesis was rejected.

The results of this study indicate that the risk management has no effect on a bank's financial performance (ROA variable). This is confirmed from a significant level that is below 5%. Some studies have reported about the negative relationship. Other studies have found no association between corporate governance and financial performance (Park & Shin, (2004); Wintoki et al., (2012). It can be stated that the risk management relationship to the bank's financial performance can be moderated by corporate governance. Therefore, the H_7 hypothesis was rejected.

CONCLUSIONS

Based on the data analysis results and discussion, it can be concluded that NPL and LDR have a negative and significant influence on the financial performance of banks. It shows that when the NPL decreases, the bank's financial performance will also increase.

The bank's management should focus on minimizing problem loans to improve and stabilize the bank's financial performance. The LDR significant negative effect on the financial performance of banks caused by the next factors: economic conditions, public confidence and others. This study confirmed that the BOPO and DER have no effect on the financial performance of banks. It shows that the increase in BOPO and DER will not affect the bank's financial performance. NIM and TPF have a significant and positive influence on the bank's financial performance. In addition, corporate governance does not moderate risk management relationship to the bank's financial performance.

4 References

Adams, R. B., & Mehran, H. (2003). Is corporate governance different for bank holding companies *Available at SSRN 387561*.

Adams, R. B., & Mehran, H. (2012). Bank board structure and performance: Evidence for large bank holding companies. *Journal of Financial Intermediation*, *21*(2), 243–267.

Allahham, M. I. (2015). Impact of Capital Structure on Bank Financial Performance of Al Ahli Bank in Saudi Arabia. *International Letters of Social and Humanistic Sciences*. https://doi.org/10.18052/www.scipress.com/ilshs.60.10

Anarfo, E. B. (2015). Capital structure and bank performance–evidence from Sub-Sahara Africa. *European Journal of Accounting Auditing and Finance Research*, *3*(3), 1–20.

Ariffin, N. M. (2012). Liquidity risk management and financial performance in Malaysia: empirical evidence from Islamic banks. *Aceh International Journal of Social Sciences*, *1*(2), 68–75. Retrieved from http://irep.iium.edu.my/28987/

Ariyanti, L. E. (2010). *Analisis Pengaruh CAR, NIM, LDR, NPL, BOPO, ROA dan Kualitas Aktiva Produktif terhadap Perubahan Laba Pada Bank Umum di Indonesia*. UNIVERSITAS DIPONEGORO.

Attar, D., & Islahuddin, M. S. (2014). Pengaruh Penerapan Manajemen Risiko terhadap Kinerja Keuangan Perbankan yang terdaftar di Bursa Efek Indonesia. *Jurnal Administrasi Akuntansi: Program Pascasarjana Unsyiah*, *3*(1).

Aulia, F., & Prasetiono. (2016). Pengaruh CAR, FDR, NPF, Dan BOPO Terhadap Profitabilitas (Return On Equity). *Diponegoro Journal of Management*, *5*(1), 1–10. Retrieved from http://ejournal-s1.undip.ac.id/index.php/djom

Awunyo-Vitor, D., & Badu, J. (2012). Capital structure and performance of listed banks in Ghana. *Global Journal of Human Social Science*, *12*(5), 57–62.

Basha, S. N. (2017). The hundred differences between Islamic and conventional banking systems. *International Journal of Scientific Research and Management*, *5*(9), 7093–7106.

Chung, K. H., Wright, P., & Kedia, B. (2003). Corporate governance and market valuation of capital and R&D investments. *Review of Financial Economics*, *12*(2), 161–172.

Desai, J. N., & Pitroda, J. (2015). *a Review on Change Order and Assessing Causes Affecting Change*. (January).

Dikko, U. M., & Alifiah, M. N. (2020). The moderating effect of corporate governance on the relationship between government intervention and bank performance: A proposed conceptual framework. *Journal of Advanced Research in Dynamical and Control Systems*, *12*(3), 451–465. https://doi.org/10.5373/JARDCS/V12I3/20201213

Edo, D. S. R., & Wiagustini, N. L. P. (2014). Pengaruh Dana Pihak Ketiga, Non Performing Loan, dan Capital Adequacy Ratio Terhadap Loan To Deposit Ratio dan Return On Assets Pada Sektor Perbankan Di Bursa Efek Indonesia. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *3*(11), 650–673.

Ergeç, E. H., & Kaytancı, B. G. (2017). Effects of Islamic Banking on employment: Turkish experience. In *Handbook of Research on Unemployment and Labor Market Sustainability in the Era of Globalization* (pp. 235–254). IGI Global.

Fahmi, I. (2015). Manajemen Investasi Teori dan Soal Jawab. In *Inflasi dan Investasi*. https://doi.org/10.1007/s10304-010-0358-x

Ferdous, C. S., Mallin, C., & Ow-Yong, K. (2014). Corporate Governance in Bangladesh: A Comparison with Other Emerging Market Countries. In *Corporate Governance in Emerging Markets* (pp. 395–420). Springer.

Flamini, V., Schumacher, M. L., & McDonald, M. C. A. (2009). *The determinants of commercial bank profitability in Sub-Saharan Africa*. International Monetary Fund.

Goodhart, C., & Hartmann, P. (1998). Financial Regula· tion: W hy, How and W here now? *Londo, Rutledge, L*, *998*.

Gumilarty, R. M. (n.d.). G., & Indriani, A.(2017). *Analisis Pengaruh DPK, NPF, ROA, Penempatan Dana Pada SBIS, Dan Tingkat Bagi Hasil Terhadap Pembiayaan Bagi Hasil*, *5*.

Halim, A. (2015). Manajemen Keuangan Bisnis Konsep dan Aplikasinya. *Jakarta: Mitra Wacana Media*.

Haris, M., Yao, H., Tariq, G., Javaid, H. M., & Ul Ain, Q. (2019). Corporate governance, political connections, and bank performance. *International Journal of Financial Studies*, *7*(4). https://doi.org/10.3390/ijfs7040062

Hermuningsih, S., Sari, P. P., & Rahmawati, A. D. (2020). the Influence of Third-Party Funds, Non-Performing Loans (Npl) on Credit Distribution With Profitability As Intervening Variable in Commercial Banks. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *4*(02), 40–50. https://doi.org/10.29040/ijebar.v4i02.988

Husain, A., & Abdullah, A. (2008). Bank-specific determinants of profitability: The case of Kuwait. *Journal of Economic and Administrative Sciences*.

Hutabarat, J., & Huseini, M. (2006). *Manajemen Strategik kontemporer Proses, Formasi dan Implementasi*. Jakarta: Media Elex Komputindo.

Irawati, N., Maksum, A., Sadalia, I., & Muda, I. (2019). Financial performance of indonesian's banking industry: the role of good corporate governance, capital adequacy ratio, non performing loan and size. *International Journal of Scientific and Technology Research*, *8*(4), 22–26.

Katuuk, P. M., Kumaat, R. J., & Niode, A. O. (2018). Pengaruh Dana Pihak Ketiga, Loan to Deposit Ratio, Biaya Operasional Pendapatan Operasional Terhadap Return on Asset Bank Umum di Indonesia Periode 2010.1-2017.4. *Jurnal Berkala Ilmiah Efisiensi*, *18*(2).

Kumar, T. M. V. (2019). Herry Achmad Buchory. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699.

Latan, H, & Ghozali, I. (2017). Partial Least Squares: Konsep, Metode dan Aplikasi menggunakan Program WarpPLS 5.0 (Third Edit). *Semarang: Badan Penerbit Universitas Diponegoro*.

Manurung, E., Effrida, E., & Gondowonto, A. J. (2019). Effect of Financial Performance, Good Corporate Governance and Corporate Size on Corporate Value in Food and Beverages. *International Journal of Economics and Financial Issues*, *9*(6), 100–105.

Mardiana, M. (2018). The effect of risk management on financial performance with good corporate governance as a moderation variable. *Management and Economics Journal (MEC-J)*, *2*(3), 308. https://doi.org/10.18860/mec-j.v0i0.5223

Mujahid, M., & Akhtar, K. (2014). Impact of Capital Structure on Firms Financial Performance and Shareholders Wealth: Textile Sector of Pakistan. *International Journal of Learning and Development*, *4*(2), 27. https://doi.org/10.5296/ijld.v4i2.5511

Naz, I., Shah, S. M. A., & Kutan, A. M. (2017). Do managers of sharia-compliant firms have distinctive financial styles? *Journal of International Financial Markets, Institutions and Money*, *46*, 174–187.

Nugrahani, S. M., & Sampurno, R. D. (2012). Analisis Pengaruh Profitabilitas, Likuiditas, Pertumbuhan Penjualan, Ukuran Perusahaan, dan Kepemilikan Manajerial terhadap Struktur Modal. *Diponegoro Business Review*, *1*(1), 1–9.

Oktaviani, O., & Pangestuti, I. R. D. (2012). *Pengaruh DPK, ROA, CAR, NPL, Dan jumlah SBI terhadap penyaluran kredit perbankan (studi pada bank umum go public Di Indonesia Periode 2008-2011)*. Fakultas Ekonomika dan Bisnis.

Olamide, O., Uwalomwa, U., & Ranti, U. O. (2015). The Effect of Risk Management on Bank's Financial Performance in Nigeria. *Journal of Accounting and Auditing*, *2015*, 1.

Park, Y. W., & Shin, H.-H. (2004). Board composition and earnings management in Canada. *Journal of Corporate Finance*, *10*(3), 431–457.

Pathan, S., & Faff, R. (2013). Does board structure in banks really affect their performance? *Journal of Banking & Finance*, *37*(5), 1573–1589.

Pinto, P., & Quadras, J. M. (2016). Impact of Capital Structure on Financial Performance of Banks. *JIMS8M: The Journal of Indian Management & Strategy*, *21*(3), 54–59.

Pinto, P., Thonse Hawaldar, I., Quadras, J. M., & Joseph, N. R. (2017). Capital Structure and Financial Performance of Banks. In *International Journal of Applied Business and Economic Research*.

Ramli, N. A., Latan, H., & Solovida, G. T. (2019). Determinants of capital structure and firm financial performance – A PLS-SEM approach: Evidence from Malaysia and Indonesia. *Quarterly Review of Economics and Finance*, *71*, 148–160. https://doi.org/10.1016/j.qref.2018.07.001

Saiful, S., & Ayu, D. P. (2019). Risks Management and Bank Performance: the Empirical Evidences From Indonesian Conventional and Islamic Banks. *International Journal of Economics and Financial Issues*, *9*(4), 90–94. https://doi.org/10.32479/ijefi.8078

Sari, F. N., & Endri, E. (2019). *Determinants of Return on Assets (ROA) On Conventional Banks Listed On Indonesian Stock Exchange (IDX) Period 2013 - 2017*. *21*(4), 52–62. https://doi.org/10.9790/487X-2104025262

Shahid, M. S., Waris, M., Saqib, M., & Asif, M. (2019). *Impact of the Risk Management and Corporate Governance on Firm Performance : Evidence From Pakistan*. *21*(12), 75–83. https://doi.org/10.9790/487X-2112017583

Shahwan, T. M. (2015). The effects of corporate governance on financial performance and financial distress: evidence from Egypt. *Corporate Governance*.

Siregar, D. D. (2004). Manajemen Aset. *Jakarta. Gramedia Pustaka Utama*.

Sofie, M., Manurung, A. H., Usman, B., & Trisakti, U. (2020). Determinants of Bank Profitability with Size as Moderating Variable. *Journal of Applied Finance & Banking*, *10*(March), 1792–6599. Retrieved from https://www.researchgate.net/publication/339434242

Soyemi, K. A., Ogunleye, J. O., & Ashogbon, F. O. (2014). Risk management practices and financial performance: evidence from the Nigerian deposit money banks (DMBs). *The Business & Management Review*, *4*(4), 345–354.

Stanley Isanzu, J. (2017). The Impact of Credit Risk on the Financial Performance of Chinese Banks. *Journal of International Business Research and Marketing*, *2*(3), 14–17. https://doi.org/10.18775/jibrm.1849-8558.2015.23.3002

Tanjung, P. R. S. (2019). Analysis of the Effect of Operational Efficiency, Third-Party Funds and Non Performing Finance on Profitability in Sharia Banking in Indonesia. *EPRA International Journal of Multidisciplinary Research (IJMR)*, (November), 181–191. https://doi.org/10.36713/epra3818

Velnampy, T., & Niresh, J. A. (2012). The relationship between capital structure and profitability. *Global Journal of Management and Business Research*, *12*(13).

Wibowo, E. S., & Syaichu, M. (2013). Analisis pengaruh suku bunga, inflasi, car, bopo, npf terhadap profitabilitas bank syariah. *Diponegoro Journal of Management*, *2*(2), 10–19.

Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, *105*(3), 581–606.

Yatim, N., & Yusoff, H. (2014). Governance structure and practice in Malaysia: Board of directors' role and responsibilities. In *Corporate governance* (pp. 199–228). Springer.

Yusuf, M., & Surjaatmadja, S. (2018). Analysis of Financial Performance on Profitability with Non Performance Financing as Variable Moderation (Study at Sharia Commercial Bank in Indonesia Period 2012-2016). *International Journal of Economics and Financial Issues*, *8*(4), 126–132.