

## Financial services authority on profitability with external factors as moderating variables at regional development banks in Indonesia

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### CHRONICLE

### ABSTRACT

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Analyzing the effects of Internal Factors, Local Government Interventions, External Factors and Policies of Bank Indonesia and the Financial Services Authority on Profitability with External Factors as Moderating Variables at Regional Development Banks in Indonesia. Sample this research is a Regional Development Bank of 24 Banks with research data from 2010 to 2018. A total of 24 Regional Development Banks throughout Indonesia were sampled from 2010 to 2018, so the observation data in this study includes 216 research data and there are 80 outlier data so that the data processed in this study with 136 data processed in the study. Analysis of the data in this study used Structural Equation Modeling with Warp PLS Program and internal actors gave a significant influence on profitability, Intervenes local government gave insignificant influence on profitability, External actors gave a significant influence on profitability, policy Bank Indonesia and financial services authority gave insignificant influence on profitability, Policy Bank Indonesia and financial services authority gave a positive and insignificant influence on profitability with external factors as moderation at the Regional Development Bank in Indonesia.

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## 1. Introduction

The profitability and efficiency level of management in the Regional Development Bank is still not optimal. Factors that determine the profitability of the Regional Development Bank include internal factors, local government interventions, external actors as well as Bank Indonesia policies and financial services authorities that are able to influence the profitability of the Regional Development Bank. Factors that affect profitability are supported by existing phenomena in the field as well as several empirical studies that state the influence of each variable on profitability. There is a positive correlation between company size and profitability. Acaravci and Calim (2013) and Kapaya and Raphael (2016) stated that the size of the company is capable of being an indication of profitability. The size of the company is not always able to indicate the profitability of a company; this is evidenced by Almazari (2014) where his research mentioned that there is no significant relationship between the size of the company and profitability.

Internal factors in addition to the size of the company include other income ratios that can affect the profitability of banks. The ratio of other income is able to contribute profit to the Regional Development Bank. The higher the ratio of other income, the

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more the profitability from the Regional Development Bank. Banks can optimize non-interest income so profitability can still go up. Factors that affect profitability are net income i.e. total revenue minus total expenses or costs. In banking, the majority of net income comes from interest income. But non-interest income also contributes little to banking profitability. Rehman et al. (2018), Bami (2014), Duraj and Moci (2015) and Aljabiri (2013) stated that other income or non-Interest income is able to have a significant influence on the profitability of the company, in contrast to research conducted by Paltrinieri et al. (2020) and Khaq et al. (2016) who stated that non-interest income has not provided a real correlation to the company's profitability.

In banking management, third-party funds generally go into the management of bank resources, third-party funds are generally funds that are successfully collected from the general public. In general, the funds that can be collected by the bank can be classified again into three types of banking deposit products, namely; current accounts, savings and deposits. In its development, many of these banking deposit products are modified by banks with the main objective to further attract customers in immersing their funds in banking. The three banking deposit products have their own characteristics. In the Regional Development Bank third party funds are carried out by the local government through the Regional Budget, as the cheapest source of funds, there is intervention from the giro giver, namely the local government so that this can have an influence on the profitability of the bank. Research conducted by Tan (2016); Borio et al. (2015) states that there is a significant influence between local government interventions through giro on the profitability of the company. The results of different studies conducted by Paltrinieri et al., (2020); Khaq et al. (2016) states that there is an insignificant influence between local government interventions through current accounts on the profitability of the company. One of the factors that affect profitability in addition to internal factors and local government intervention is external factors. External factors affecting several banking conditions include economic growth and inflation as well as SBI.

The higher the minimum mandatory giro, the greater the liquidity of regional development banks guaranteed by Bank Indonesia, so that in case of liquidity difficulties the regional development bank can borrow directly to Bank Indonesia, which is able to generate public confidence in the Regional Development Bank so as to increase its profitability. This is supported by research conducted by Siregar et al. (2015), Aljabiri (2013), Gunartin (2015), Mohanty and Krishnankutty (2018) stated that the policies or rules that have been set in the form of GWM can improve the profitability of banks, in contrast to the results of research conducted by Aimon et al. (2019), Kristianti and Yovin (2016), Nyabaga and Matanda (2020) that states the GWM has no significant impact on profitability. In addition to the minimum mandatory giro non-performing loan ratio is also able to have an impact on profitability. The policy situation of Bank Indonesia and the Financial Services Authority is rapidly developing; one of the bank's business risks is credit risk, which is defined by the risk arising as a result of the failure of the counterparty to meet its obligations. There are various reasons, making the debtor may not fulfill his obligations to the bank such as payment of principal on the loan, interest payments and others. The fulfillment of customer obligations to the bank causes losses by not receiving the previously estimated receipts. Receivables management is very important for companies whose operations provide credit, because the greater the receivables given, the greater the risk. The ratio of finance used as a proxy to the value of a credit risk is Non-Performing Loan. The larger the Ratio of Non-Performing Loans, the more non-performing loans are resolved. Large non-performing loans will lower the bank's profitability; this is supported by research conducted by Nguyen et al. (2020); Fazlur Rahman and Sulistiyono (2017) and NPL had a significant impact on profitability, while research conducted by Alshatti (2015).

Menicucci and Paolucci (2016), Supriyono and Herdhayinta (2019) stated non-performing loans had no significant effect on profitability. Based on the above thinking, it can be known that the profitability of the Regional Development Bank can be determined by internal factors, internal intervention factors of local governments, external factors and policy factors of Bank Indonesia and financial services authorities. Referring to the phenomenon and empirical studies, the purpose of this study is 1) Proving and analyzing the influence of internal factors on the profitability of the Regional Development Bank in Indonesia. 2) Proving and analyzing the influence of internal local government intervention on the profitability of the Regional Development Bank in Indonesia. 3) Proving and analyzing the influence of external factors on the profitability of regional development banks in Indonesia. 4) Proving and analyzing the influence of policy factors of Bank Indonesia and the Financial Services Authority on the profitability of Regional Development Banks in Indonesia. 5) Proving and analyzing the influence of policy factors of Bank Indonesia and the Financial Services Authority on profitability with external factors as variables of moderation of Regional Development Banks in Indonesia.

## **2. Literature review**

### *2.1 The effects of internal factors on profitability*

Profitability is influenced by internal corporate factors that include the size or size of the company and other revenue ratios. The size of the company in this study is seen based on the total amount of assets owned by the company. The large size of the company may also indicate that the company has a high commitment to continuously improve its performance, so the market will be willing to pay more because it believes it will get a profitable return from the company. There is a positive correlation between company size and profitability, as well as the statements of Acaravci and Calim (2013), Kapaya and Raphael (2016) stated that the size of the company is capable of being an indication of profitability. The size of the company is not always able

to indicate the profitability of a company; this is evidenced by Almazari (2014); Almumani (2013) in his research mentioned that there is no significant relationship between the size of the company and profitability. Internal factors in addition to the size of the company there are other income ratios that can affect the profitability of banks. Banks can optimize non-interest income so profitability can still go up. Factors that affect profitability are net income i.e. total revenue minus total expenses or costs. In banking, the majority of net income comes from interest income. But non-interest income also contributes little to banking profitability. Rehman *et al.* (2018); Bami (2014); Duraj & Moci (2015); Aljabiri (2013) stated that other income or non-Interest income is able to have a significant influence on the profitability of the company, in contrast to research conducted by Paltrinieri *et al.* (2020); Khaq *et al.* (2016) stated that non-interest income has not provided a real correlation to the company's profitability.

*H<sub>1</sub>: Internal Factors positively affect the profitability of Regional Development Banks.*

## 2.2 Local government intervention on profitability

Local government intervention is also able to influence the profitability of the Regional Development Bank. Local governments usually form a supervisory body, which acts like a board of commissioners who supervise and are responsible for the board of directors and provide advice to the board of directors. The board of commissioners will be able to provide input for the achievement of profitability in the company. This is in line with research conducted by Kristianti and Yovin (2016); Aljabiri (2013) to provide a statement on the importance of the board of commissioners in the growth of profitability of the company because the board of commissioners serves as control in a company, in contrast to the research conducted by Aimon *et al.* (2019); Hallunovi and Berdo (2018) stated that the board of commissioners has not been able to support the improvement or improvement of the company's profitability because there is still a dean of commissioners who do not carry out their duties in accordance with the company's expectations. The three banking deposit products have their own characteristics. At the Regional Development Bank third party funds are carried out by the local government through the Regional Budget, as the cheapest source of funds, there is intervention from the giro giver, namely the local government so that this can have an influence on the profitability of the bank. Research conducted by Ding *et al.* (2013); Tan (2016); Borio *et al.* (2015) state that there is a significant influence between local government interventions through giro on the profitability of the company, the results of different studies conducted by Paltrinieri *et al.*, (2020); Khaq *et al.* (2016) states that there is an insignificant influence between local government interventions through current accounts on the profitability of the company.

*H<sub>2</sub>: Local Government Intervention has a positive effect on the profitability of regional development banks.*

## 2.3 Factors to profitability

External factors affecting several banking conditions include economic growth and inflation as well as the Bank Indonesia Certificate. In general, economic growth is a determinant that is often used as a determinant of banking profitability, research conducted by Aljabiri (2013); Jadah *et al.* (2020); Hallunovi & Berdo (2018) shows that economic growth through gross regional domestic product has a significant impact on banking profitability. In addition to growth and economy in external factors there is also a Bank Indonesia Certificate where the interest rate is a percentage of the capital borrowed from outside parties or the level of profit obtained by savers in the Bank or the level of costs incurred by investors who invest funds, in its application The Bank Indonesia Certificate is able to have an impact on the profitability of the bank, supported by research conducted by Dewi *et al.* (2019); Ebrahimi *et al.* (2016) giving a statement that interest rates are able to have a significant impact on improving profitability. Research conducted by Alshatti (2015) had different results in relation to interest rates and profitability, the results of which stated that there is no significant correlation between interest rates which is one of the determinants of external factors to increase profitability.

*H<sub>3</sub>: External Factors positively affect the profitability of regional development banks.*

## 2.4 Policies of Bank Indonesia and the Financial Services Authority on Profitability

The profitability of the Regional Development Bank is also inseparable from the influence of Bank Indonesia Policy and the Financial Services Authority. Bank Indonesia sets the minimum mandatory giro amount in rupiah at least 5% of third party rupiah funds and 3% of foreign exchange third party funds. *Minimum mandatory giro* in relation to the profitability of the Regional Development Bank is the level of liquidity guaranteed by the central bank (Bank Indonesia) indicated by the amount of current account deposited by the regional development bank to Bank Indonesia, in contrast to the results of research conducted by Aimon *et al.* (2019); Kristianti & Yovin (2016); Nyabaga & Matanda (2020) states that the *minimum mandatory giro* has no significant effect on profitability. In addition to the *minimum mandatory giro non-performing loan* ratio is also able to have an impact on profitability. The policy situation of Bank Indonesia and the Financial Services Authority is rapidly developing; one of the bank's business risks is credit risk, which is defined by the risk arising as a result of the failure of the counterparty to meet

its obligations (Widjaja et al., 2020; Ahmad et al., 2020). Effect of *Non-performing Loan* on profitability the ability to manage non-performing loans by banks is demonstrated through the ratio of *Nonperforming Loans*. The greater the ratio of *Nonperforming Loan*, the more non-performing loans are resolved. Large non-performing loans will lower the bank's profitability. This is supported by research conducted by Nguyen et al. (2020); Fazlur Rahman & Sulistiyono (2017) stated that *Non Performing Loans* have a significant impact on profitability, while research conducted by Alshatti (2015); Menicucci Paolucci (2016); Supriyono Herdayanti (2019) stated that *Non-Performing Loans* have no significant impact on profitability. The *Capital Adequacy Ratio* formula is compared between capital and all types of assets that are considered to contain risk or commonly called Risk-Weighted Assets. Therefore, the amount of capital of a bank will affect the amount of productive assets, so the higher the *asset utilization*, the capital must increase. Research conducted by Syafrida & Aminah (2015); Khaq et al. (2016); Taliwuna et al. (2019) states that the *Capital Adequacy Ratio* has a significant impact on profitability, while research conducted by Idrus (2018); Mongid & Tahir (2011); Agbeja et al., (2015) states that there is no significant capital *adequacy ratio* on profitability.

H<sub>4</sub>: *The policy of the Bank and the Financial Services Authority positively affects the profitability of regional development.*

Based on the description of empirical studies, the authors created a frame of mind based on several models that have been done by previous research as follows:

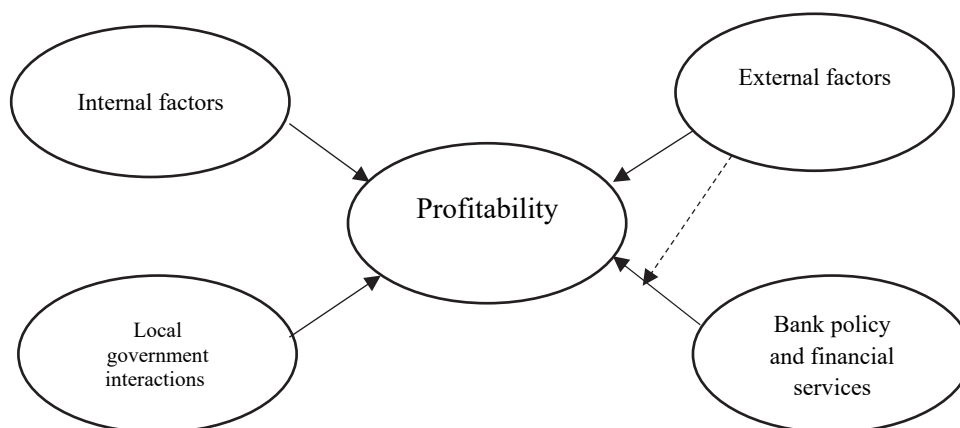


Fig. 1. The proposed framework

### 3. Method

Research is conducted quantitatively with descriptive research design, descriptive design aims to explain something, characteristics of a relevant group, estimate the percentage of units in a particular population that exhibit certain behaviors, know the perception of certain characteristics, and know how much variable relationships are and to know specific predictions. Through this study, researchers wanted to find out how much the relationship between a variable and another variable. The research that will be done is quantitative research conducted once in a period. This type of research, data collection activities obtained from one type of respondent sample for one time.

This study uses secondary data or information obtained processed by statistical methods using Warp PLS *software* and data analysis method using PLS (*Partial Least Square*). This research is explanatory *research*. This research is explanatory *research* that aims to test a theory or hypothesis in order to strengthen or reject pre-existing research theories or hypotheses. Explanation research as an explanatory study that highlights the causal relationship between research variables and tests pre-formulated hypotheses.

#### 3.1 Population and Samples

A population is a group of similar individuals who are in a certain region and at a certain time. In this study, the population is the Regional Development Bank in Indonesia as many as 28 Regional Development Banks in Indonesia. Sampling method in this study using purposive *sampling*, and samples obtained by *purposive sampling* method with sample determination criteria in this study are 1) Regional Development Bank in 2010-2018. 2) Regional Development Bank that publishes audited financial statements and *annual reports*. 3) Regional Development Bank registered with the Regional Banking Association. 4) Regional Development Bank with non-Syariah Commercial Bank category. The Regional Development Bank that sampled this research is the Regional Development Bank of 24 Banks with research data from 2010 to 2018.

#### 3.2 Operational Definitions and Variable Measurements

1) Internal Factors ( $X_1$ ) are factors that occur within the Regional Development Bank that can influence the management decisions of the Regional Development Bank in relation to policy making and operational strategies of the bank, with the following indicators:

- a) *Size Bank*. In this study, the Bank Size used is Total Assets (which have been in Log10) obtained by Regional Development Banks throughout Indonesia in the period 2010-2018
  - b) Income other than interest. In this study, income other than interest used was income earned in addition to credit interest by regional development banks throughout Indonesia in the period 2010-2018
- 2) Local Government Intervention ( $X_2$ ) is an act of intervention of the local government in order to optimize regional finance where the local government as the main *shareholder* in the Regional Development Bank, with the following indicators:
- a) Board of Commissioners. In this study, the Board of Commissioners used is the Total Board of Commissioners consisting of Independent and Non-Independent Dekom in Regional Development Banks throughout Indonesia for the period 2010- 2018
  - b) Third Party Funds. In this study, total third party funds were collected from savings, deposits and current accounts at Regional Development Banks throughout Indonesia in the period 2010-2018
- 3) External Factors ( $X_3$ ) are external factors that are able to have an impact on the policy to be determined by the Regional Development Bank, the indicators of external factors in this study are as follows:
- a) Economic growth. In this study, the economic growth used was the Amount of Gross Regional Domestic Product on the basis of the constant price obtained by each Province at each Regional Development Bank throughout Indonesia.
  - b) Inflation. In this study, the inflation value is taken from the inflation data of each province in each Regional Development Bank throughout Indonesia obtained from the Central Bureau of Statistics for the period 2010-2018.
  - c) Bank Indonesia Certificate. In this study, the Bank Indonesia certificate used is the interest rate that has been auctioned by BI in the period 2010-2018.
- 4) Bank Policy and Financial Services Authority ( $X_4$ ) policy made by Bank Indonesia and *financial services* authority with the aim that activities in the financial sector run regularly, fairly, transparently and accountable, policy indicators of Bank Indonesia and the Financial Services Authority are as follows:
- a) *Minimum mandatory giro*, used is the amount of Rupiah *minimum mandatory giro* placed by the bank in Bank Indonesia based on the provisions of Bank Indonesia in the period 2010-2018.
  - b) *Non performing Loan (NPL) Ratio*. In this study used is the number of non-performing loans with quality categories: less smooth, doubtful, and bad to the total credit provided by the *minimum mandatory giro* period 2010-2018.
  - c) *Capital Adequacy Ratio (CAR)*. In this study used is the total capital owned by the *minimum mandatory giro* against the total assets weighted according to risk in this case the risk-weighted assets obtained from the amount of credit provided by the *minimum mandatory giro* period 2010-2018.
- 5) Profitability ( $Y_2$ ) is the ability of the Regional Development Bank to obtain *revenue* and profit in a certain period of time by using labor, assets and capital. Profitability in this study was measured using the following indicators:
- a) *Return on Assets (ROA)*  
In this study used is profit after interest and tax obtained by the Regional Development Bank throughout Indonesia against the total assets owned by the Regional Development Bank throughout Indonesia in the period 2010-2018.
  - b) *Return on Equity (ROE)*. In this study used is profit after interest and tax obtained by the Regional Development Bank throughout Indonesia against the total assets owned by the Regional Development Bank throughout Indonesia in the period 2010-2018.

## 4. The results

### 4.1 Indicator Weights

In warppls analysis can be known the influence of each indicator on its variables consisting of internal factor variables in this study measured through indicators of company *size and* income other than interest. The internal variables of local government intervention in this study were measured through indicators of the number of commissioners and third-party funds. The variables of external factors in this study were measured through indicators of economic growth and inflation as well as bank Indonesia certificates. The policy variables of Bank Indonesia and the Financial Services Authority in this study were measured through the *minimum mandatory giro* and Non-Performing Loan indicators as well as the Capital Adequacy Ratio. The variable profitability in this study was measured through the Return on Assets and Return on Equity indicators for the 2010 to 2018 research period. Formative and reflective indicator values in this study can be known through indicator weights, the highest indicator value is the strongest or dominant variable forming indicator value. Constructs or indicators in this study are not eliminated because it explains the actual state in the study. Based on the results of the study can be known the value of indicators on each of the research variables as follows:

- 1) The variable factor internal indicator affects the variable is the company *Size* indicator ( $X_{1,1}$ ) with a value of 0.914 followed by the indicator Income other than interest ( $X_{1,2}$ ) with an indicator value of 0.914 in this variable there is no dominant

indicator because each indicator has the same value.

- 2) The variable intervention of local government indicators affecting variables is the Board of Commissioners indicator (X<sub>2,1</sub>) with a value of 0.689 followed by a third party Fund indicator (X<sub>2,2</sub>) with an indicator value of 0.689 in this variable there is no dominant indicator because each indicator has the same value.
- 3) External variable factors indicators affect variables are indicators of economic growth (X<sub>3,1</sub>) with a value of 0.220 followed by an indicator inflation (X<sub>3,2</sub>) with an indicator value of 0.803 and a certification indicator of Bank Indonesia (X<sub>3,3</sub>) with an indicator value of 0.757 in this variable there is a dominant indicator affecting variables that is an indicator of inflation because it has the highest indicator *weights*.
- 4) Policy variables of Bank Indonesia and the Financial Services Authority indicators affecting variables are the *minimum mandatory giro* indicator (X<sub>4,1</sub>) with a value of 0.702 followed by the *Non-performing loan ratio* indicator (X<sub>4,2</sub>) with an indicator value of - 0.105 and the capital adequacy ratio indicator (X<sub>4,3</sub>) with an indicator value of 0.755 in this variable there is a dominant indicator affecting the variable i.e. the minimum mandatory current account indicator because it has the highest weight indicators.
- 5) In variable profitability the indicator affects the variable is *the Indicator Return on Assets* (Y<sub>1</sub>) with a value of 0.833 followed by the Indicator Return on *equity* (Y<sub>2</sub>) with an indicator value of 0.833 in this variable there is no dominant indicator because each indicator has the same value.

4.2 Direct effect (direct effect)

In the WarpPLS program, research testing was conducted by knowing the direction of influence between variables through *path coefficients* and *p-Values*. Testing is done by *t-test* if obtained *p-value* ≤ 0.10 (*alpha* 10%, *confidence level* 90%) then it is said *weakly significant*, if obtained *p-value* ≤ 0.05 (*alpha* 5%, *confidence level* 95%) then it is said *significant* and if obtained *p-value* ≤ 0.01 (*alpha* 1%, *confidence level* 99%) then it is said to be *highly significant*. The test results can be seen in the picture below:

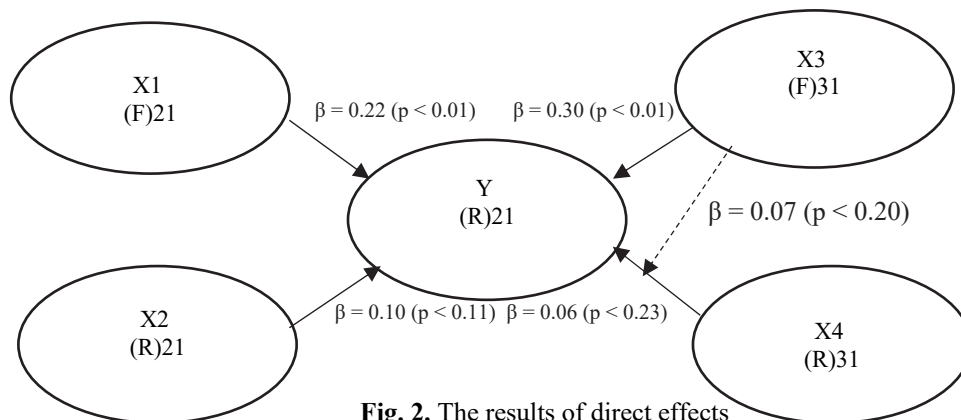


Fig. 2. The results of direct effects

Table 1  
Path coefficients and p-Values

Variable	Path Coefficients	P_vale	Description
Internal Factor (X <sub>1</sub> ) → Profitability (Y)	0.217	0.004	Negative and Strong Significant
Local Government Intervention Factor (X <sub>2</sub> ) → Profitability (Y)	0.105	0.107	Negative and Weak Significant
External Factor → Profitability (Y)	0.304	0.001	Positive and Strong Significant
Policy Factor and Financial Service Authority (X <sub>4</sub> ) → Profitability (Y)	0.063	0.227	Positive and Insignificant

Source: Author's processed results

Based on Table1, it can be known the positive influence and significance of each exogenous variable against endogenous variables with the following explanation: 1) Internal factors have a negative and significant influence on the profitability of regional development banks in Indonesia with a coefficient value of -0.217 and significance can be known by comparison with (0.05 > 0.004), so it can be known that internal factors have a significant influence on the profitability of regional development banks in Indonesia. 2) Local government intervention factors have an insignificant negative influence on the profitability of the Regional Development Bank in Indonesia with a coefficient value of - 0.105 and significance can be known by comparison with (0.05 < 0.107), so it can be known that local government interventions have an insignificant influence on the profitability of regional development banks in Indonesia.

1. External factors have a positive and significant influence on the profitability of the Regional Development Bank in Indonesia with a coefficient value of 0.304 and significance can be known by comparison with (0.05 > 0.001), so it can be known that external factors have a significant influence on the profitability of regional development banks in Indonesia.

2. The policies of Bank Indonesia and the Financial Services Authority have an insignificant positive impact on the profitability of the Regional Development Bank in Indonesia with a coefficient value of 0.063 and significance can be known by comparison with  $(0.05 < 0.227)$ , so it can be known that the Policies of Bank Indonesia and the Financial Services Authority have an insignificant influence on the profitability of regional development banks in Indonesia.

#### 4.3 Effect of Moderation (Moderation Effect)

The effect of Bank Indonesia Policy and Financial Services Authority on the profitability of Regional Development Bank in Indonesia with moderation variables (external factors) and their influence without moderation variables can be explained in table 2 as follows:

**Table 2**  
Results for Inner Weights

Variable	Path Coefficients	P divisions	Description
Policy Factors of Bank and the Financial Services Authority ( $X_4$ ) on Profitability (Y) with External Factors ( $X_3$ ) as moderation	0.070	0.203	Positive and insignificant

Source: Author's processed results

Bank Indonesia's policy and the Financial Services Authority have a positive and insignificant impact on profitability by external factors as moderation at the Regional Development Bank in Indonesia with a coefficient value of 0.070 and significance can be known by comparison with  $(0.05 < 0.203)$ , so it can be known that the Policies of Bank Indonesia and the Financial Services Authority have an insignificant influence on the profitability of regional development banks in Indonesia. External variable factors as measured through economic growth, inflation and Bank Indonesia certificate are able to become moderating variables, this is due to having a positive coefficient value and the role of external factor variables as moderation variables provide a role to increase their influence on Bank Indonesia Policy and Financial Services Authority on the profitability of Regional Development Bank in Indonesia.

## 5. Discussion

### 5.1 The effect of Internal Factors ( $X_1$ ) on Profitability (Y)

Internal factors have a negative and significant influence on the profitability of regional development banks in Indonesia. Based on the results of the study, it can be known that if internal factors measured through the *size* of the company and total other revenues increase by 1% then profitability measured through return on *assets* and return on *equity* at the Regional Development Bank in Indonesia will decrease by 0.217% with the influence of a significant decrease. This means that the *size* of a large bank will have an impact on the decrease in profits earned because the assets owned by the Regional Development Bank do not have good quality during the research period. In fact, unqualified assets such as loans provided by the Regional Development Bank have a collectability that is not in line with expectations, so this resulted in the acquisition of credit returns decreased, interest income was hampered and delayed payment while banks had to pay interest to depository customers and other operational costs, as well as other income decreases in revenue will directly impact the profitability level of the Regional Development Bank.

### 5.2 Local Government Intervention Factor ( $X_2$ ) on Profitability (Y)

Local government intervention factors have a negative and significantly weak influence on the profitability of the Regional Development Bank in Indonesia. Based on the results of the study, it can be known that if local government intervention measured through the total board of commissioners and total third party funds increases by 1% then the profitability measured through return on *assets* and return on *equity* at the Regional Development Bank in Indonesia will decrease by 0.105% with the influence of a significant decrease. This means that if government intervention reflected by indicators of the number of supervisory boards increases and third-party funds raise it will lower the value of profitability even if this decline falls into a significantly weak category. Since the board of commissioners is only quantity-oriented (measuring quantity) rather than judging from the performance of the board of commissioners judging by the number of dean commissioners who sit in the Regional Development Bank more *non-independent* commissioners than the independent board of commissioners, this tendency can be known through the *non-independent* board of commissioners coming from government officials (representing shareholders). The problem that currently needs to be fixed is that the board of commissioners who concurrently hold positions and do not have special expertise in the banking sector so that the increase or decrease in numbers will not have a significant or significant impact weakly can lead to a decrease in profitability in the Regional Development Bank.

### 5.3 External Factors ( $X_3$ ) to Profitability (Y)

External factors have a positive and significant impact on the profitability of regional development banks in Indonesia. Based on the results of the study, it can be known that if external factors measured through economic growth and inflation and Bank Indonesia Certificate increase by 1% then profitability measured through return on *assets* and return on *equity* at the Regional Development Bank in Indonesia will increase by 0.304% with the influence of a significant increase. This means that external factors that are one of the indicators of economic growth can be explained that increase economic growth (increase in production capacity and services) both nationally and regionally can have an impact on the increase in regional development bank profits (Sawitri et al., 2020). To increase

production capacity, one of them increases working capital by borrowing money in the bank, Thus, it will be able to have an impact on the profitability of the Regional Development Bank in Indonesia, in addition to economic growth inflation is also an indicator that is able to impact external factors with its role as a predictor for profitability, inflation indicates economic activity in a region so that with stable inflation will be able to provide growth in the ability of the public to consume and ultimately use banking services as a process of consumption and *saving* of funds that will provide profitability to the Regional Development Bank, in addition to economic growth and inflation Bank Indonesia Certificate also provides a role in shaping external factors in this research. If the interest rate of Bank Indonesia Certificate rises, more and more banks are interested in purchasing Bank Indonesia Certificate. This is because a Bank Indonesia Certificate is the safest investment instrument. So that the Regional Development Bank in Indonesia has the opportunity easily to get the benefit of simply purchasing a Certificate of Bank Indonesia directly will get interest derived from the interest on deposits, it will be a concern if the Bank Indonesia Certificate is not controlled, resulting in the malfunction of the Regional Development Bank as the actual intermediation.

#### 5.4 The effect of Policy Factors of Bank and the Financial Services Authority ( $X_4$ ) on Profitability ( $Y$ )

The policies of Bank Indonesia and the Financial Services Authority have had an insignificant positive impact on the profitability of the Regional Development Bank in Indonesia. Based on the results of the study, it can be known that if the Policy of Bank Indonesia and the Financial Services Authority as measured through minimum mandatory Current accounts and *non-performing loans* and capital adequacy ratio increases by 1% then the profitability measured through return on *assets* and return on *equity* at the Regional Development Bank in Indonesia will increase by 0.063% with the influence of insignificant increases. The policies of Bank Indonesia and the Financial Services Authority in relation to the profitability of the Regional Development Bank are measured through minimum mandatory current accounts and *non-performing loans* as well as capital adequacy ratios. The determination of the *minimum mandatory giro* is one of the monetary instruments of Bank Indonesia as the Monetary Authority which aims to influence the amount of money circulating in the community.

Therefore, it is necessary to anticipate the possibility of risks arising in running a banking business. The ratio of finance used as a proxy to the value of a credit risk is *Non-Performing Loan*. This ratio indicates that the bank's management's ability to manage non-performing loans is provided by the bank. *Non-Performing Loan* reflects credit risk, the smaller *non-performing loan*, the smaller the credit risk borne by the bank. In order for the bank's value to this ratio, Bank Indonesia will set the criteria for the *non-performing loan* net ratio below 5%. The effect of *Non-Performing Loans* on profitability and the ability to manage non-performing loans by banks is demonstrated through the Ratio of *Non-Performing Loans*. The larger the Ratio of *Non-Performing Loans*, the more non-performing loans are resolved. Large non-performing loans will lower the bank's profitability. The higher the Ratio of *Non-Performing Loans*, the lower the profitability of a bank. The profitability of the Regional Development Bank has also changed due to the capital adequacy ratio. The need for bank capital is to protect fund owners and maintain public trust, to cover operational risks that can occur, to remove *non-performing loan* assets where borrowers cannot pay debts at a predetermined time, a source of preliminary funding. Based on this, the two main functions of *capital* are financing in infrastructure and protecting customers from possible losses, thus it can be said that bank capital is used to maintain public trust. This public trust will be seen from the size of current accounts, deposits and savings accounts. Capital Adequacy Ratio reflects the company's own capital, the greater the Capital Adequacy Ratio, the greater the chance of the bank in generating profit, because with a large capital, the bank management is very free in putting its funds into profitable investment activities. Therefore, the amount of capital of a bank will affect the amount of productive assets, so the higher the *asset utilization*, the capital must increase. The capital banking industry serves to attract and maintain public trust. The Bank is a trust institution so trust for the bank is a separate asset for the bank that needs to be maintained and developed. To maintain, grow and develop public trust the bank needs to have its own capital. Prospective depositors will deposit their money in the bank if they trust the bank and this trust arises, among others, based on the capital owned by the bank, so that public trust is the main capital in carrying out its operations. In addition to being used to attract and increase public trust, capital also bears the risk of credit provided. If there are borrowers who are not biased to return credit as promised or can be said to have bad credit, then the loss is borne by the bank, not by the depositors.

#### 5.5 Policy Factors of Bank and the Financial Services Authority ( $X_4$ ) on Profitability ( $Y$ ) with External Factors ( $X_3$ ) as moderation

Bank Indonesia's policy and the Financial Services Authority have a positive influence on profitability with external factors as moderation variables at the Regional Development Bank in Indonesia it can be known that Bank Indonesia Policy and The Financial Services Authority have an insignificant influence on profitability with external factors as moderation variables at the Regional Development Bank in Indonesia. This means that external factors are able to be a mediation variable to describe that any change that occurs externally whether it is seen from economic growth, Inflation and Bank Indonesia Certificate will be able to improve policies made or formulated by Bank Indonesia and the Financial Services Authority in order to carry out their role as the main regulators in banking, with Bank Indonesia Policy and Financial Services Authority based on changes in economic growth factors, inflation and SBI, banks, especially regional development banks, are able to *maneuver* to generate profitability through work programs and products with innovation insight to obtain optimal profitability. External variable factors as measured through economic growth, inflation and Bank Indonesia certificate are able to become moderating variables, this is because the role of external factor variables as moderation variables provides a role to increase its influence on Bank Indonesia Policy and The Financial Services Authority on the profitability of Regional Development Banks in Indonesia because it has a positive but insignificant value.

## 6. Novelty Research

Novelty in this study shows that profitability is influenced by four variables consisting of internal factors, local and external



government intervention factors as well as Policy factors of Bank Indonesia and the Financial Services Authority. Novelty that can be explained the relationship between variables that give a significant influence is internal factors and external factors are able to increase the profitability of the Regional Development Bank in Indonesia, negative direction for internal factors variables and variables of local government intervention and positive direction for external variables and policy factors of Bank Indonesia and The Financial Services Authority. The findings of this study indicate that local government interventions measured through the board of commissioners and third party funds have not been able to improve the profitability of the Regional Development Bank in Indonesia, this can happen because the number of independent commissioners in the Regional Development Bank in Indonesia tends to have a small amount compared to non-independents. The Board of Commissioners is tasked with conducting general and/or special supervision and advising the Board of Directors. The Board of Commissioners shall carry out its duties and responsibilities independently and ensure that the Bank has carried out good corporate governance at all levels of the organization.

## 7. Limitations, Conclusion and Suggestions

Limitations of research on internal factors, local government interventions, external factors and policy rules of Bank Indonesia and financial services authorities as determinants of the profitability of regional development banks in Indonesia can be known as follows: 1) Limitations of data taken at the time of the study with the scope of research objects, namely all Regional Development Banks in Indonesia, make researchers have difficulty so that it is suspected that there are some data that do not match the actual data on the grounds of the opening of research objects, namely all Regional Development Banks in Indonesia. 2) The representation of research results will be better if operationalized one by one, namely each Regional Development Bank in each Province so that the research results can be used as the policy of each Regional Development Bank in each Province. 3) Research will be better if the period of more research years; this will increasingly represent the actual situation in the field, namely the Regional Development Bank in Indonesia.

Internal factors have a negative and significant influence on the profitability of regional development banks in Indonesia. This means that: *The size of a large bank will have an impact on the decrease in profits earned because the assets owned by the Regional Development Bank do not have good quality during the research period. In fact, unqualified assets such as loans provided by the Regional Development Bank are many that have collectability that is not in line with expectations, so this results in the acquisition of credit returns decreased, interest income is hampered and delayed payment while banks have to pay interest to depository customers and other operational costs. Banks can optimize non-interest income so profitability can still go up. Factors that affect profitability are net income i.e. total revenue minus total expenses or costs. In banking, the majority of net income comes from interest income. However, non-interest income also contributes not least to the profitability of banks but in this study has not had an optimal influence on profitability. The problem that currently needs to be fixed is that the ability to provide growth in the ability of the public to consume and ultimately use banking services as a process of consumption and saving of funds that will provide profitability to the Regional Development Bank. The Bank Indonesia Certificate also provides a role in shaping external factors in this study. If the interest rate of Bank Indonesia Certificate rises, more and more banks are interested in purchasing Bank Indonesia Certificate. This is because a Bank Indonesia Certificate is the safest investment instrument. So that the Regional Development Bank in Indonesia has the opportunity easily to get the benefit of simply purchasing a Certificate of Bank Indonesia directly will get interest derived from the interest on deposits, it will be a concern if the Bank Indonesia Certificate is not controlled, resulting in the malfunction of the Regional Development Bank as the actual intermediation.*

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