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# Effect Of Credit Risk, Liquidity Risk, And Operational Risk On Profitability (Study On Banco Nasional De Comércio De Timor-Leste Bnctl-Dili)

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#### **Abstract**

The research aims to determine the effect of credit risk, liquidity risk, and operational risk on profitability on Banco Nasional do Comércio de Timor-Leste (BNCTL). The method used is quantitative descriptive analysis. This type of data is secondary data sourced from bank BNCTL's financial statements for the period 2010-2018, consisting of balance sheet statements and loss / profit statements. In this study, researchers conducted observations on financial statemens data through annual reports provided by BNCTL for the period 2010-2018, thus getting 9 years of observation. After secondary data is collected and analyzed it tested using multiple linear regression analysis models. This analysis model consists of a normality test, an autocorrelation test, a multicollinearity test, and a regression model determination test. Based on the results of the analysis found that Credit Risk has no significant effect on profitability (ROA), Liquidity Risk has an effect on credit risk.

**Keywords**: Credit Risk, Liquidity Risk, Operational Risk, Profitability, NPL, LDR, BOPO,ROA.

#### INTRODUCTION

Every activity carried out in daily activities must contain risks, as well as in bank activities. The higher the complement of business run by the bank, the more risks faced by the bank. The risks occur will cause losses for the bank if not detected and not managed properly. In order to deal with, minimizing and controlling the risks faced, banks always apply the function of risk management which is a process of identifying, measuring, monitoring and controlling the risks faced and the possibility of risk causing losses financial and non-financial.

Banking has a strategic role in supporting the running of the economic wheels and national development. This is because the bank has a function as an intermediation institution to organize payment, transactions and monetary policy transmission tools. As an

intermediation institution, banks play an important role in raising funds and channeling to the real sector in order to encourage economic growth.

Timor-Leste is a new country and has one national bank namely Banco Nacional de Comercio de Timor-Leste (BNCTL), and in the period of twenty years to date (2000-2020) there are several foreign banks operating in Timor Leste such as; Bank Mandiri Indonesia, Bank ANZ Newzeland, Bank Nacional Ultra Marino (BNU) Portugal, and the emergence of a new bank BRI Indonesia.

With the emergence of banks will provide convenience and provide optimal services for the people of Timor Leste, becoming mediation between communities, surplus funds and deficit, and not rule out of the possibilities. Government will provide additional funding support in answering the needs of local investors who needs considerable funds to fill various sectors not yet exist and develop existing businesses in the country. In addition to increasing employment opportunities or preventing domestic development accommodated in various development policies throughout the districts in Timor Leste.

Banco Nacional de Comércio de Timor Leste (BNCTL) was the first National bank from a microfinance institution on the initiative of the ADB (Asia Development Bank) along with several donor countries such as Australia, Portugal and the Countries that joined the TFET named Micro Finance Institute of East Timor. On May 13,2002 the institution was officially established under the name of Instituição de Micro Finanças de Timor Leste (IMFTL), based on UNTAET regulation number 2000/8 and permission from the Banking and Payment Authority of East Timor (BPA) number BS/2002/121/VA. The name is still an institution, but its operational practices are the same as banks. The change from Microfinance institution to Bank BNCTL was formed on July 8, 2011 under Government Regulation No. 3 of 2011, dated January 26, switching from Instituto de Micro Financas Timor Leste (IMFTL) to Banco Nacional de Comercio Timor Leste (BNCTL). This change has granted of funds from the government to BNCTL was USD 10,000.00, this grant is intended for BNCTL operations. (www.bancocentral.tl, 2019).

The type of business activities of Banco Nacional de Comércio de Timor Leste (BNCTL) is to serve micro, small and medium-sized entrepreneurs, as well as accepting savings from the communities in the form of savings deposits, current accounts, term deposits, providing credit loans and providing other services. With this role, the management system

and financial performance of banks also need to be maintained financial stability of the bank and maintain the level of performance, because the level of performance is one of the tools to control the survival of the bank. From the financial statements, it has known as level of performance of the bank (healthy or unhealthy).

Given the role of banking is very important, the Government of East Timor provides guarantee and protections in agreement with the mandate of the RDTL Constitutions Article 142: "the financial system is regulated by law in such a way as to encourage savers, and guarantee savings, and will be provided financial resources needed for economic and social development".

According to Attar at all, (2014) there are several risks are often faced by banks, among others: credit risk, liquidity risk, and operational risks of a company. According to Ahmad (2017) credit risk is a risk due to the failure of debtors or other parties in fulfilling obligations to banks. Credit risk is generally found in all bank activities whose performance depends on the performance of the partner, or the performance of the borrower. For the world of banking credit is the main element to profit (Cashmere, 2015: 125). Abu Hanifa Md. Nomanet.al., (2015) revealed that excessive credit expansion, poor loan quality and improper credit risk management were the main reasons for the global financial crisis. it means a bank's profitability is greatly affected by the amount of credit channeled in a period. Management should also pay attention to the quality of credit because, credit has quality related to the risk of congestion (problems) of loans channeled. it means the higher of quality of credit provided, it will reduce the risk of possible bad or problematic credit. As known more bad credit will result in bank profits falling (Cashmere, 2015: 126).

Liquidity risk is the risk due to the bank's inability to meet obligations maturing from high-quality sources of cash flow funding or liquid assets—can be guaranteed without interfering with the bank's financial activities and conditions (Muhammad &Ellen., 2016). in current prices This type of liquidity refers to the ability to trade assets, such as stocks or bonds. Other definitions of liquidity apply to large organizations, such as financial institutions. Banks often evaluate liquidity, or the ability to meet cash and collateral obligations without incurring major losses. Increased liquidity risk is associated with decreased profitability in terms of assets. Since many banks' actions are based on the ability to liquidate assets if needed, this lack of functionality will reduce the revenue from loan-based businesses.

Therefore, reduced interest income borrowing could reflected in reduced interest margins negatively affect the bank's ability. In addition, liquidity issues may lead to a lack of customer trust especially if withdrawal requests cannot be met (Mahmoud, Ali, &Odai., 2017).

The Bank's operational risks are those due to insufficient and failed internal processes, human error, system failures, and/or external events affecting the bank's operations. Operational risk is different from other types of risks, it is not directly related to efforts to generate returns (Muhammad &Ellen., 2016). Operational risk is a risk caused by the lack of functioning of the bank's internal processes, human error, technological system failure, or due to external problems. Operational risks generally use BOPO (Operating Expenses to Operating Income) as a research indicator. BOPO demonstrates the ability of bank management in controlling operating costs to operating income. Operational efficiency emphasizes that efficiency is achieved when transactions are conducted with minimum transaction costs. The banking industry is an industry that experiences various of risks in carrying out its operations. The operating activities of the banking industry generate operating costs, generate operating income and involve assets in the process (Mohamad, Riska, & Tertiarto.,2018). Empirical evidence shows that operational efficiency is measured from the ratio of cost to income or overhead costs to total assets (Abdurrahman &Muhammad., 2015).

Profitability has an important meaning in a bank maintaining its long-term survival, because profitability indicates whether the bank has good prospects in the future. Profitability is the most appropriate indicator to measured the level of performance of a bank. Profitability is one of the benchmarks of a bank's financial performance. A bank's profitability is the ability of a bank to generate revenue exceeds costs, in relation to the bank's capital base. A healthy and profitable banking sector be able to withstand negative shocks and contribute to financial system stability (Ali Sulieman Alshatti, 2015). He,et al., (2014) General profitability is the relationship between the profits generated by the company and the investments contributing to the achievement of profits, and the profitability ratio measuring the efficiency of the company converting business activity into profit. Therefore, companies have gone public will seek to increase the value of their shares through profitability. The rise and fall in profitability in every banking company is due to several factors, including liquidity, operational efficiency, and credit risk held by these companies (Mohamad, et al., 2018).

Return on Asset (ROA) measures a bank's ability to generate overall profit. According to Capriani & Dana (2016) the greater the ROA, the greater the profitability which means the better the performance of a company. The profitability of a bank depends on the specific characteristics of the bank and the market in which the bank operates. Determinants of profitability can be both internal and external. Internal factors determine a bank's profitability included: capital ratio, cost-to-income ratio, loan loss provision, deposit growth, bank size, interest income sharing, funding costs, bank ownership, and Violeta bank citizenship, et al., (2018).

Muhammad Fahrul Rozi Shafi'i and Ellen Rusliati (2016) showed credit risk does not affect profitability. Operational risks and liquidity risks are positive to profitability. According to Mahmoud Al-Rdaydeh, Ali Matar, and Odai Alghzwai (2017) shows the effect of liquidity risk on ROA is significant for banks and conventional. Saeed MS and Zahid (2016) stressed credit risk indicators have a positive relationship with bank profitability. Mohamad Adam's research, Riska Safitri, Tertiarto Wahyudi (2018) shows liquidity does not affect profitability and operational efficiency negatively affects profitability. Yong Tan, Christos Floros, John Anchor (2017) found credit risk and liquidity risk significantly affect the profitability of commercial banks. Didik Riyanto, Dwi Asih Surjandari (2018) found credit risk to affect profitability, while liquidity risk did not affect profitability. Based on the background description it has been explained, the formula for the problem in this study as follows: does credit risk affect profitability in BNCTL? Does liquidity risk affect profitability in BNCTL? and does Operational Risk Affect Profitability on BNCTL? Based on that The purpose of this study is to know the effect of credit risk on profitability, to know the effect of liquidity risk on profitability, and to know the effect of operational risk on profitability.

# RESEARCH METHOD

The method used in this study is quantitative research i.e. information data expressed in the form of numbers. The location of this research was conducted in the National Comersial Bank of Timor-Leste (BNCTL) as a national bank located in Avenida Martires da Patria Mandarin Dili Timor Leste. The variables in this study are financial statements as measured by the analysis of NPL, LDR, BOPO, and ROA of the Timor-Leste National Comersial Bank for the period 2010 to 2018.

The type of data used in this study is secondary data sourced from bank BNCTL's financial statements for the period 2010 - 2018, consisting of balance sheet statements and loss / profit statements.

The methods of collecting data used in this study are methods of observation and study of literature. Method of observation in this case Researchers had observed on financial statement data through annual reports provided by the National Bank of Comersial Timor Leste (BNCTL). While the Literature Study is a technique of collecting data by reading and reviewing documents, library books, and other library materials (Sugiyono, 2014).

After secondary data is collected and analyzed it has been tested using multiple linear regression analysis models. This analysis model consists of a normality test, an autocorrelation test, a multicollinearity test, and a regression model determination test. In this study has been used tools in the form of statistical software, namely SPSS vs. 22. Multiple linear regression analysis is used to test the influence of dependent (bound) and independent (free) variables. The independent variables of the study are: credit risk, liquidity risk, and operational risk. While the dependent variable is profitability.

# RESEARCH RESULTS AND DISCUSSION

Table 1.

Decrypted Research variables

CALCULATION RESULTS OF NPL, LDR, BOPO & ROA								
AT BANCO NACIONAL DO COMERCIO DE TIMOR-LESTE (BNCTL) PERIOD 2010-								
	2018							
Tahun	Tahun NPL LDR BOPO ROA							
2010	0,82	103,99	73,45	3,38				
2011	0,49	122,55	96,34	4,13				
2012	0,33	74,07	77,11	2,23				
2013	0,24	67,53	68,29	3,12				
2014	0,22	31,05	82,52	0,66				
2015	0,16	36,90	90,51	0,86				
2016	0,07	47,25	59,33	1,83				
2017	0,15	60,27	60,47	2,80				
2018	3,11	65,53	84,08	1,26				
Source: BNCTL financial report processed by researchers 2020								

In this study, the credit risk level of the National Bank of Timor-Leste is projected with a Non performing Loan. Based on the calculation of table 1. It has seen non-performing loans for the ninth year in a row experienced the lowest value. NPL in 2010 amounted to 0.82%, In 2011 it was 0.49%, in 2012 it was 0.33%, in 2013 it was 0.24% in 2014 by 0.22%, in 2015 it was 0.16%, in 2016 it was 0.07%, in 2017 it was 0.15%, while NPL in 2018 had the highest value from the previous year at 3.11%. If compared with existing standards, the NPL value in Banco Nacional de Comercio de Timor-Leste in 2010 to 2018 Fall into the unhealthy category. Where the provisions of the NPL ratio generally banks set a maximum NPL limit of 5% it is not affect the health level of the bank. can be concluded the factors of affecting the decline in total credit include the willingness of debtors, timor-leste economic conditions and also policies from the government. As the function of the bank's activities is to collect funds and re-channel the funds in the form of credit. So in maximizing this order to remain well coordinated, the bank must create a management system involved all various aspect. This step is an effort to manage bank's operational activities, including to reduce the risk of credit failure or bad credit which can eventually result in a level or total credit that continues to increase well.

Based on table 1. diats, Loan To Deposit Ratio (LDR) rate in 2010 of 103.99%, in 2011 it was 122.55%, in 2012 it was 74.07%, in 2013 it was 67.53%, in 2014 it was 31.05%, in 2015 it was 36.90%, in 2016 it was 47.25%, in 2017 it was 60.27%, while in 2018 it was 65.53%. If compared with existing standards, the LDR on Banco Nacional de Comercio de Timor-Leste in 2010 to 2018 is classified as unhealthy because the safe limit of LDR ranges from ≤85-100% of the theory supporting Kuncoro Mudrajad (2002). it has made difficult for the National Bank of Timor Leste to meet its short-term obligations. shows the bank is not considered to distribute credit optimally and efficiently where the amount of credit channeled decreasing, then the income from credit will decrease as well as worsen the bank in making a profit.

According to table 1, It seen that bopo was the lowest in 2010 at 73.45%, BOPO had the highest ratio in 2011 at 96.34%, BOPO was the lowest again in 2012 by 77.11%, and in 2013 by 68.29%, in 2014 by 82.52%, BOPO rising in 2015 by 90.51%, in 2016 the lowest by

59.33%, BOPO the lowest again in 2015 by 90.51%, in 2016 the lowest by 59.33%, BOPO the lowest again in 2015. 2017 was 60.47%, and in 2018 it was up by 84.08%. It concluded BOPO experienced the highest ratio in 2011 of 96.34%, in 2015 at 90.51%, and the ratio rate of two years was at 90% and close to 100%, it said the bank's performance indicates a low level of efficiency, because it shows the value of operational efficiency is increased. Profitability achieved by Banco Nasional do Comercio de Timor-Leste (BNCTL) will decrease While, the ratio in the seven years is below of standard <90%. It has concluded the National Commercial Bank is categorized as healthy, it means the bank's performance shows a high level of efficiency then the profitability achieved by the National Commercial Bank also increases.

Profitability is company's ability to generate profits in relation its sales, assets and capital. The profitability variable used in study was Return on Asset (ROA). Based on the results in table 1. The Phenomenon of Return on Asset occurred in Banco Nasional do Comercio de Timor Leste, from the seven years of speaking fluctuations in 2010 ROA increased by 3.38%, up again in 2011 increased again by 4.13%, in 2012 by 2.23%, in 2013 it increased by 3.12%, and ROA decreased for two years, named in 2014 by 0.66%. in 2015 by 0.86%, and ROA value increased in 2016 by 1.83%, and in 2017 by 2.80%, while in the last year of 2018 by 1.26%. From the data it concluded the contribution of total assets to pre-tax profits from seven years tends is increased. Meaning the Banco Nacional do Comércio de Timor-Leste (BNCTL) is categorized as healthy. When compared with the average value and the ratio is above the standard of value of >1.5% supported by the results of the study (Armado, 2012: 34).

## Normality test

The normality test was also conducted through a One-Sample Kolmogorov-Smirnov analysis on non-parametric tests. The results of the Kolmogorov-Smirnov One-Sample test can be displayed on table 2.

Tabel 2
Uji Normalitas (One-Sample Kolmogorov-Smirnov Test)

	Standardized Residua	al
N		9
Normal Param eters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.79056942
Most Extreme Differences	Absolute	.260
	Positive	.196
	Neg ative	260
Kolmogorov-Smirnov Z		.781
Asymp. Sig. (2-tailed)		.575

- a. Test distribution is Normal.
- b. Calculated from data.

Source: SPSS output by researchers 2020

Based on the normality test using the One-Sample Kolmogorov-Smirnov test shown in Table 2 shows the magnitude of Kolmogorov-Smirnov value is 0.781 then, the H0 hypothesis is accepted which indicates the data used in this study is normally distributed, it has concluded the regression model meets the assumption of normality.

# Multicollinearity test

Multicollinearity tests are performed to see if regression models have a correlation between independent variables. How to find out the existence of deviations in the multicollinearity test is to look at the tolerance and VIF values of each independent variable, if the value of Tolerance > 0.10 or the value of VIF more than 10 then indicates the existence of multicollinearity.

Tolerance values and VIF values are shown on Table 3.

Tabel 3.

Uji Multikolinieritas (*Tolerance* dan *Variance Inflation Factor*)

Collinearity Statistics

Model	Collinearity Statistics			
M odel	Tolerance	VIF		
(Constant)				
NPL	.387	2.584		
L D R	.383	2.613		
ВОРО	.951	1.052		

Source: SPSS output by researchers 2020

Based on table 3 above, the result of the calculation of tolerance values there are no independent variables have a tolerance value of less than 0.10 with a tolerance value of each independent variable worth NPL of 0.387 VIF of 2,584, LDR of 0.383 VIF of 2.613, and BOPO of 0.951 VIF of 1,052. The calculation of Tolerance and VIF values must concluded, there is no multicollinearity between independent variables in the regression model.

#### **Heteroscedasticities Test**

The Heteroscedasticity test aims to test whether in regression models or variance inequality from residual one observation to another. If the variance from residual one observation to another remains, it called heteroscedasticity. A good regression model does not occur heteroscedasticity. The basis of decision-making of the heteroscedasticity test with regression as follows:

- 1) If the value of significance or Sig. (2-tailed) greater than the value of 0.05, it concluded there are no symptoms of heteroscedasticity.
- 2) Conversely, if the value of significance or Sig. (2-tailed) is smaller than the value of 0.05 Meaning there are symptoms of heteroscedasticity.

Tabel 4. Uji Heteroskedastisitas (Uji Glesjer)

Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	671	1.333		503	.636
	NPL	101	1.347	049	075	.943
	LDR	140	1.018	090	137	.896
	ВОРО	1.795	1.717	.434	1.045	.344

a. Dependent Variable: RESIDUAL heteroskedastisitas

Based on Table 4 above, it stated each model has a significance value greater than 5%.shows the free variables used in studies did not significantly affect the bound variable is error. Therefore, this study is free from symptoms of heteroscedasticity.

#### **Autocorrelation Test**

The autocorrelation test aims to test whether in a linear regression model or correlation between a nuisance error in the t period and a nuisance error in the t-1 period. A good regression model is a regression free of autocorrelation. In this study used the Run Test to

test the presence of autocorrelation in regression models with the provision of Std. Residual values. Sig. (2 tailed) is greater than 0.05.

Table 5 Uji Autokorelasi - Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	,0063	,0368	,0222	,01006	9
Residual	-,00923	,00366	,00000	,00427	9
Std. Predicted Value	-1,578	1,452	,000	1,000	9
Std. Residual	-1,709	,677	,000	,791	9

a. Dependent Variable: ROA

Based on table 5 mentioned above, has known from the results of tests conducted using run tests, Meaning std. residual values. Sig. (2-tailed) of 0.791 is greater than 0.05. Therefore it concluded there are no autocorrelation symptoms of this regression model.

# **Multiple Linear Regression Test Results**

To facilitate the reading of results and interpretation of regression analysis, the form of equation is used. The equation or model contains constants and regression coefficients obtained from the results of data processing has been done before. Regression equations have been formulated later with the help of the SPSS program are processed data until the final equation is obtained as follows:

$$Y = -0.671 + -0.101X_1 + -0.140X_2 + 1.792X_3$$

The numbers resulting from the test are described as follows:

# 1) Constants(α)

In the regression model, the constant value obtained - 0.671 Meaning if the variable is free (Independent) credit risk (NPL), liquidity risk (LDR) and operational risk (BO) does not exist or is worth zero, then the size of the variable outside the fixed model will increase profitability (ROA) is by - 0.671 units.

# 2) Koefisien Regresi (β) X1

The β1 regression coefficient value of -0.101 in this study can be interpreted as the credit risk variable (NPL) (X1) negatively affects profitability (Y). Th indicated each increase in one unit of credit risk as measured by a Non Performing Loan (NPL) will result in an increase in profitability (ROA) of -0.101 units.

# 3) Koefisien Regresi (β) X2

The value of the regression coefficient of  $\beta 2$  of -0.140 in this study can be interpreted the variable (X2) positively affects profitability (Y). This indicates each increases in one unit of liquidity risk as measured by loan to deposit ratio (LDR) will result in an increase in profitability (ROA) of -0.140 units.

# 4) Koefisien Regresi (β) X3

The regression coefficient value of  $\beta 3$  of 1,792 in this study has interpreted the variable (X3) negatively affects profitability (Y). It indicates each increase in one unit of operational risk measured by (BOPO) will increase the regression coefficient of  $\beta 3$  by 1,792 in this study can be interpreted variable (X3) negatively affects profitability (Y). it indicates each increases in one unit of operational risk measured by (BOPO) will result in an increase in profitability (ROA) of 1,792 units.

#### **Coefficients of Determination**

The coefficient of determination (R2) measures extentded to which a model's ability to explain the variation of its bound variables. The coefficient of determination between zero and  $(0 \le R2 \ge 1)$ , magnitude of the coefficient of determination can be seen in the Table.

Table 6.

Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,921ª	,848	,756	,00540

Based on table 6 above, it shows the magnitude of the coefficient of determination is 0.848. Meaning an 84.8 percent variation in profitability explained by all three free variables named credit risk, liquidity risk and operational risk, while the remaining of 15.2 percent is explained by other factors such as inflation, interest rates, exchange rates, and other banking risks not including in the study.

#### Statistic F Test

Statistical test F is a test used to find out whether independent variables jointly or simultaneously affect dependent variables. Based on the results of SPSS output, it shown independent variables of credit risk, liquidity risk, and operational risk jointly or simultaneously affect dependent variables or profitability as shown in the following table:

Table 7 Uji F - ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,001	3	,000	9,266	,017 <sup>b</sup>
	Residual	,000,	5	,000		
	Total	,001	8			

a. Dependent Variable: ROA

Based on the results of the test showed a significance level of 0.017 or smaller than 0.05, it concluded the model used meeting of requirements of better fit. Based on the F test, it shows regressing of factors of Credit Risk (NPL), Credit Risk (LDR) and Operational Risk (BO) affect profitability (ROA) in Banco Nasional do Comércio de Timor-Leste (BNCTL-Dili).

## **Statistic-t Test**

This test is showing how independent variable relationships individually affect dependent variables. independent variables can affect the profitability dependent variables in Banco Nasional do Comércio de Timor-Leste (BNCTL-Dili), it showed following table:

Table 8
Uji T- Coefficients<sup>a</sup>

	Model			Standardized Coefficients	t	Sig.
				Beta		
1	(Constant)	,026	,013		1,976	,105
	NPL	-,022	,014	-,448	-1,597	,171
	LDR	,044	,010	1,227	4,348	,007
	ВОРО	-,035	,017	-,369	-2,059	,095

a. Dependent Variable: ROA

b. Predictors: (Constant), BOPO, NPL, LDR

Based on the results of the processed statistical data in table 8, if the value of significance <0.05 it stated the hypothesis is accepted, then there is a significant influence between independent variables to dependent variables.

# 1. Effect of Credit Risk on Profitability

Hypothesis 1 (H1) stated credit risk has a positive and significant effect on profitability. Test results showed credit risk was shown to have no positive and significant effect on profitability. shown to be statistically significant at the level of 5% (value t calculate=-1,597; sig.0,171). Based on the results of these tests, the hypothesis 1 (H1) formulated credit risk has no positive and significant effect on profitability, is rejected.

# 2. Effect of liquidity risk on profitability

Hypothesis 2 (H2) stated liquidity risk has a positive and significant effect on profitability. Test results showed liquidity risks proved to have a positive and significant effect on profitability. It shown to be statistically significant at the level of 5% (value t calculate =4,348; sig.0,007). Based on the results of these tests, the hypothesis 2 (H2) formulated liquidity risks have a positive and significant effect on profitability, accepted.

## 3. Effect of operational risks on profitability

Hypothesis 3 (H3) stated operational risks have a positive and significant effect on profitability. Test results showed operational risks proved to have no positive and significant effect on profitability. It shown to be statistically significant at the level of 5% (thitung=-2,059; sig.0.095). Based on the results of these tests, the hypothesis 3 (H3) formulated has operational risks and do not has a positive and significant effect on profitability, is rejected.

## **Discussion**

Based on the results of the analysis has been done, there will be a discussion related to the results of the analysis by providing a clear picture of how the influence occurs between variables in the research. The variables in this study are Credit Risk as variable X1, Liquidity Risk as variable X2, Operational Risk as variable X3, and Profitability as variable Y.

# 1. Effect of Credit Risk on Profitability

Based on the results of the t (partial) test on the regression model stated the credit risk variable (NPL) has no effect on profitability (ROA). These findings suggest an increase in NPL will lead to a decrease in profitability. The results indicated of increasing in Non Perform of Loans (NPL), which reflects bad credit in bank credit management, will lower the bank's income level, causing the ROA to get smaller.

The results of this study are consistent with the results of research conducted by Dwi Agung Prasetyo, Ni Putu Ayu Darmayanti (2015) showed credit risk (NPL) negatively affects profitability (ROA). And research anindita Dani Permatasari (2012) shows credit risk (NPL) has no effect on profitability (ROA). Research Melania et al. (2016), Herlina et al. (2016), and Gizaw et al. (2015) said the credit risk negatively affects profitability. Research conducted by Riski Agustiningrum (2013). Non Performing Loan (NPL) has a significant negative effect on profitability (ROA).

# 2. Effect of Liquidity Risk on Profitability

Based on the results of research tested using the t (partial) test in the regression model above showed liquidity risk has a positive and significant effect on profitability (ROA). Positive influence means any increases in LDR will be followed by an increase in profitability, where when the amount of credit channeled increases, the income from the credit will rise while the bank's ability to generate profits will also increasing.

The results of this study are in line with the existing theory, which stated the higher of credit channeled by the bank, the profitability obtained by the bank will increase. The results of this study supported by previous research conducted by Mahmoud Al-Rdaydeh, Ali Matar, and Odai Alghzwai (2017) showed liquidity risk has a significant influence on profitability (ROA) for Islamic and conventional banks. (Didik Riyanto & Dwi Asih Surjan, 2018) stated liquidity has a significant positive effect on profitability (ROA). Research findings (Ali Sulieman Alshatti, 2015) showed there is a significant impact of liquidity risk factors on bank profitability. Research by Rosana Nur Oktavia and Sutrisna Dewi (2017) showed LDR variables have a significant positive effect on profitability. Research conducted by Ni Made &Ida Bagus (2016) showed liquidity has a significant positive effect on profitability. Research (Deni Wahyudi, 2018) which stated liquidity risks have a positive effect on profitability. LDR partially has an insignificant positive effect on ROA. Liquidity risk has a

significant positive effect on profitability. It indicated the increase in credit channeled by the bank, then the Profitability generated by the bank will also increase Ni Wayan Wita Capriani I Made Dana (2016). Swaputra and Ratini's research (2007) showed there was a positive and significant (strong) relationship between LDR and ROA. it means if the LDR goes up then the ROA also goes up. Setiadi (2010) stated LDR makes a positive contribution to profitability (ROA). When the percentage of LDR is high will increase the bank's profits because it increases interest income which has an impact on the greater the level of profitability (profitability) of the bank.

## 3. Effect of Operational Risk on Profitability

Based on the results of research tested using the t (partial) test in the regression model above showed operational risk (BOPO) had no effect on profitability (ROA). Any increases in operating expenses will result in reduced pre-tax profits which will ultimately decrease the profit or profitability (ROA) of the bank concerned.

This research related with proposed of hypothesis, and in line with previous research conducted by Capriani & Dana (2016), and contrary to the results of the study (Abdurrahman Antoni and Muhammad Nasri (2015) showed the operational risks projected with BOPO had a negative and significant effect on profitability projected with ROA. Research by Dwi Agung Prasetyo and Ni Putu Darmayanti (2015) showed operational efficiency negatively and significantly affects profitability. And Pradina and Wiagustini's research (2018) showed operating expenses have a significant negative effect on profitability. The results of this study are in line with luklu'ul Maknunah's research, (2016) showing BOPO partially has a significant negative influence on ROA. While research conducted by Mohamad, Riska &, Wahyudi (2018), found the same results as the research of Ni Wayan, I Nyoman, & Sunarwijaya (2016) showed operational risks projected with BOPO negatively affect profitability (ROA). Riyadi Research (2006:159) & Lukman Dendawijaya (2009) which also got similar results, namely BOPO negatively affect ROA.

It interpreted the lower the BOPO ratio, which indicates efficiency in the bank's operations, will increase the bank's operating income which will further make the profit change even greater. This is possible due to the decrease / efficiency of bank operating costs and increased incomes beyond operating income (Nur Aini, 2013).

## CONCLUSION

Based on the results of the analysis of data has been conducted and the discussions have been outlined in Chapter IV on the Effect of Credit Risk, Liquidity Risk and Operational Risk on Profitability of Banco Nacional de Comércio de Comércio de Timor-Leste (BNCTL-Dili), the following conclusions can be drawn:

- 1. Credit risk has no significant effect on profitability. it shows the increase in credit risk has no effect on the increase or decrease in profitability, because the credit risk experienced is relatively large.
- 2. Liquidity risk has a significant positive effect on profitability (ROA). it shows the increase in credit channeled by banks, then the profitability generated by the bank will also increase.
- 3. Operational risk has no significant effect on profitability. Operating Expenses to Operating Income (BOPO) negatively and significantly affect the Return on Asset (ROA) variable. it shows the decrease in operational risk experienced by banks causes the bank's ability to earn profits will increase.

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