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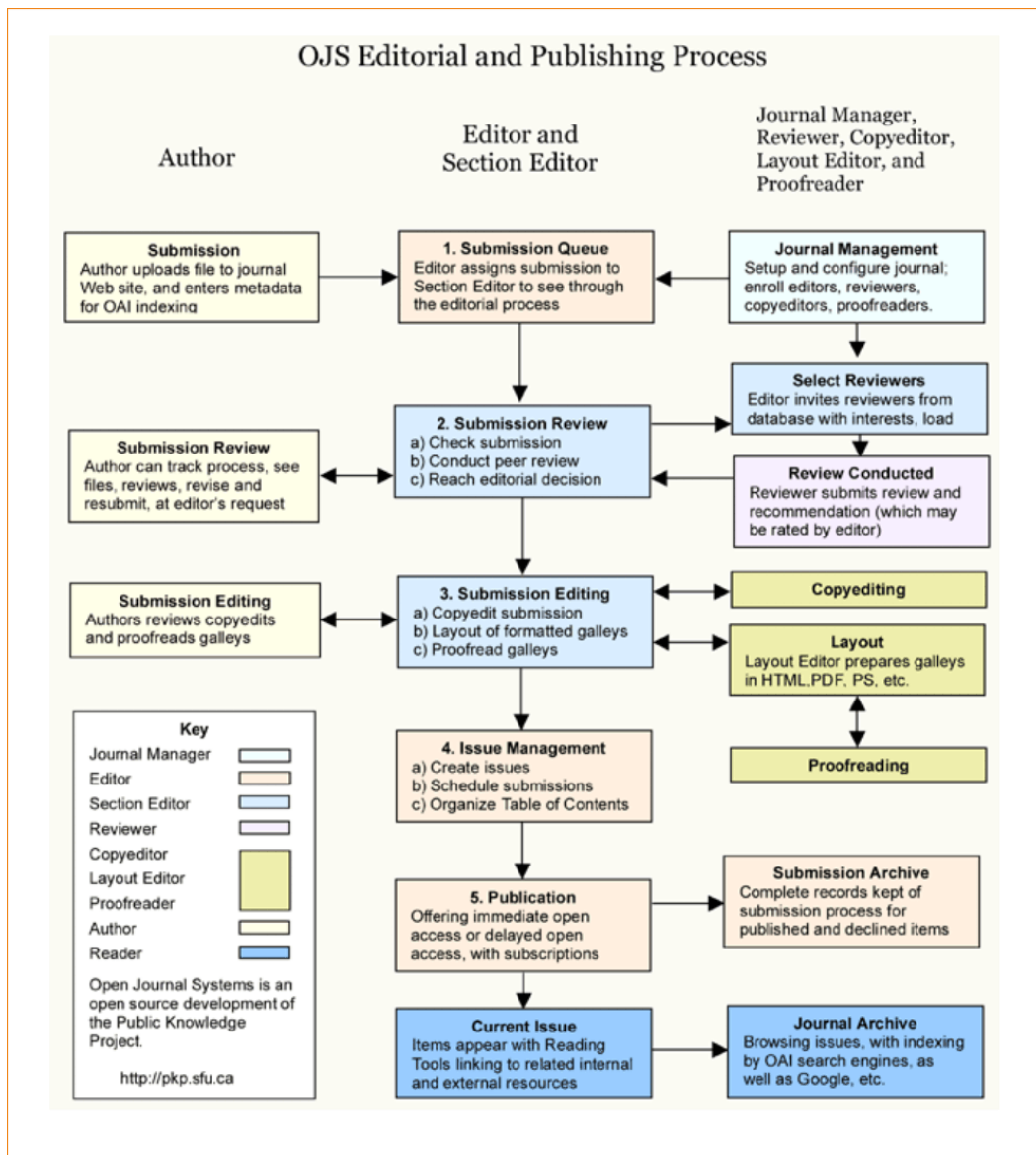
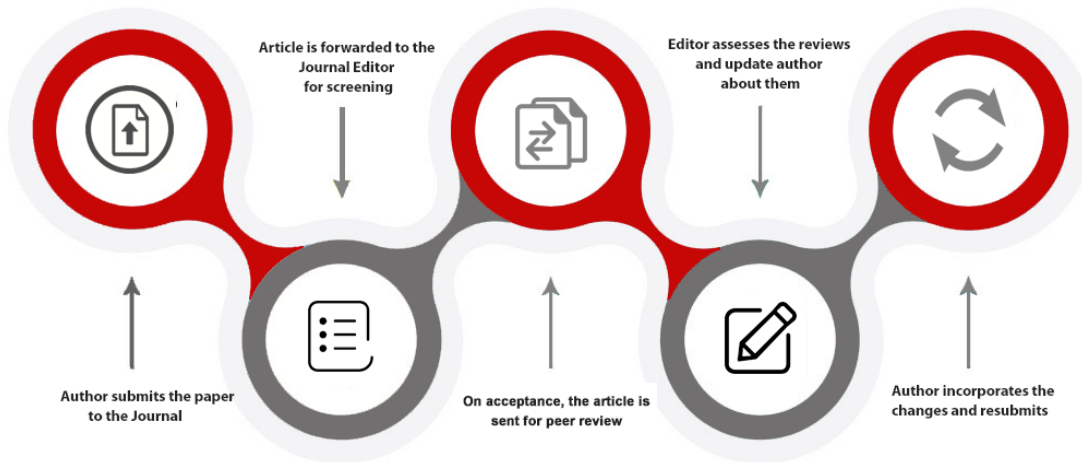
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# **Analysis of the Effect of Occupational Safety and Health (K3) on Employee Performance in Distribution Center Area Logistics Division (Case Study of PT. Indomarco Primatama Gresik Branch)**

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## **Abstract**

In Indonesia, problems related to Occupational Safety and Accidents (K3) are still quite large, both in cities and in villages, both in the industrial and service sectors as well as in the agricultural sector. This is evident from the still high number of work accidents that occur. Throughout 2020, work accidents in Indonesia reached 153,044 cases, where this figure decreased by 1.46 percent when compared to work accident cases in 2019, which was 155,327 cases. The purpose of this study was to determine the effect of occupational safety and health on the performance of employees of the Logistics Division of PT. Indomarco Primatama Gresik Branch. Data was collected through the distribution of questionnaires, with the number of respondents as many as 60 employees of the Logistics Division of PT. Indomarco Primatama Gresik Branch. The sampling technique used is random sampling using questionnaires and data testing techniques used in this study include validity and reliability tests, multiple regression analysis tests, F tests, and t tests. The results of this study indicate that: (1) work safety has a positive effect on employee performance; (2) occupational health has a positive effect on employee performance; and (3) occupational safety and health affect employee performance.

## **Keywords**

Employee performance, Occupational safety and health (K3).

## **1. Introduction**

According to Gomes, (1995) human resources are the only resources that have reason, feelings, desires, abilities, skills, knowledge, encouragement, power and work, the only resources that have the ratio, taste and intention no matter how advanced technology is. the development of information, the availability of capital and adequate materials but without human resources it will be difficult for the organization to achieve its goals. Occupational Health and Safety (K3) is very important for the company because by ensuring Occupational Safety and Health (K3) for every employee it will create a safe and comfortable work environment.

With the implementation of the Occupational Safety and Health (K3) program that creates a sense of security and comfort for employees at work, it will encourage employees to work more productively and aim to avoid accidents in the company's production process, increase enthusiasm, work harmony and employee work participation, so that with the increase in Occupational Safety and Health (K3), it is certain that employee performance will increase (Anwar, n.d.). Ahmad Waluya Jati & Thoufan Nur, (2021) states that a work accident is an unplanned, uncontrolled and undesired event at work, which is caused either directly or indirectly, by unsafe acts and or unsafe conditions so that cessation of work activities.

Based on the above background, the formulation of the problem in this study is as follows:

1. Does Occupational Safety and Health (K3) have a partial effect on Employee Performance in the Logistics Division of PT. Indomarco Primatama Gresik?
2. Does Occupational Safety and Health (K3) have a simultaneous effect on Employee Performance in the Logistics Division of PT. Indomarco Primatama Gresik?
3. What are the work accidents that can occur to employees of the logistics division of PT. Indomarco Primatama Gresik Branch?

## 2. Methodology

Using the data collection method using a questionnaire as an effort to collect survey data and assisting respondents during the questionnaire filling process so that respondents more easily understand the meaning of the questionnaire and then researchers will get all the answers to these questions.

The types of data used in this study are primary and secondary data. Primary data is data that comes from answers, opinions, or employee perceptions of the statement indicators contained in the research variables, namely work safety, occupational health, and employee performance. While secondary data is obtained indirectly through intermediary media. Secondary data comes from documentary data and related journals as well as the results of previous studies related to the topics discussed in this study.

The population in this study were all employees of PT. Indomarco Prismatama Gresik Branch who works in the Logistics Division. Determination of the sample in this study was done with the type of Probability Sampling. The chosen probability sampling technique is Random Sampling, which is a method of taking samples of population members at random without regard to the strata that exist in the population

## 3. Result and Discussion

### 3.1. Result

#### 3.1.1. Multiple Linear Regression Analysis

Based on the table below, it can be seen that in the Unstandardized Coefficients column part B, the b1 value for the Work Safety variable is 0.345, the b2 value for the Occupational Health variable is 0.390, and the constant value is 10.380, so the multiple linear regression equation can be formulated as follows:

$$Y = 10.380 + 0.345X_1 + 0.390X_2 + e.$$

Table 1. Multiple Linear Regression Analysis

| Model                    | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------------------|-----------------------------|------------|---------------------------|-------|------|
|                          | B                           | Std. Error | Beta                      |       |      |
| (Constant)               | 10.380                      | 4.302      |                           | 2,413 | .019 |
| 1 Work Safety (X1)       | .345                        | .177       | .276                      | 1,950 | .056 |
| Occupational Health (X2) | .390                        | .223       | .247                      | 1,747 | .086 |

a. Dependent Variable: Employee Performance (Y)

1. Constant ( $\alpha$ ) = 10,380

The constant value of 10.380 indicates that if the occupational safety and health variable is constant (does not change), then the employee's performance is 10.380.

2. Coefficient b1 (X1) = 0.345

Work safety variable (X1) affects employee performance by 0.345, meaning that if the work safety variable (X1) increases by 0.345 then employee performance will also increase linearly by 0.345. On the other hand, if the work safety variable (X1) decreases, the employee's performance will decrease.

3. Coefficient b2 (X2) = 0.390

The occupational health variable (X2) affects employee performance by 0.390, meaning that if the occupational health variable (X2) has an increase of 0.390, the employee's performance will increase linearly by 0.390. On the other hand, if the occupational health variable (X2) has decreased, the employee's performance will also decrease.

#### 3.1.2. F test (simultaneous)

Table 2 F test (simultaneous)

| Model        | Sum of Squares | df | Mean Square | F     | Sig.  |
|--------------|----------------|----|-------------|-------|-------|
| 1 Regression | 78.065         | 2  | 39,032      | 7.745 | .001b |
| Residual     | 287,268        | 57 | 5.040       |       |       |
| Total        | 365,333        | 59 |             |       |       |

a. Dependent Variable: Employee Performance (Y)

b. Predictors: (Constant), Occupational Health (X2), Occupational Safety (X1)

In the above it can be seen that the results of the F test simultaneously obtained the calculated F value of 7.745 with a significance level of 0.001. While the value of F table is 3.16. So the calculated F value > F table

(7.745 > 3.16) and the significance level ( $0.001 < 0.10$ ) which means that  $H_0$  is rejected and  $H_1$  is accepted. So it can be concluded that the independent variables, namely Occupational Safety (X1) and Occupational Health (X2) together have a positive and significant effect on Employee Performance.

### 3.1.3. T test (Partial)

1. For the work safety variable, the calculated t value is 1.950, while the t table value with a significance of 0.10 (10%) is 1.672 and a significance value of  $0.056 < 0.10$ . This shows that the work safety variable (X1) individually have a positive and significant effect on Employee Performance (Y) at the Logistics Division of PT. Indomarco Prismatama Gresik Branch. In addition, it means that if the work safety variable is not maximized properly it will affect employee performance.
2. Meanwhile, for the Occupational Health variable, it is known that the t-count value is 1.747, while the t-table value with a significance of 0.10 (10%) is 1.672 and a significance value of  $0.086 > 0.10$ . This shows that the Occupational Health variable (X2) individually has a negative effect on Employee Performance (Y) of the Logistics Division of PT. Indomarco Prismatama Gresik Branch

## 3.2. Discussion

### 3.2.1. Effect of Work Safety (X1) on Employee Performance (Y)

The results of this study using statistical tests of regression analysis showed that the work safety variable had a positive and significant effect on the performance of the employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch, so  $H_1$  is accepted. The magnitude of the influence of the work safety variable that has a positive effect on employee performance is 1.950 with a significance value of 0.056 Table 2.

That matter means that the more important work safety results in the better employee performance. Work safety that is less than the maximum provided by the company will have an unfavorable impact on the performance of its employees. On the other hand, if the company is able to maximize the work safety program, it will positively assist employees in producing good performance. According to ILFANI et al., 2014, work safety is defined as a state of avoiding danger while doing work. Mangkunegara, 2010 explains that the variables that affect employee performance are the potential ability factor and the reality ability (knowledge & skill), as well as the motivation factor which is defined as an attitude (attitude) of leaders and employees towards work situations in the environment.

### 3.2.2. Effect of Occupational Health (X2) on Employee Performance (Y).

Hypothesis 2 states that occupational health has an effect on employee performance. Based on the results of the statistical test of regression analysis, it can be seen that the occupational health variable has a positive and significant effect on the performance of the employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch, so  $H_2$  is accepted. The better the occupational health program, the better the performance of the employees. The magnitude of the effect of the occupational health variable that has a positive effect on employee performance is 1.747 with a significance value of 0.086 Table 2. Occupational health according to includes a medical work environment, occupational health facilities, and maintenance of the health of the workforce. The better the health program in a company, the better the performance of the employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch. So that overall will be able to work better and more productive. This is supported by Law no. 36 of 2009 concerning Health that workplace managers are required to comply with health standards set by the government and ensure a healthy work environment and are responsible for the occurrence of work accidents.

### 3.2.3. Effect of Occupational Health and Safety on Employee Performance

Hypothesis 3 states that occupational safety and health together affect employee performance. Based on the results of the statistical test of regression analysis, it can be seen that the occupational safety and health variables have a positive and significant effect on the performance of the employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch, so  $H_3$  is accepted. The magnitude of the influence of occupational safety and health variables simultaneously on employee performance is 7.745 with a significance value of 0.001 (Table 2).

Occupational safety and health for employees is a goal to be achieved by the company to support the work of employees (Paramitha & Wijayanto, 2012). Occupational safety and health implemented by the company can increase enthusiasm or work spirit, prevent occupational diseases, and can provide knowledge about the correct use of tools and machines, so that the existence of an occupational safety and health program will provide encouragement to employees to work optimally. lead to the achievement of company goals. In line with research conducted by (Firmanzah, 2018) and (Wahyuni, S., Bambang, S., Wiwin, 2018), the results of this study indicate that occupational safety and health variables affect employee performance.

#### 4. Conclusion

This study examines the Effect of Occupational Safety and Health (K3) on Employee Performance. The following is a conclusion from the results of research that has been carried out:

1. Work safety has a positive and significant effect on the performance of employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch. This is because if employees feel safe and comfortable in the work environment, it will have an impact on increasing employee performance. The better the work safety program that is carried out, the higher the level of performance generated by the employees.
2. Occupational health has a positive and significant effect on the performance of employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch. This is because if employees are in a healthy body condition at work, their performance will also be optimal. The higher the level of employee health, the higher the level of employee performance.
3. Occupational safety and health simultaneously have a positive and significant effect on the performance of employees of the Logistics Division of PT. Indomarco Prismatama Gresik Branch. The higher the level of occupational safety and health, the higher the performance possessed by employees.

#### References

- Ahmad Waluya Jati, & Thoufan Nur. (2021). Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan Dan Opini Audit Terhadap Ketepatan Waktu Publikasi Laporan Keuangan (Studi Empiris Pada Perusahaan Tambang Yang Terdaftar Di Bursa Efek Indonesia Tahun 2017-2019).
- Anwar. (n.d.). Efek Penambahan Roll Slide Fleksi Ekstensi Terhadap Penurunan Nyeri Pada Osteoarthritis Sendi Lutut. 1(12), 2012.
- Faustino Cardoso Gomes. (1995). Manajemen sumber daya manusia / Faustino Cardoso Gomes (Vol. 23). <https://lib.ui.ac.id/detail.jsp?id=20151339>
- Firmanzah. (2018). Pengaruh Point Reward, Undian Behadiah dan Asuransi terhadap Loyalitas Pelanggan PT ISM Bogasari Flour Mills Surabaya. *Jurnal Manajemen*, 4.
- ILFANI, Grisma, NUGRAHANI, & Rini. (2014). Analisis Pengaruh Keselamatan Dan Kesehatan Kerja Terhadap Kinerja Karyawan (Studi Pada Pt. Apac Inti Corpora Bawen Jawa Tengah Unit Spinning 2).
- Mangkunegara, A. A. A. P. (2010). Manajemen Sumber Daya Manusia Perusahaan. PT. Remaja Rosdakarya.
- Paramitha, C. C. P., & Wijayanto, A. (2012). Pengaruh Keselamatan Dan Kesehatan Kerja Terhadap Prestasi Kerja Karyawan Pada PT. PLN (Persero) APJ Semarang. *Jurnal Administrasi Bisnis*, 1(1), 1–11. <https://doi.org/https://doi.org/10.14710/jab.v1i1.4313>
- Wahyuni, S., Bambang, S., Wiwin, H. (2018). The Effect of Occupational Safety and Health (K3) on Employee Work Productivity at PT. Kutai Timber Indonesia (Case Study at PT. Kutai Timber Indonesia Probolinggo City. *Journal of Economic Education*, 12(1).

# Analysis of Bank Health During the Covid19 Pandemic in Indonesia, Using the RGEC Method (Risk Profile, Good Corporate Governance, Earnings, Capital)

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## Abstract

This study aims to analyze the level of healthState-owned banks and private banks for the period 2018-2020 are viewed based on the overall RGEC (Risk profile, Good Corporate Governance (GCG), Earnings, Capital) aspects. This Type of Researchusing a qualitative approach to data quantitative with research subjectsState-owned banks and private banks for the period 2018-2020. The data was obtained based on the document technique. The data analysis technique used is the assessment of the soundness of the bank using RGEC factors. Research result find that the soundness of the Bank BUMN with (1) Risk Profile aspect using the NPL ratio of "1.79%" gets the "Very Healthy" predicate, the LDR ratio of "118%" gets the "Unhealthy" predicate, (2) the GCG aspect with the composite "1" gets the "Very Good" predicate, (3) the Earnings aspect uses an ROA ratio of "2.51%" gets the "Very Healthy" predicate, the NIM ratio of "9%" gets the "Very Healthy" predicate, the BOPO ratio of "-131%" gets the "Very Healthy" predicate, (4) the "17%" CAR aspect gets the "Very Healthy" predicate. Meanwhile, at the Bank's soundness level, Private with (1) Risk Profile aspect using the NPL ratio of "-5%" gets the "Very Healthy" predicate, the LDR ratio of "101%" gets the "Unhealthy" predicate, (2) the GCG aspect with a composite of "2" gets the "Good" predicate, (3) the Earnings using an ROA ratio of "2.25%" gets the "Very Healthy" predicate, the NIM ratio of "30%" gets the "Very Healthy" predicate, the BOPO ratio of "524%" gets the "Unhealthy" predicate, (4) aspects CAR "11%" received the title "Very Healthy". In general, the soundness of banks in the period 2018-2020State-owned bank received the "very healthy" predicate with a composite value of "103%", while private banks received the "fairly healthy" predicate with a composite score of "60%".

## Keywords:

Bank BUMN, Bank Soundness Level, Bank Swasta, RGEC Method

## 1. Introduction

According to the Law of the Republic of Indonesia No. 10 of 1998 Bank is a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of credit and or other forms in order to improve the standard of living of the people at large. National Private Commercial Bank is one of the best quality commercial banks in Indonesia, both in terms of asset valuation, profitability and level health. Of course, it is still necessary to pay attention to the soundness of the bank in order to reach level desired assets and income in business plan bank (Law RI, 1998).

The role of banking in a business greatly determines the progress of a nation's economy, considering that banking is a driving force and a catalyst in efforts to accelerate the pace of development of the business world. As a bank, in an effort to collect funds from the public in the form of deposits and distribute them to the public in the form of credit or other forms in order to improve the standard of living of the people, it is required to increase professionalism in the management of all assets that will be owned. (Rany, Nur and Finance, 2020).

According to the Ministry of Finance of the Republic of Indonesia Year 17/11/2020, the challenge in economic recovery in the banking sector is to recover the demand for work loans which fell due to the impact of the Covid-19 pandemic. The declining demand for credit is one of the government's current concerns. Bad credit will hinder a good economic cycle.

With the existence of two banking sectors, namely state-owned banks and private banks, which operate simultaneously and compete for relatively equal consumers, it creates a high level of competition between banks. Therefore, the management needs to pay attention to the soundness of the bank as an assessment of the company's performance and customer trust.

In general, this bank soundness assessment has undergone changes since it was first implemented in 1999, namely CAMEL which was later changed to CAMELS and now Bank Indonesia (BI) has established RGEC. Through RGEC, BI wants banks to be able to identify problems early, carry out appropriate and faster follow-up

improvements, and implement Good Corporate Governance (GCG) and better risk management so that banks are more resilient in facing crises (Gide 2021).

According to number 13/1/PBI/2011 Banks are required to maintain and/or improve Bank Soundness Level by applying prudential principles and risk management in carrying out business activities, Banks are required to conduct a sound level assessment using a risk approach (Risk-based Bank Rating) either individually or on a consolidated basis, as referred to in Article 2 paragraph (3), with the scope of assessment of the following factors:

- a. Risk profile (risk profile);
- b. Good Corporate Governance (GCG);
- c. Profitability (earnings); and
- d. Capital (capital) (Bank Indonesia, 2011).

The researcher made the object of the largest state-owned banks and private banks in Indonesia, namely state-owned banks (PT Mandiri (Persero) Tbk, Bank BRI) and private banks (PT Bank Central Asia Tbk, DBS Bank). State-owned banks and private banks because by doing this research, it can be seen the achievements of these banks in carrying out their operational activities. Based on the description above, the author takes the title "Analysis of Bank Health During the Covid19 Pandemic in Indonesia, Using the Rgec Method (Risk Profile, Good Corporate Governance, Earnings, Capital)".

Based on the background of the researchers formulate the problem as follows:

1. How is the level of healthState-owned Banks and Private Banksbased on RGEc Method?
3. Is there a significant difference, the level of healthState-owned Banks and Private Banks

## 2. Literature Review

Research with the title "Comparative Analysis of Bank Soundness Levels Based on the Rgec Method at Bank Mandiri and Bank BCA for the 2015-2019 Period". This study uses the bank soundness level variable and the RGEc method, the samples in this study, the samples in this study were Bank Mandiri and Bank BCA. The results of this study indicate that during the 2015-2019 period: (1) Aspects of the Risk profile are in a Healthy condition (2) Aspects of GCG with very Healthy criteria. (3) Earnings aspect is in Very Healthy condition (4) Capital Aspect is in Very Healthy condition (5) RGEc aspect as a whole for the 2015-2019 period is in Composite Rank 1 which is Very Healthy with a value of > 86% (Hariyono et al., 2019).

Research with the title "Method of Rgec On"The Health Level of Islamic Banking and Conventional Banking". This study uses the variables of Islamic and conventional bank health and RGEc, the samples in this study are Mandiri Bank and BCA Bank. The results of this study indicate that conventional banking is still superior to Islamic banking. This can be seen from the profitability ratio which measures the company's ability to earn profits, conventional banking is better able to maximize profit income which can be seen from the achievement ROA value in 2017/2018 (Yuniati and Pertiwi, 2020).

Research entitled "Comparative Analysis Between Islamic Banks In Indonesia And Malaysia Using Rgec Method And Sharia Conformity Indicator Period 2011-2015". This study uses the variables of Islamic banks, business performance, social performance, RGEc, indicators of sharia compliance, the samples in this study are Islamic banks in Indonesia and Islamic banks in Malaysia. The results of this study indicate that the results of the Independent Samples T-test and Mann Whitney Test show that there is no difference in the business performance of Indonesian and Malaysian Islamic banks in terms of Risk profile (FDR) and Earnings (ROA). Meanwhile, there are differences in business and social performance as seen from Earnings (ROE), capital (CAR), and Aspects of Sharia Compliance Indicators (PSR and ZR)(Method et al., 2017).

Research With the Title "Assessment of The Bank's Financial Health Level at Pt. Bank Central Asia, Tbk. Based on Risk Approach". This study uses the variables of Bank Financial Health, Risk Profile, Good Corporate Governance, Profit, Capital, the sample in this study is Bank BCA Tbk. The results of this study indicate that PT. Bank Central Asia, Tbk. is in the composite rating of 1 which means the bank's condition is very healthy. This reflects that the bank. able to be committed to maintaining public trust by providing optimal banking performance (Yuliawati and Dana, 2020).

Research With the Title "Analysis of Risk" Profile, Good Corporate Governance, Earnings, And Capital (Rgec) In Syariah Commercial Banks and Conventional Commercial Banks". This study uses the variables NPL, LDR, Good Corporate Governance, ROA, CAR, the samples in this study are Islamic commercial banks and conventional commercial banks. The results of this study indicate that there are differences in ROA between Islamic commercial banks and conventional commercial banks. This shows that the ability of conventional commercial banks has a better ability to obtain net profit by using all assets owned by the bank compared to Islamic commercial banks. There is no difference in CAR between Islamic commercial banks and conventional commercial banks. This shows that the two groups of banks have met the requirements of Bank Indonesia as a healthy bank (Lisa and Hermanto, 2020).

Research With the Title "Assessment Of Bank Health Levels" Using Rgec Methods On National Private Public Banks". This study uses the variable RGEC Method, the sample in this study is a national private commercial bank. This shows that the results of the study during the period 2016 to 2018 show that: (1) Aspects of the Risk Profile of National Private Commercial Banks are in very healthy condition with NPL ratios of 0.31%, 0.24%, and 0.19%, respectively. . for the IRR of 151.30%, 166.94% and 159.30%, respectively, as well as for LDR of 81.26%, 89.68%, and 85.16%. (2) The GCG aspect shows 1.925, 1.925 and 1.85 with healthy criteria. (3) Earnings aspect shows a healthy condition with ROA values of 2.10%, 2.01%, and 1.34% and NIM shows 4.9%, 5.2%, and 4.7%. (4) The capital aspect shows a very healthy condition with CAR values of 9.69%, 11.59%, and 11.43%. (5) The RGEC aspect shows a Composite 1 (PK-1) rating with very healthy criteria (S 2020).

Research with the title "Analysis of Bank Rating with Rgec Method". This study uses the bank soundness level variable and the RGEC method, the sample in this study is PT Bank Mandiri (Persero). The results of this study indicate that at PT. Bank Mandiri (Persero) Tbk in the 2014 period showed a very healthy bank soundness level, this is reflected in the final composite value of 86.66%, in the 2015 period the bank's soundness level was reflected in the final composite score of 83.33%. the period of 2016 shows that the Bank's soundness level is healthy, this is reflected in the final composite value obtained by the value of 73.33%. For the period of 2017 shows a healthy level of Bank soundness, this is reflected in the final composite value obtained by the value of 83.33% (Stella 2020).

### **3. Method**

#### **3.1. Data Type**

The type of data used in this research is using quantitative data. Data Quantitative research is a type of research data that has the form of numbers or numbers. Data This quantitative analysis is processed and analyzed using statistical and mathematical calculations. By Therefore, researchers need to do processing in order to get the goals that have been set targeted with definite results figures. This study uses quantitative data in the form of number-figures on the financial statements of state-owned banks (PT Mandiri (Persero) Tbk, Bank BRI) and banks Private (PT Bank Central Asia Tbk, DBS Bank) which will be analyzed using the method RGEC.

#### **3.2. Research Approach**

Qualitative research method is a research method based on the philosophy of post positivism, used to examine the condition of natural objects, (as opposed to experiments) where the researcher is the key instrument, data collection techniques are carried out by triangulation (combined), data analysis is inductive/qualitative, and the results of qualitative research emphasize meaning rather than generalizations (Sugiyono 2013). This study uses a qualitative approach to quantitative data because this study does not use the same assumptions as in general quantitative research.

#### **3.3. Data source**

The source of the data used in this research is using secondary data. Secondary data is data that can be obtained from available sources. Secondary data can be obtained through books, journals, government publications, websites and other supporting sources. This study collects data obtained from financial reports or documentation owned by state-owned banks (PT Mandiri (Persero) Tbk, Bank BRI) and private banks (PT Bank Central Asia Tbk, Bank DBS Limited). Presented on the IDX official website <https://www.idx.co.id/> as well as other research-related sources.

#### **3.4. Data collection**

According to (Dr. Farida Nugrahani, 2014) when viewed in terms of data collection methods or techniques, then the data collection technique can be done by observation (observation), interviews (interviews), documentation and a combination of the four.

1. Observation

Observation is a technique or method of collecting systematic data on the object of research either directly or indirectly.

4. Interview

Although interviewing is a conversational process in the form of face-to-face questions and answers, interviewing is a process of collecting data for a study.

5. Documentation

Documentation method means a way of collecting data by recording existing data. The technique of collecting data with documentation is the retrieval of data obtained through documents.

6. Triangulation

In data collection techniques, triangulation is defined as a data collection technique that combines various data collection techniques and existing data sources.

This study uses documentation data collection techniques, namely collecting data in the form of financial statements of state-owned banks (PT Mandiri (Persero) Tbk, Bank BRI) and private banks (PT Bank Central Asia Tbk, DBS Bank) which are already available on official sites such as <https://www.idx.co.id/> as well as other research-related sources.

**3.5. Study Unit**

The unit of study is the emphasis used in the process or meaning that is being studied. The study units in this research are:

1. Risk Profile

Based on SE 13/1/PBI/2011 on (Bank Indonesia, 2011) risk profile is an assessment of the inherent risk and quality of risk management implementation in bank operations.

- a. Credit risk is the risk of failure of other debtors in fulfilling their obligations to the bank. In detecting non-performing loans using the calculation of the NPL Ratio (Net Performing Loan).
- b. Liquidity risk is the risk that occurs because customers or users of banking services withdraw money simultaneously which makes the bank go bankrupt. This risk is calculated using the LDR Ratio (Loan to Deposit Ratio).

2. Good Corporate Governance

It is a review of the quality of the person in charge of the bank or bank management for the implementation of GCG principles. GCG assessment is measured by conducting a self-assessment.

3. Earnings or Profitability

Profitability ratio is used to determine the condition or ability of the bank to gain profit or profit during a certain period in order to support the bank's operations. Profitability assessment is measured using the following ratios:

- a. Return On Assets (ROA)
- b. This ratio is used to assess the company's ability to earn a profit from the total assets used. The higher this ratio will have a positive impact on asset productivity in obtaining net profits.
- c. Net Interest Margin (NIM)
- d. SE Bank Indonesia No. 6/23/DPNP dated May 31, 2004 Net Profit Margin is the ratio between net interest income to the average earning assets.
- e. Operating Expenses to Operating Income (BOPO)
- f. Operational Cost of Operating Income (BOPO) is often called the efficiency ratio which is used to measure the ability of bank management to control operational costs against operating income.

4. Capital

In calculating Capital, Banks are required to refer to Bank Indonesia regulations governing the Minimum Capital Adequacy Requirement (CAR) for Commercial Banks. In addition, in assessing the adequacy of Capital, Banks must also relate capital adequacy to the Bank's Risk Profile. The higher the Bank's Risk, the greater the capital that must be provided to anticipate the Risk.

**4. Results and Pemdiscussion**

**4.1. Rating of the Average Aspects of the RGEC Method on State-Owned Banks and Private Banks**

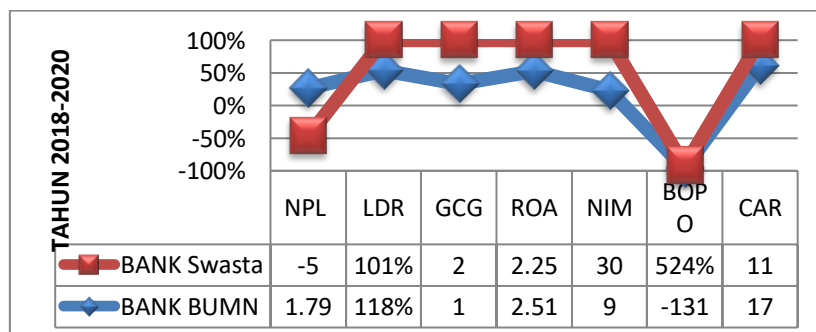


Figure 1. Rating of the Average Aspects of the RGEC Method on State-Owned Banks and Private Banks

Based on the Trend Figure above, it can be seen that the average aspect ratio which includes the method RGEC on the assessment of the soundness of the Bank on the Bank BUMN and Private Bank using the RGEC method, namely:

Bank BUMN using the Risk Profile component on NPL of 1.79%, LDR of 118%, using the GCG component gets a rating of 1 which is very good, using the Earnings component on an ROA of 2.51%, NIM of 9%, BOPO of -131%, using the Capital component in the CAR of 17%.

Private Banks use the Risk Profile component in NPL of -5%, LDR of 101%, using the GCG component gets a rating of 2 which is good, using Earnings component on ROA of 2.25%, NIM of 30%, BOPO of 524%, using the Capital component in the CAR of 11%.

Bank in general BUMN and Private Bank have a good bank sound condition in last 3 years. But Bank BUMN able to control operational costs against operating income on the BOPO component is better than that of private banks.

Table 1. Composite Rating Weight

| Composite Rating | Weight (%) | Description    |
|------------------|------------|----------------|
| PK 1             | 86 – 100   | Very healthy   |
| PK 2             | 71 – 85    | Healthy        |
| PK 3             | 61 – 70    | Healthy enough |
| PK 4             | 41 – 60    | Unwell         |
| PK 5             | <40        | Not healthy    |

Source : (Unud, 2017)

**4.2. Cumulative Rating RGEC method At Banks BUMN And Private Banks Period 2018-2020**

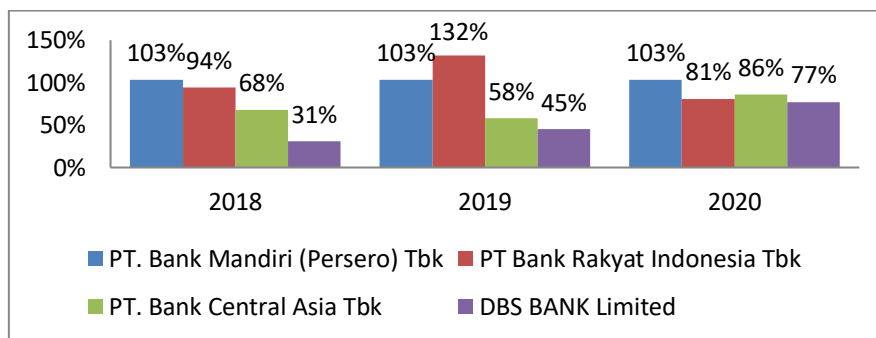


Figure 2. Cumulative Rating RGEC

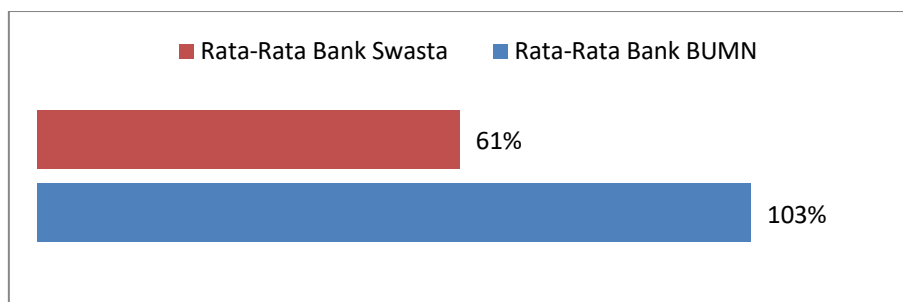


Figure 3. Cumulative Predicate Rgec . Method

Based on the Trend Figure above, it can be seen that the cumulative average of the health level assessment Bank on Bank BUMN and Private Banks using the RGEC method, namely:

It can be seen that the results of the study indicate the health of the Bank's performance BUMN, namely in Bank PT. Bank Mandiri (Persero) Tbk ranked composite 1 (PK-1) in 2018-2020. Then on the Bank PT. Bank Rakyat Indonesia Tbk in 2018-2019 occupy ranked 1 (PK-1), in 2020 it was ranked composite 2 (PK-2).

In Private Banks, the results of the study show that the health of the Bank is in Banks PT. Bank Central Asia Tbk in 2018 ranked composite 3 (PK-3), in 2019 ranked composite 4 (PK-4), in 2020 it was ranked composite 1 (PK-1). Then on DBS BANK Limited in 2018 ranked composite 5 (PK-5), in 2019 was ranked composite 4 (PK-4), and in 2020 ranked composite 2 (PK-2).

Based on the average rating of the Bank's soundness using the RGEC method on the Bank BUMN and Private Banks, namely BU BanksMN has a value of 103% is ranked composite 1 (PK-1) which means Very Healthy. Based on the weight of the composite ranking The RGEC value of 86%-100% is included in the very healthy criteria. While in private banks has a value of 61% and is in the composite rank 3 (PK-3) which means Fairly Healthy. Based on the weight of the RGEC composite rating, the value of 61%-70% is included in the criteria Healthy enough. It can be seen that based on the analysis of the soundness of the bank using the RGEC method In general, BU BanksMN is healthier than private banks.

#### 4.3. Aspect Assessment Significance Test RGEC method at Bank BUMN and Private Banks

The table below lists the results of the significance of the assessment of the composite health rating of BU BanksMN and Private Banks in 2018-2020 using a hypothesis test conducted using the Independent Sample T-Test.

Table 2. Independent Samples Test

|      | Levene's Test for Equality of Variances |      | t-test for Equality of Means |       |                 |                 |                       |   |           |          |
|------|---|------|------------------------------|-------|-----------------|-----------------|-----------------------|---|-----------|----------|
|      | F                                       | Sig. | t                            | df    | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |           |          |
|      |   |      |                              |       |                 |                 |                       | Lower                                     | Upper     |          |
| RGEC | Equal variances assumed                 | ,219 | ,650                         | 1,148 | 10              | ,278            | 22,000000             | 19,17174                                  | -20,71730 | 64,71730 |
|      | Equal variances not assumed             |      |                              | 1,148 | 9,442           | ,279            | 22,000000             | 19,17174                                  | -21,06182 | 65,06182 |

Based on the Independent Sample T-test (T-test) on Equal variances assumed obtained a significance value of  $p(\text{sig}(2\text{-tailed)})$  is  $0.278 > 0.05$ , it can be concluded that there is no significant difference between the soundness of BU BankMN and Private Banks in 2018-2020. Thus, it can be concluded that although some indicators have different levels of health, these differences are tolerable differences.

## 5. Conclusion and Suggestions

### 5.1. Conclusion

Based on the results of the analysis of the Bank's soundness level using MRGEC method at BU BankMN and Private Banks can be concluded as follows:

- Judging based on the bank's health assessment using the RGEC method, namely at BU BanksMN Risk Profile components with NPL (Non-Performing Loan) ratios generally get the predicate "Very Healthy" with a composite value of "1.79%", and the LDR (Loan to Deposit Ratio) ratio generally gets the predicate "Unhealthy" with a composite value of "118 %". Meanwhile, in Private Banks, the Risk Profile component with an NPL (Non-Performing Loan) ratio generally gets the predicate "Very Healthy" with a composite value of "5", and the LDR (Loan to Deposit Ratio) ratio generally gets the "Unhealthy" predicate with composite value "101%".
- Judging based on the general health assessment of banks using the RGEC method based on the Self-Assessment assessment, namely on BU BanksMN The components of Good Corporate Governance (GCG) generally get the predicate "Very Good" with the predicate "1". Meanwhile, private banks get the predicate "Good" with the predicate "2". This means that at BU BankMN and Private Banks have good corporate governance.
- Judging based on the bank's health assessment using the RGEC method, namely at BU BanksMN Earnings components with ROA (Return On Assets) ratio generally get the predicate "Very Healthy" with a composite value of "2.51%", the NIM ratio (Net Interest Margin) generally gets the predicate "Very Healthy" with a composite value of "9%", and the ratio of BOPO (Operating Expenses to Operating Income) generally gets the predicate "Very Healthy" with a composite value of "-131%", while in Private Banks the Earnings component with ROA (Return On Assets) ratio generally gets the predicate "Very Healthy" with a composite value of "2.25%", the NIM (Net Interest Margin) ratio in general gets the predicate "Very Healthy" with a

composite value of "30%", and the BOPO ratio (Operating Expenses to Operating Income) generally gets predicate "Unhealthy" with a composite value of "524%".

5. Judging based on the bank's health assessment using the RGEC method, namely at BU BanksM NuseCapital components with a CAR (Capital Adequacy Ratio) ratio in general get the predicate "Very Healthy" with a composite value of "17%", While in Private Banks the Capital component with a CAR (Capital Adequacy Ratio) ratio generally gets the predicate "Very Healthy" with a composite "11%".
6. Judging based on the bank's health assessment using the RGEC method as a whole, BU BanksMN and Private Banks, namely atBU bankM Nget the "Very Healthy" predicate with a composite value of "103%", while private banks get the "Quite Healthy" predicate with a composite value of "61%".
7. Judging based on the Significance Test of the Independent Sample T-Test on the assessment of the Bank's soundness level usingMRGEC method.i.e. there is no significant difference with BU BankMN and Private Banks for the period 2018-2020.

## 5.2. Suggestion

As a researcher's consideration provide advice on the level of bank soundness carried out in BU bank MN and Private Banks between3 years, namely 2019-2020 as follows:

1. In future researchers, it is expected to expand other financial ratio indicators in the assessment of bank soundness levels which will be used as objects in order to obtain more accurate data and results according to the latest policies or regulations.
2. The Bank Manager is expected to be able todevelop health performance in
3. BU bankMN and Private Banks in order to gain the trust of Investors and Customers.
4. At BU. BankMIn order to maintain a healthy performance even though it can be said to be healthy, it is necessary to be consistent in developing bank soundness in order to face business competition in the future.
5. In Private Banks to improve the soundness of its performance in managing assets and minimizing the risk of financing problems in the company. in order to increase profits in the following year.

## References

- Bank Indonesia (2011) 'Bank Indonesia Regulation No.13/1/PBI/2011 Regarding Bank Soundness Rating', Bank Indonesia Regulation, pp. 1–31.
- Dr. farida nugrahani, MH (2014) 'Qualitative research methods'.
- Gide, A. (2021)*No Title No Title No Title*, *Angewandte Chemie International Edition*, 6(11), 951–952.
- Hariyono, J. V et al. (2019) 'RGEC In Bank Mandiri And Bank Bca 2015-2019 The Comparative Analysis Of Bank Health Level Based On The Rgec Method In Mandiri And Bca Bank Period 2015-2019 *Jurnal EMBA* Vol . 9 No. October 4, 2021, p. 475-485', 9(4), pp. 475–485.
- Lisa, O. and Hermanto, B. (2020) 'Analysis of Risk Profile , Good Corporate Governance , Earnings , and Capital ( Rgec ) in Syariah Commercial Banks and Conventional Commercial Banks', 4(1), pp. 58–65.
- Management, PS et al. (2018) 'comparative Level Of Health Of Conventional Commercial Banks With Sharia Commercial Banks In Indonesia For The 2017-2018 Period Using Rgec Method Rita Indah Mustikowati', pp. 1–7.
- Method, R. et al. (2017) 'Comparative Analysis between Islamic Banks in Indonesia and Malaysia Using Comparative Analysis between Islamic Banks in Indonesia and Malaysia Using RGEC Method and Sharia Conformity Indicator Period 2011-2015', (August 2019). doi: 10.5220/0007079302000206.
- Putri, RD et al. (2021) 'Comparison of the Performance Health Level of Conventional BCA and BCA Syariah Using the RGEC Method', 9(2), pp. 327–344.
- Rany, IP, Nur, AN and Finance, K. (2020) 'ISSN 2656-2790 (online)', 2(2).
- S, RU (2020) 'International Journal of Social and Administrative Sciences Assessment of Bank Health Levels Using Rgec Methods On National Private Public Banks Keyword s', 5(1), pp. 42–53. doi: 10.18488/journal.136.2020.51.42.53.
- Stella, LA (2020) 'Analysis of Bank Rating with RGEC Method', 143(Isbest 2019), pp. 240–245.
- Sugari, BP, Sunarko, B. and Giyatno, Y. (1963) 'Sharia and Convention Using The Rgec Method (Risk Profile, Good Corporate Governance, Earnings, and Capital)'.
- Sugiyono (2013) *Quantitative qualitative research methods and R&D*. Bandung.
- Unud, EM (2017) 'assessment Of Bank Health Level With Rgec Method', 6(2), pp. 948–974.
- Law of the Republic of Indonesia, N. 10 T. 1998 (1998) 'Law of the Republic of Indonesia No. 10 of 1998 concerning Banking', *State Gazette of the Republic of Indonesia*, p. 182. Available at: <http://www.bphn.go.id/data/documents/98uu010.pdf>.
- Yuliawati, KA and Dana, IM (2020) 'Assessment of the Bank's Financial Health Level at Pt . Bank Central Asia , TBK . Based on Risk Approach', (2), pp. 175–182.

Yuniati, E. and Pertiwi, DA (2020) 'The RGEC Method on the Soundness of Islamic Banking and Conventional Banking', 3, pp. 36–54.

# The Effect of Digital Marketing, Online Customer Reviews and Ratings on Consumer Buying Interest Through Shopee

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## Abstract

This study aims to analyze the effect of digital marketing, online customer review rating on consumer buying interest through shopee. The analytical method used in this study is quantitative analysis by conducting a survey on 106 respondents, namely students from Narotama University who have made purchases through shopee and tested with the help of an analytical tool, namely the SPSS program. The results of this study indicate that digital marketing, online customer reviews and ratings have a positive effect on buying interest through shopee. When consumers feel that shopee's digital marketing is attractive, online customer reviews and other user ratings provide benefits in terms of providing product-related information, this can increase purchase intention.

## Keywords:

Buying Interest, Digital Marketing, Online Customer Review, Rating

## 1. Introduction

The development of technology and the internet causes changes in consumer behavior who want to buy goods or services quickly and efficiently. The existence of the internet has made it easier for people to get the information they want. The ease of surfing the internet is not only felt by the general public, but also by business people who use the internet as a means of supporting business activities in the form of e-commerce. The Ministry of Communication and Informatics of the Republic of Indonesia noted that Indonesia was included in the list of 10 countries with the fastest e-commerce growth in the world with 78%, ranking first. Are Social in April 2021. At 88.1%, higher than the global e-commerce adoption average of 78.6%.

Currently, the most widely used e-commerce in Indonesia is Shopee. Based on SimilarWeb data on application performance across all E-commerce applications in Indonesia, Shopee has a daily active user base (DAU) of 28.35 million. based on iPrice's research, Shopee is one of the leaders in terms of website visitors, with 126.99 million web visitors per month., assuming iPrice's web visit rate in June is the same as August, Shopee gets an average of 961.51 million visits, (13,383 million) from the web and (83.52 million) from applications. The increase in visits to the Shopee application and website can be seen as a result of various sales promotion campaigns aimed at boosting sales, in Indonesia alone the number of orders for MSME products during Shopee Shopping Day 9.9 increased 6 times compared to usual days. Overall, this promotion was able to record a record purchase of 1.8 million in 1 minute.

Shopee as a company engaged in e-commerce, must first know about digital marketing and all its contents because e-commerce is part of digital marketing. Changes in consumer behavior in the modern era are forcing businesses to rethink their marketing strategies in the digital space. Therefore, business people need to understand how digital marketing and social media affect consumer buying interest. Purchase interest will arise if consumers are influenced by the quality of the product, and information about the product, usually prospective consumers have obtained reliable information about the quality of the product. Because it is not uncommon in online buying and selling, the goods that arrive at the buyer's hands are not the same as those listed in the description or pictures in the seller's window. To minimize this, potential consumers often look for information through the review or comment column, as well as the ratings available on the seller's website. Rating is an opinion or assessment about a product given by consumers in the form of a certain scale, usually the rating used in online stores is in the form of stars, the more stars given by consumers, the better the value or quality of the product. These reviews and ratings are from people who have purchased these items.

Hasrul, Suharyati and Sembiring (2021) conducted a study and got the results that rating does not significantly influence buying interest. While research conducted by Kurniawan (2021) states that Rating has a significant effect on consumer buying interest. Research conducted by Izzah Nur Masyithoh & Novitaningtyas

(2021) states that Digital Marketing has a significant effect on consumer buying requests. This study aims to fill in the gaps of previous studies, and to re-examine digital marketing, online customer reviews and ratings.

Based on the background of the problem above, the formulation of the problem in this study is as follows:

3. Does Digital Marketing affect consumer buy interest through Shopee?
4. Does online customer review affect buying interest through Shopee?
5. Does Rating affect buying interest through Shopee?

Based on the background and problems raised, the objectives to be achieved in this research are:

1. To analyze the influence of Digital Marketing on consumer buying interest through Shopee (Study on Narotama University Students).
2. To analyze the influence of online customer reviews on consumer buying interest through Shopee (Study of Narotama University Students).
3. To analyze the influence of Rating on consumer buying interest through Shopee (Study on Narotama University Students).

## **2. Literature Review**

### **2.1. Digital Marketing**

Digital Marketing is a method of promoting a product or service using digital media. In the business world, marketing has a very important role. The right marketing strategy will certainly have a positive impact on the progress of the business itself, one of the marketing methods that has been intensively carried out in the last ten years is digital marketing. According to Dave Chaffey et al. (2013) E-Marketing, internet marketing, or commonly known as digital marketing is the core of e-business, by getting a company closer to customers and understanding customers well, adding value to a product, expanding distribution network and also increase sales figures by conducting e-Marketing activities based on digital media such as: marketing through search engines, online advertising, and affiliate marketing.

### **2.2. Online Customer Review**

Online customer review is a form of electronic word of mouth in online sales, where prospective buyers get information about products from consumers who have felt the benefits of these products, (Fileri, 2015). As a result, it is easier for consumers to find comparisons with similar products sold by other online sellers, this is due to the rapid use of digital marketing so that it provides benefits to consumers, namely consumers do not need to visit different sellers directly (Al-Afifi et al., 2015)

### **2.3. Rating**

Rating is part of a review, but the opinion given by consumers is in the form of a determined scale, usually the rating assigned by online stores is in the form of stars where more stars indicate a better value Lackermair et al (2013). Usually in the rating scale there are one to five stars which will be determined by consumers, if the stars given reach five stars or full then the goods or services being marketed are very good and meet expectations. If the star given by consumers is less than five, of course there are things that are lacking and need to be reviewed from the product.

### **2.4. Buying Interest**

Meanwhile, according to Purbohastuti & Hidayah (2020) Purchase interest is the willingness to have a product, buying interest will arise if consumers have been affected by the quality and quality of a product, information about the product. For example, the price, how to buy, the weaknesses and advantages of the product compared to other brands. Interest to buy a product comes from a basic belief in the product that is accompanied by the ability to buy the product. In addition, buying interest in a product can also occur because of the influence of other people who are trusted by consumers. Buying interest can also grow if a consumer feels very fond of various information about products obtained through advertisements, the experiences of those who use them, and the urgent need for a product, (Simamora, 2001)

## 2.6. Conceptual Framework

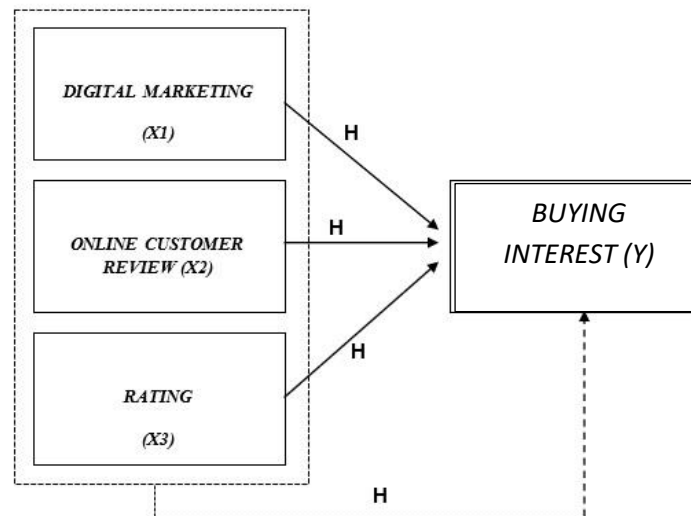


Figure 1 Conceptual Framework

Hypothesis:

H1: Digital Marketing has a partial effect on consumers' buying interest through Shopee (Study at Narotama University Students)

H2: Online customer reviews have a significant effect on consumer buying interest through Shopee (Study at Narotama University Students)

H3 : Rating has a partial effect on consumer buying interest through Shopee (Study on Narotama University Students)

H4 : Digital Marketing, Online Customer reviews and ratings have a simultaneous effect on interest Buy consumers through Shopee (Study on Narotama University Students).

## 3. Research Methodology

### 3.1 Types of research

This type of research is using quantitative research. According to Sugiyono (2015) a quantitative approach is research based on the philosophy of potivism to examine a particular population or sample and take random samples by collecting data using statistical data analysis instruments.

### 3.2 Research Object

In this study, the object of research is Narotama University students' class of 2018/2019 - 2020/2021 who use the Shopee application and have purchased products through the Shopee application.

### 3.3 Population and Sample

The population in this study were Narotama University students. The sampling technique in this research is purposive sampling, namely the sampling technique with certain considerations. The determination of the sample in this study was Narotama students who had purchased products through shopee. The determination of the number of representative samples according to Hair et al. (2014) is the number of statements multiplied by 5, so that the sample in this study is  $\text{Sample} = \text{Number of statements} \times 5 = 21 \times 5 = 105$  The calculation shows that the minimum sample is 105 respondents.

### 3.4 Types, Sources and Techniques of Data Collection

The type of data used in this research is quantitative data, in the form of questionnaires distributed to Narotama University students who use Shopee. In this study, researchers used primary data, primary data is a data source that directly provides data to data collectors. The primary data sources in this study were obtained based on the answers to questionnaires from all respondents, namely Narotama University students who used Shopee. The data collection technique used in this study was using a questionnaire or questionnaire.

### 3.5. Operational Definitions and Variable Indicators

#### 3.5.1. Digital Marketing

Digital marketing is an activity carried out in conveying offers to the intended customer. While the internet is a tool used with a digital model, which can help communicate in a two-way manner. So digital marketing is a unit to offer products virtually so that it can make it easier for sellers and buyers to share information and transact. Digital marketing indicators in this study are as follows:

- a. Incentive Program
- b. Site Design
- c. Interactive

#### 3.5.2. Online Customer Review

Online customer review is a feature found in the marketplace application to describe the advantages and disadvantages of a product. The online customer review indicators in this study are as follows:

- a. Perceived Usefulness
- b. Source credibility
- c. Argument quality

#### 3.5.3. Rating

Ratings are part of the review, but the opinions given by consumers are in the form of a determined scale, usually the rating applied by online stores is in the form of stars, where more stars indicate a better value, Lackermair et al. (2013). The rating indicators in this study are as follows:

- a. Credible
- b. Skill
- c. Number of Ratings

#### 3.5.4. Buying Interest

Buying interest is a desire that arises in a consumer towards a product as a result of observing and studying the product. Consumers who are led to buy a product will show their attention and interest in the product, which is then realized in the form of buying behavior. The indicators of buying interest in this study are as follows:

- a. Transactional interest
- b. Referential interest
- c. Preferential interest
- d. Exploratory interest

### 3.6. Data Analysis Technique

#### 3.6.1. Validity and Reliability Test

Validity test is a test used to measure the validity of the results obtained from distributing questionnaires. Validity shows the degree of accuracy between the data that actually occurs on the object and the data collected by researchers to find the validity of an item (Sugiyono, 2017). The reliability test is a tool to measure the extent to which the measurement results using the same variables will produce the same data (Sugiyono, 2017). To measure the reliability of the variables seen from the Crombach's alpha value of each indicator.

#### 3.6.2. Classic Assumption Test

Classical Assumption Test is an analysis conducted to assess whether in an *Ordinary Least Square* (OLS) linear regression model there are classical assumption problems. There are three types of classical assumption tests that must be carried out to test the data in this study. The classical assumption tests are Normality test, Multicollinearity test and Heteroscedasticity test.

#### 3.6.3. Multiple Linear Regression

Multiple linear analysis is an analytical tool used to obtain an equation that shows how much influence the independent variable has on the dependent variable. The equation formula is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Information :

Y = Buying Interest

$\alpha$  = Standart Error

e = Constant

X1 = Digital marketing  
 X2 = Online Customer Review  
 X3 = Rating  
 $\beta_1$  = Digital marketing variable regression coefficient  
 $\beta_2$  = online customer review variable regression coefficient  
 $\beta_3$  = Regression coefficient of rating variable

### 3.6.4. Hypothesis testing

Hypothesis testing is a test of a statement using statistical methods so that the test results can be declared statistically significant. There are two types of hypothesis testing, namely partial test (T) and simultaneous test (F).

## 4. Results and Discussion

### 4.1. Validity test

#### 4.1.1. Digital Marketing Variable Validity Test (X1)

Table 1. Digital Marketing Variable Validity Test Results (X1)

| Statement   | r-Count | r-Table | Description |
|-------------|---------|---------|-------------|
| Statement 1 | 0,845   | 0,191   | Valid       |
| Statement 2 | 0,722   | 0,191   | Valid       |
| Statement 3 | 0,791   | 0,191   | Valid       |
| Statement 4 | 0,836   | 0,191   | Valid       |
| Statement 5 | 0,661   | 0,191   | Valid       |
| Statement 6 | 0,771   | 0,191   | Valid       |

(Source: SPSS data processed by the author, 2021)

From the table above, the results of the validity test carried out on the Digital Marketing variable (X1) indicate that the value of rcount is greater than rtable (0.191). Thus, it can be concluded that all statements on the Digital Marketing indicators are valid.

#### 4.1.2. Online Customer Review Variable Validity Test (X2)

Table 2. Online Customer Review Variable Validity Test Results (X2)

| Statement   | r-Count | r-Table | Description |
|-------------|---------|---------|-------------|
| Statement 1 | 0,773   | 0,191   | Valid       |
| Statement 2 | 0,838   | 0,191   | Valid       |
| Statement 3 | 0,820   | 0,191   | Valid       |
| Statement 4 | 0,875   | 0,191   | Valid       |
| Statement 5 | 0,802   | 0,191   | Valid       |

(Source: SPSS data processed by the author, 2021)

From the table above, the results of the validity test carried out on the Online Customer Review (X2) variable indicate that the value of rcount is greater than rtable (0.191). Thus, it can be concluded that all statements on the Online Customer Review indicator are valid.

#### 4.1.3. Rating Variable Validity Test (X3)

Table 3. Rating Variable Validity Test Results (X3)

| Statement   | r-Count | r-Table | Description |
|-------------|---------|---------|-------------|
| Statement 1 | 0,820   | 0,191   | Valid       |
| Statement 2 | 0,878   | 0,191   | Valid       |
| Statement 3 | 0,910   | 0,191   | Valid       |
| Statement 4 | 0,902   | 0,191   | Valid       |

(Source: SPSS data processed by the author, 2021)

From the table above, the results of the validity test carried out on the Rating variable (X3) indicate that the value of rcount is greater than rtable (0.191). Thus, it can be concluded that all statements on the Rating indicator are valid.

#### 4.1.4. Buying Interest Variable Validity Test (Y)

Table 4. Buying Interest Variable Validity Test Results (Y)

| Statement   | r-Count | r-Table | Description |
|-------------|---------|---------|-------------|
| Statement 1 | 0,751   | 0,191   | Valid       |
| Statement 2 | 0,854   | 0,191   | Valid       |
| Statement 3 | 0,797   | 0,191   | Valid       |
| Statement 4 | 0,895   | 0,191   | Valid       |
| Statement 5 | 0,766   | 0,191   | Valid       |
| Statement 6 | 0,659   | 0,1909  | Valid       |

(Source: SPSS data processed by the author, 2021)

From the table above, the results of the validity test carried out on the buying interest variable (Y) indicate that the value of rcount is greater than rtable (0.191). Thus it can be concluded that all statements on the buying interest indicator are valid.

#### 4.1.5. Reliability Test

Table 5. Reliability Test Result

| Variable                 | Nilai Alpha Cronbach 's | Koefisien Alpha | Reliability |
|--------------------------|-------------------------|-----------------|-------------|
| Digital Marketing Online | 0.863                   | 0.7             | High        |
| Customer Review          | 0.879                   | 0.7             | High        |
| Rating                   | 0.899                   | 0.7             | High        |
| Buying Interest          | 0.879                   | 0.7             | High        |

(Source: SPSS data processed by the author, 2021)

Based on the data processed by the researcher, it shows that the independent variables consisting of digital marketing, online customer reviews, ratings and the dependent variable, namely buying interest, each have a value greater than 0.7. So this condition indicates that all variables are said to be reliable and can be used for further research.

#### 4.1.6. Normality Test

The normality test used in this study is the Kolmogorov Smirnov Normality Test, provided that the data is normally distributed if the significance value is  $> 0.05$  and the data is not normally distributed, if the significance value is  $< 0.05$ .

Table 6. One-Sample Kolmogorov-Smirnov Test

|                          |                | Unstandardized Residual |
|--------------------------|----------------|-------------------------|
| N                        |                | 106                     |
| Normal Parameters        | Mean           | .0000000                |
|                          | Std. Deviation | 2.31603145              |
| Most Extreme Differences | Absolute       | .077                    |
|                          | Positive       | .045                    |
|                          | Negative       | -.077                   |
| Test Statistic           |                | .077                    |
| Asymp. Sig. (2-tailed)   |                | .140                    |

- Test distribution is Normal
- Calculated from data

c. Lilliefors Significance Correction  
(Source: SPSS data processed by the author, 2021)

From the table of normality test results above, it can be seen that the significance value of the residual variable is 0.140, this means  $0.140 > 0.05$ . Thus, the data is declared to be normally distributed.

#### 4.1.7. Multicollinearity Test

Multicollinearity test was carried out with the aim of testing whether there was a correlation between independent variables in the regression model. If the tolerance value shows the variable has a tolerance value greater than 0.10 and the VIF value is less than 10, it can be concluded that the regression model does not occur multicollinearity.

Table 7. Multicollinearity Test Result

| Model        | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig. | Collinearity Statistics |       |
|--------------|-----------------------------|------------|---------------------------|--|-------|------|-------------------------|-------|
|              | B                           | Std. Error | Beta                      |  |       |      | Tolerance               | VIF   |
| 1 (Constant) | 2.047                       | 1.750      |                           |  | 1.170 | .245 |                         |       |
| X1           | .334                        | .081       | .337                      |  | 4.111 | .000 | .728                    | 1.374 |
| X2           | .407                        | .131       | .308                      |  | 3.102 | .002 | .494                    | 2.023 |
| X3           | .285                        | .133       | .206                      |  | 2.145 | .034 | .530                    | 1.889 |

(Source: SPSS data processed by the author, 2021)

From the table of multicollinearity test results above, it can be seen that the tolerance value of all independent variables in this study is greater than 0.10 and the VIF value of all independent variables in this study is less than 10. So it can be concluded that there is no symptom of multicollinearity between independent variables in regression model in this study.

#### 4.1.8. Heteroscedasticity Test

In this study using the Glejser method to perform the heteroscedasticity test. By regressing the absolute value of the residual to the independent variable. Where it is said that there is no heteroscedasticity if the significance value is  $> 0.05$ .

Table 8. Heteroscedasticity Test Result  
Coefficients<sup>a</sup>

| Model        | Unstandardized Coefficients |            | Standardized Coefficients |  | t      | Sig. |
|--------------|-----------------------------|------------|---------------------------|--|--------|------|
|              | B                           | Std. Error | Beta                      |  |        |      |
| 1 (Constant) | .464                        | 1.002      |                           |  | .463   | .644 |
| X1           | -.081                       | .047       | -.195                     |  | -1.749 | .083 |
| X2           | .064                        | .075       | .115                      |  | .846   | .400 |
| X3           | .131                        | .076       | .225                      |  | 1.717  | .089 |

a. Dependent Variable: ABS\_RES  
(Source: SPSS data processed by the author, 2021)

From the table of heteroscedasticity test results above, it can be seen that the significance value of each variable exceeds 0.05. it can be concluded that there is no symptom of heteroscedasticity in the regression model in this study.

#### 4.1.9. Multiple Linear Regression

Table 9. Multiple Linear Regression Test Result Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant) | 2.047                       | 1.750      |                           | 1.170 | .245 |
|       | X1         | .334                        | .081       | .337                      | 4.111 | .000 |
|       | X2         | .407                        | .131       | .308                      | 3.102 | .002 |
|       | X3         | .285                        | .133       | .206                      | 2.145 | .034 |

(Source: SPSS data processed by the author, 2021)

From the table of data processing results above, the following multiple regression equation is obtained:

$$Y = 2,047 + 0,334 X1 + 0,407 X2 + 0,285 X3 + e$$

#### 4.1.10. Coefficient of Determination Test ( $R^2$ )

Table 10. Coefficient of Determination Test Result ( $R^2$ ) Model Summary<sup>b</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .709 <sup>a</sup> | .502     | .487              | 2.350                      |

a. Predictors: (Constant), X3, X1, X2

(Source: SPSS data processed by the author, 2021)

The interpretation of the correlation coefficient (R) shown in the table above means that there is a significant relationship between the independent variable and the dependent variable. Because the value of R is 0.709 which proves that the relationship between the independent and dependent variables is strong, coefficient of determination  $R^2$  according to the table above is 0.502, meaning that the linear relationship in this case the model is able to explain Purchase Interest (Y) of 50.2%. And the remaining 49.8% is caused by other factors not discussed in this study.

#### 4.1.11. Simultaneous Test (F)

The F test is a statistical test intended to determine whether the independent variables simultaneously affect the dependent variable. This test is done by comparing the value of  $F_{count}$  with  $F_{table}$ . If  $F_{count} > F_{table}$  as a 95% confidence level = 0.05).

Table 11. Simultaneous ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.  |
|-------|------------|----------------|-----|-------------|--------|-------|
| 1     | Regression | 567.921        | 3   | 189.307     | 34.284 | .000b |
|       | Residual   | 563.220        | 102 | 5.522       |        |       |
|       | Total      | 1131.142       | 105 |             |        |       |

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X1, X2

(Source: SPSS data processed by the author, 2021)

From the F test, using a significance value of 0.05 ( $\alpha = 0.05$ ) then the value of  $F_{count}$  is greater than  $F_{table}$  ( $34.284 > 2.70$ ). Because  $F_{count}$  is greater than  $F_{table}$ ,  $H_0$  is rejected and  $H_a$  is accepted. This means that the independent variable has a significant effect on the dependent variable simultaneously.

#### 4.1.12. Partial Test (T)

T-test is done by comparing the value of  $t_{count}$  with  $t_{table}$ . Where if  $t_{count}$  is greater than  $t_{table}$  with a significant value less than 0.05 then  $H_a$  is accepted and  $H_0$  is rejected.

Table 12. Partial Test (T) Result  
Coefficients<sup>a</sup>

| Model | Unstandardized Coefficients |            | Standardized Coefficients |      | t     | Sig. |
|-------|-----------------------------|------------|---------------------------|------|-------|------|
|       | B                           | Std. Error | Beta                      |      |       |      |
| 1     | (Constant)                  | 2.047      | 1.750                     |      | 1.170 | .245 |
|       | X1                          | .334       | .081                      | .337 | 4.111 | .000 |
|       | X2                          | .407       | .131                      | .308 | 3.102 | .002 |
|       | X3                          | .285       | .133                      | .206 | 2.145 | .034 |

(Source: SPSS data processed by the author, 2021)

a. Dependent Variable: Y

Based on the table above obtained from data processing with the SPSS program, the results of the T-Test can be explained as follows:

1. Based on data processing using the SPSS program above, the results obtained regarding the theory of the Digital Marketing variable (X1) have a significant effect on Buying Interest (Y). This can be seen from the significant value of the Digital Marketing variable (X1) which has a significance of  $0.000 < 0.05$  and the value of t count  $>$  t table ( $4.111 > 1.986$ ). So, from these results it is stated that Ha1 is accepted, so it can be concluded that the Digital Marketing variable (X1) has a significant effect on the Purchase Interest variable (Y).
2. Based on data processing using the SPSS program above, the results obtained regarding the theory of the Online Customer Review variable (X2) have a significant effect on Purchase Interest (Y). This can be seen from the significant value of the Online Customer Review variable (X2) which has a significance of  $0.002 < 0.05$  and the value of t count  $>$  t table ( $3.102 > 1.986$ ). So, from these results it is stated that Ha2 is accepted, so it can be concluded that the Online Customer Review variable (X2) has a significant effect on the Purchase Interest variable (Y).
3. Based on data processing using the SPSS program above, the results obtained regarding the theory of the Rating variable (X3) have a significant effect on Purchase Interest (Y). This can be seen from the significant value of the Rating variable (X3) which has a significance of  $0.034 < 0.05$  and the value of t arithmetic  $>$  t table ( $2.145 > 1.986$ ). So, from these results it is stated that Ha3 is accepted, so it can be concluded that the Rating variable (X3) has a significant effect on the Purchase Interest variable (Y).
4. Based on the results of testing using the SPSS program in the table above, it can be seen that the variables Digital Marketing (X1), Online Customer Review (X2) and Rating (X3) have a significant effect on Purchase Interest (Y).

## 6. Conclusion

Based on the results of research conducted with the title of the influence of digital marketing, online customer reviews, and ratings on buying interest through Shopee, a study on Narotama University Students. Based on the data that has been collected and the tests that have been carried out, the researchers can draw conclusions that are in accordance with the formulation of the problem, as follows:

- a. Digital Marketing variable has a positive and significant influence on consumer buying interest (Narotama University Students) through Shopee.
- b. The Online Customer Review variable has a positive and significant influence on consumer buying interest (Narotama University Students) through Shopee.
- c. Rating variable has a positive and significant influence on consumer buying interest (Narotama University Students) through Shopee.
- d. Based on the results of the F test, the Digital Marketing, Online Customer Review and Rating variables together or simultaneously have a positive and significant effect on consumer buying interest (Narotama University Students) through Shopee.

## References

- Al-Afifi, A., Yasmin, A., Tasneem, S., & Fatema, K. (2015). international-journal-of-management-science-and-business-administration International Journal of Management Scie. *International Journal Of Management Science And Business Administration*, 1(5), 69–80.
- Dave Chaffey, Smith, P. R., & Smith, P. R. (2013). *Emarketing Excellence*.
- Filieri, R. (2015). What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM. *Journal of Business Research*, 68(6), 1261–1270. <https://doi.org/10.1016/j.jbusres.2014.11.006>

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis*. Pearson Education Limited.
- Hasrul, A. F., Suharyati, S., & Sembiring, R. (2021). Analisis Pengaruh Online Customer Review dan Rating terhadap Minat Beli Produk Elektronik di Tokopedia. *Konferensi Riset Nasional Ekonomi, Manajemen, Dan Akuntansi*, 2(1).
- Izzah Nur Masyithoh, & Novitaningtyas, I. (2021). Pengaruh Digital Marketing Terhadap Minat Beli Konsumen Pada Marketplace Tokopedia. *Jurnal Manajemen & Bisnis Kreatif*, 7(1). <https://doi.org/10.36805/manajemen.v7i1.1951>
- Kurniawan, B. (2021). Pengaruh Online Customer Reviews Dan Rating Terhadap Minat Pembelian Di Lazada. *Jurnal Ilmiah Bisnis, Manajemen, Dan Akuntansi Universitas Ngudi Waluyo*, 1(2). <https://doi.org/http://dx.doi.org/10.35473/.v1i2.1076>
- Lackermair, G., Kailer, D., & Kanmaz, K. (2013). Importance of Online Product Reviews from a Consumer's Perspective. *Advances in Economics and Business*, 1(1), 1–5. <https://doi.org/10.13189/aeb.2013.010101>
- Purbohastuti, A. wahyuni, & Hidayah, A. A. (2020). Meningkatkan Minat Beli Produk Shopee Melalui Celebrity Endorser. *Jurnal Bisnis Terapan*, 4(1), 37–46. <https://doi.org/10.24123/jbt.v4i1.2480>
- Simamora, B. (2001). *Memenangkan Pasar dengan Pemasaran Efektif dan Profitabel*. PT Gramedia Pustaka Utama.
- Sugiyono. (2015). *Metode penelitian pendidikan : Pendekatan kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta CV.

### Biography

**Gina Alivea Oryza**, born in Surabaya on October 2, 1998. The eldest of two children. Born from a simple family, with the profession of parents of private employees. I completed my education at State Elementary School VI Surabaya in 2009 and continued Junior High School Taruna Jaya I Junior High School until 2012. Then continued Muhammadiyah 1 High School Surabaya until 2015 and enrolled at Narotama University University Surabaya Management S1 Study Program. My work history, I have worked as an admin at a pharmacy in Surabaya for approximately 2 years, and currently I am working as an Operations Admin at a Property Agent company located in Surabaya, I have worked in this company for approximately 3 years. My hope is that I can apply the knowledge that I have gained during my studies to be applied to every job I do, and also with this knowledge, I hope that I can make my parents proud and be useful to many people.

**Sengguruh Nilwardono**, a university lecturer at Narotama University with the functional position of Lecturer. Educational history of S1 S. E at Narotama University in 1995, and S2 M.Psi at the University of 17 August 1945, Surabaya in 2001

# The Effect of Beauty Influencer, Social Media Marketing, and Brand Image on Purchase Decisions for Korea Skincare Products

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## Abstract

This study aims to analyze the influence of beauty influencers, social media marketing, brand image on purchasing decisions of Korean skincare products. The analytical method used in this research is quantitative analysis by conducting a survey on 118 respondents, namely Narotama University students who have purchased Korean skincare and tested with the help of an analytical tool, namely the SPSS program. The results of this study indicate that beauty influencers, social media marketing, and brand image have a simultaneous positive effect on Korean skincare purchasing decisions. Partially it only has a significant effect on social media marketing and brand image variables and for the beauty influencer variable it does not have a partially significant effect on purchasing decisions.

## Keywords:

Beauty Influencer, Brand Image, Buying decision, Social Media Marketing

## 1. Introduction

In the current digital era, the changes that have occurred in human life are growing rapidly. Where there is almost no separation between human needs and existing technology. This is supported by looking at the current era where people do more online activities which are easier to access any information and whenever needed. This also has an impact on the business situation in Indonesia, which has undergone significant changes. In fact, in the midst of the pressure from the Covid-19 pandemic, this manufacturing group was able to make a significant contribution to GDP of 1.92% with its export value reaching USD 1.4 billion. With this percentage, Indonesia is a potential market for cosmetic industry entrepreneurs both nationally and internationally.

To get healthy and glowing facial skin, of course, you have to go through regular maintenance using a formula that is good, safe, and not harmful to the body. Using natural ingredients is one of the most popular skincare trends. Social media is one of the important aspects of digital marketing that companies must consider for marketing today. Social media is a term used to describe a type of media that is based on conversions and interactions between people online. Social media marketing has become a very important subject to analyze. Internet users who visit Youtube are not just for video entertainment, but also to get information and as a medium of learning. Vlogs or video blogs, is a trending term among Youtube viewers, which contains various kinds of videos about daily activities, traveling, culinary, beauty, automotive, to life hacks. Through social media, it is easier for women to get information about K-beauty, be it corporate social media, or personal social media belonging to beauty influencers.

Another factor that can influence purchasing decisions is brand image. Brand for a company is very important because it involves a company's reputation. According to Kotler & Keller brand image is describing the extrinsic nature of a product or service, including the way in which the brand seeks to meet the psychological or social needs of customers. Students are one of the main segments in marketing facial skin care beauty products in order to appear more beautiful, clean, and well-groomed.

Based on the background of the problem above, the formulation of the problem in this study is as follows:

1. Does Beauty Influencer affect Korean Skincare Purchase Decisions for Narotama University Surabaya students?
2. Does Social Media Marketing Affect Korean Skincare Purchase Decisions for Narotama University Surabaya students?
3. Does Brand Image affect Korean Skincare Purchase Decisions for Narotama University Surabaya students?
4. Do Beauty Influencers, Social Media Marketing, and Brand Image simultaneously affect Korean Skincare Purchase Decisions for Narotama University Surabaya students?

Based on the background and problems raised, the objectives to be achieved in this research are:

5. To analyze the influence of Beauty Influencers on Korean Skincare Purchase Decisions for Narotama University Surabaya students
6. To analyze the influence of Social Media Marketing on Korean Skincare Purchase Decisions for Narotama University Surabaya students
7. To analyze the effect of Brand Image on Korean Skincare Purchase Decisions for Narotama University Surabaya students
8. To analyze the effect of Beauty Influencers, Social Media Marketing, and Brand Image simultaneously on Korean Skincare Purchase Decisions at Narotama University Surabaya students

## **2. Literature Review**

### **2.1. Beauty Influencers**

Beauty influencers itself is a profession carried out by someone who is specifically in the world of beauty and is much liked by women on social media. In addition, (Tuten, 2008) Beauty influencers themselves are someone who is considered a source of information, this is because they have extensive knowledge and a strong communication network, so that they are able to influence other people's purchasing decisions for something either directly or indirectly. According to Widiastuti et al. (2019) the activities carried out by Beauty influencers or who can be referred to as Beauty Vloggers are by uploading videos such as sharing how to apply makeup or information on a beauty product through tutorials or by reviewing with clear presentations and attractive visuals as a way to influence women to be interested in wearing these beauty products. Therefore, this is what causes many beauty brands to look to beauty influencers to promote their products on social media such as Instagram and Youtube to attract female audiences by providing beauty content created such as product reviews containing beauty information presented in the form of tutorials. , swatches,

### **2.2. Social Media Marketing**

Social media marketing is a form of digital marketing that uses social media and networking websites to promote an organization's products or services through paid and organic means. Social media marketing involves activities like building a presence on social networks, spreading brand awareness, engaging prospects and customers through content, driving traffic to websites, and so on. According to Gunelius et al., (2011) social media marketing is a form of direct or indirect marketing that is used to build awareness, recognition, memory, and action for brands, businesses, products, people, or other entities and is carried out using tools from the web. such as blogging, microblogging, social networking, social bookmarking, and content sharing.

### **2.3. Brand Image**

According to Sangadji et al. (2013) defining a brand as a symbol and indicator of the quality of a product, this opinion is similarly expressed by Aaker (1997) which states that "a brand is a distinguishing name and/or symbol (such as a logo, stamp, or packaging) with the intent of identifying the goods or services of a particular seller or seller in a manner capable of distinguishing them from those of competitors." Supriyadi et al. (2016) interpret brand image as an image of a product in the minds of consumers in bulk. Everyone will have the same image of a brand. According Kotler et al. (2009) brand image is the perception and belief of consumers as a reflection of the associations that arise in the minds of consumers when remembering a brand. So it can be explained that brand image is the impression that is felt or experienced by consumers about a brand that is in memory. According to Sangadji et al. (2013) "brand image is a unique set of associations that marketers want to create or maintain.

### **2.4. Buying Decision**

According to Putri, (2017) the purchase decision is a process in a real purchase, whether to buy or not. Purchasing decisions are choosing between two or more alternative purchase options, meaning that a person can make a decision if several alternative choices are available. The decision to buy can also lead to how the decision-making process is carried out. There are various factors that influence the consumer's process in making a purchase of a product or service, usually consumers always consider the quality, price and products that are already known to the public.

## 2.5. Conceptual Framework

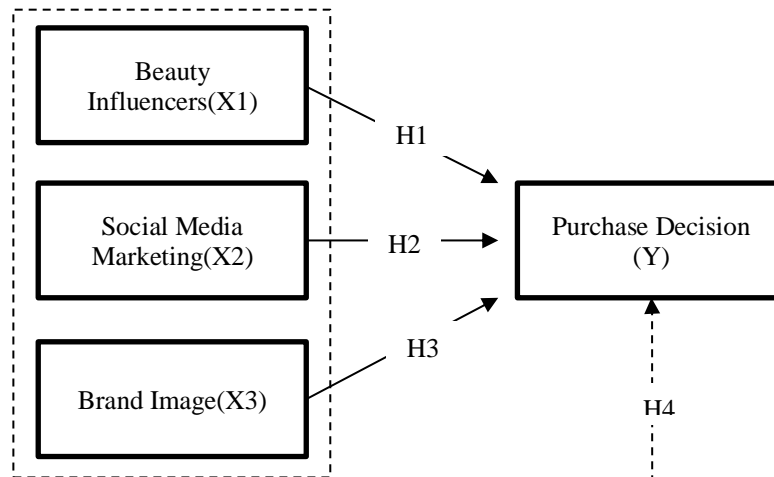


Figure 1. conceptual framework

### Hypothesis:

H1 : Beauty Influencers partially influence the Korean Skincare Product Purchase Decision for Narotama University Surabaya Students

H2 : Social Media Marketing has partial effect on Korean Skincare Product Purchase Decisions for Narotama University Surabaya Students

H3 : Brand Image has a partial effect on Korean Skincare Product Purchase Decisions for Narotama University Surabaya Students

H4 : Beauty Influencer, Social Media Marketing, and Brand Image have a simultaneous effect on Korean Skincare Product Purchase Decisions at Narotama University Surabaya Students

## 3. Research Methodology

### 3.1. Types of Research

This type of research is using quantitative research. According to Sugiyono, (2015) a quantitative approach is research based on the philosophy of positivism to examine a particular population or sample and take random samples by collecting data using statistical data analysis instruments.

### 3.2. Research Object

In this study, the research object was Narotama University students and several Korean skincare brands that were the object of this research: Laneige, Nature Republic, Some By Mi, COSRX, and Etude House.

### 3.3. Population and Sample

The population in this study were Narotama University students. The sampling technique in this research is purposive sampling, namely the sampling technique with certain considerations. The sample determination in this study was Narotama students who had purchased Korean skincare products. Determination of the number of representative samples according to Hair (2014) is the number of statements multiplied by 5, so the sample in this study is  $\text{Sample} = \text{Number of statements} \times 5 = 19 \times 5 = 95$ . The calculation shows that the sample made at least 95 respondents.

### 3.4. Types, Sources and Techniques of Data Collection

The type of data used in this study is quantitative data, in the form of questionnaires distributed to Narotama University students who have purchased Korean skincare products. In this study, researchers used primary data, primary data is a data source that directly provides data to data collectors. The primary data source in this study was obtained based on questionnaire answers from all respondents, namely Narotama University students who had bought Korean skincare products. The data collection technique used in this study was using a questionnaire or questionnaire.

### **3.5. Operational Definitions and Variable Indicators**

#### **3.5.1. Beauty Influencers**

Beauty influencer is a profession carried out by someone who is specifically in the world of beauty and is much liked by women on social media. In addition, Tuten, (2008) Beauty influencers themselves are someone who is considered a source of information, this is because they have extensive knowledge and a strong communication network, so that they are able to influence other people's purchasing decisions for something either directly or indirectly.

The beauty influencer indicators in this study are as follows:

- a. Trustworthiness
- b. Expertise
- c. Attractiveness

#### **3.5.2. Social Media Marketing**

Social media marketing is a form of digital marketing that uses social media and networking websites to promote an organization's products or services through paid and organic means. Social media marketing involves activities such as building a presence on social networks, spreading brand awareness, engaging prospects and customers through content, driving traffic to websites, and so on. The indicators of social media marketing in this study are as follows:

- a. Online Communities
- b. Interaction
- c. Sharing of Content
- d. Accessibility

#### **3.5.3. Brand Image**

Rangkuti, (2008) Brand Image or brand image is a set of brand associations that are formed and attached to the minds of consumers. The rating indicators in this study are as follows:

- a. Corporate Image
- b. Product Image
- c. User Image

#### **3.5.4. Buying Decision**

According to Swastha and Handoko Putri, (2017) the purchase decision is a process in a real purchase, whether to buy or not. Purchasing decisions are choosing between two or more alternative purchase options, meaning that a person can make a decision if several alternative choices are available. The decision to buy can also lead to how the decision-making process is carried out. Indicators of purchasing decisions in this study are as follows:

- a. Stability on a product
- b. Habits in buying and using products
- c. Give recommendations to others
- d. Product evaluation
- e. Make a repeat purchase

### **3.6. Data Analysis Technique**

#### **3.6.1. Validity and Reliability Test**

Validity is a level that measures the characteristics that exist in the phenomenon in research. According to Lerbin R. & Risman, (2007) the validity of an instrument is related to the instrument's ability to measure or reveal the characteristics of the variables that are intended to be measured. An instrument is said to be valid if it is able to reveal data from the variables studied appropriately. Meanwhile, it is said to be invalid if it is not able to reveal data from the variables studied appropriately.

According to Sumadi, (2018) reliability shows the extent to which the measurement results with this tool can be trusted. The measurement results must be reliable in the sense that they must have a level of consistency and stability. Reliability testing can be calculated using the Cronbach Alpha formula. To measure the reliability of the variables seen from the value of Cronbach's alpha each indicator using SPSS.

#### **3.6.2. Classic Assumption Test**

Classical Assumption Test is an analysis conducted to assess whether in an Ordinary Least Square (OLS) linear regression model there are classical assumption problems. There are three types of classical assumption tests

that must be carried out to test the data in this study. The classical assumption tests are Normality test, Multicollinearity test and Heteroscedasticity test.

### 3.6.3. Multiple Linear Regression Analysis

Multiple linear analysis is an analytical tool used to obtain an equation that shows how much influence the independent variable has on the dependent variable. The equation formula is:

$$Y = + 1 X_1 + 2 X_2 + 3 X_3 + e$$

Description :

Y = Purchase Decision

= Standard Error

e = Constant

X<sub>1</sub> = Beauty Influencer

X<sub>2</sub> = Social Media Marketing

X<sub>3</sub> = Brand Image

1 = Digital marketing variable regression coefficient

2 = online customer review variable regression coefficient

3 = Regression coefficient of rating variable

### 3.6.4. Hypothesis Testing

Hypothesis testing is a test of a statement using statistical methods so that the test results can be declared statistically significant. There are two types of hypothesis testing, namely partial test (T) and simultaneous test (F).

## 4. Results and Discussion

### 4.1. Validity test

#### 4.1.1. Beauty Influencer Variable Validity Test (X1)

Table 1. Beauty Influencer Variable Validity Test Results (X1)

| No. Items | Correlation | Rtable | Description |
|-----------|-------------|--------|-------------|
| X1.1      | 0.68        | 0.1809 | Valid       |
| X1.2      | 0.736       | 0.1809 | Valid       |
| X1.3      | 0.458       | 0.1809 | Valid       |
| X1.4      | 0.576       | 0.1809 | Valid       |
| X1.5      | 0.741       | 0.1809 | Valid       |

(Source: SPSS data processed by the author, 2022)

From the table above, the results of the validity test carried out on the variable beauty influencers (X1) shows that the value of rcount is greater than rtable (0.1809). Thus, it can be concluded that all statements on the beauty influencer indicator are valid.

#### 4.1.2. Social Media Marketing Variable Validity Test (X2)

Table 2 Results of Social Media Marketing Variable Validity Test (X2)

| No. Items | Correlation | R Table | Description |
|-----------|-------------|---------|-------------|
| X2.1      | 0.767       | 0.1809  | Valid       |
| X2.2      | 0.775       | 0.1809  | Valid       |
| X2.3      | 0.751       | 0.1809  | Valid       |
| X2.4      | 0.752       | 0.1809  | Valid       |
| X2.5      | 0.674       | 0.1809  | Valid       |

(Source: SPSS data processed by the author, 2022)

From the table above, the results of the validity test carried out on the variable Social Media Marketing (X2) shows that the value of rcount is greater than rtable (0.1809). Thus it can be concluded that all statements on the Social media Marketing indicator are valid.

#### 4.1.3. Brand Image Variable Validity Test (X3)

Table 3. Brand Image Variable Validity Test Results (X3)

| No. Items | Correlation | R Table | Description |
|-----------|-------------|---------|-------------|
| X3.1      | 0.753       | 0.1809  | Valid       |
| X3.2      | 0.72        | 0.1809  | Valid       |
| X3.3      | 0.654       | 0.1809  | Valid       |
| X4.4      | 0.725       | 0.1809  | Valid       |

(Source: SPSS data processed by the author, 2022)

From the table above, the results of the validity test carried out on the variable Brand Image (X3) shows that the value of rcount is greater than rtable (0.1809). Thus, it can be concluded that all statements on the Brand Image indicator are valid.

#### 4.1.4. Purchasing Decision Variable Validity Test (Y)

Table 4 Results of the Validity Test of the Purchase Decision Variable (X3)

| No. Items | Correlation | R Table | Description |
|-----------|-------------|---------|-------------|
| Y.1       | 0.443       | 0.1809  | Valid       |
| Y.2       | 0.817       | 0.1809  | Valid       |
| Y.3       | 0.723       | 0.1809  | Valid       |
| Y.4       | 0.787       | 0.1809  | Valid       |
| Y.5       | 0.736       | 0.1809  | Valid       |

(Source: SPSS data processed by the author, 2021)

From the table above, the results of the validity test carried out on the variable Buying decision (Y) shows that the value of rcount is greater than rtable (0.1809). Thus, it can be concluded that all statements on the Purchasing Decision indicator are valid.

## 4.2. Reliability Test

Table 5 Reliability Test Results

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .851             | 19         |

(Source: SPSS data processed by the author, 2021)

Based on the table above, it can be seen that Cronbach's Alpha value is 0.851. The variable research instrument was declared reliable and worthy of being used as a variable in the measurement of this study.

## 4.3. Normality Test

The normality test used in this study is the Kolmogorov Smirnov Normality Test, provided that the data is normally distributed if the significance value is  $> 0.05$  and the data is not normally distributed, if the significance value is  $< 0.05$ .

Table 6 One-Sample Kolmogorov-Smirnov Test

|                          |                | Unstandardized Residual |
|--------------------------|----------------|-------------------------|
| N                        |                | 106                     |
| Normal Parameters        | Mean           | .0000000                |
|                          | Std. Deviation | 2.31603145              |
|                          |                |                         |
| Most Extreme Differences | Absolute       | .077                    |
|                          | Positive       | .045                    |
|                          | Negative       | -.077                   |
| Test Statistic           |                | .077                    |
| Asymp. Sig. (2-tailed)   |                | .140                    |

- Test distribution is normal
- Calculated from data
- Lilliefors Significance Correction

Table 7 Normality Test Results  
One-Sample Kolmogorov-Smirnov Test

|                          |                | Unstandardized Residual |
|--------------------------|----------------|-------------------------|
| N                        |                | 118                     |
| Normal Parameters, b     | mean           | 0E-7                    |
|                          | Std. Deviation | 1.83995934              |
|                          |                |                         |
| Most Extreme Differences | Absolute       | .077                    |
|                          | Positive       | .042                    |
|                          | negative       | -.077                   |
| Kolmogorov-Smirnov Z     |                | .838                    |
| asyp. Sig. (2-tailed)    |                | .484                    |

- Test distribution is Normal.
- Calculated from data.

(Source: SPSS data processed by the author, 2022)

From the table of normality test results above, it can be seen that the significance value of the residual variable is 0,484 this means  $0.484 > 0.05$ . Thus, the data is declared to be normally distributed.

#### 4.4. Multicollinearity Test

Multicollinearity test was carried out with the aim of testing whether there was a correlation between independent variables in the regression model. If the tolerance value shows the variable has a tolerance value greater than 0.10 and the VIF value is less than 10, it can be concluded that the regression model does not occur multicollinearity.

Table 8 Multicollinearity Test Results

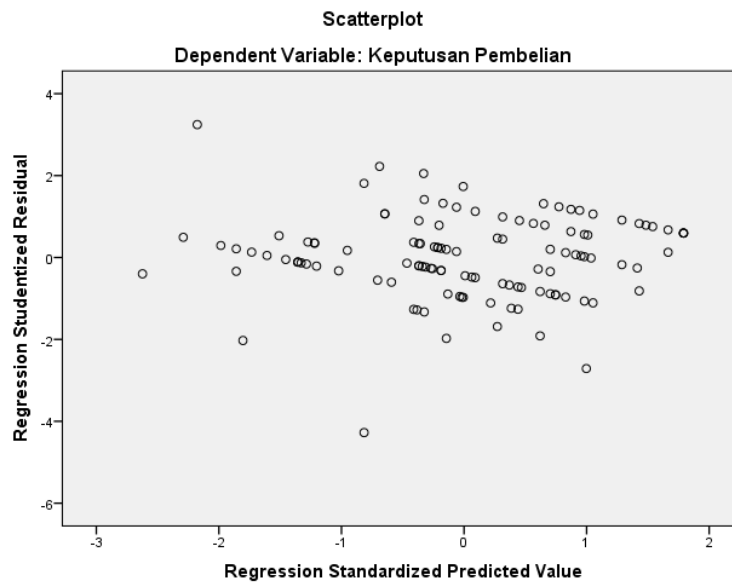
| Model        | Collinearity Statistics |       |
|--------------|-------------------------|-------|
|              | Tolerance               | VIF   |
| (Constant)   |                         |       |
| Beauty       |                         |       |
| Influencers  | .703                    | 1.423 |
| Social Media |                         |       |
| Marketing    | .768                    | 1.302 |
| Brand Image  | .797                    | 1.255 |

(Source: SPSS data processed by the author, 2022)

From the table of multicollinearity test results above, it can be seen that the tolerance value of all independent variables in this study is greater than 0.10 and the VIF value of all independent variables in this study is less than 10. So, it can be concluded that there is no symptom of multicollinearity between independent variables in the regression model in this study.

**4.5. Heteroscedasticity Test**

The basis for decision making on the Heteroscedasticity test is the Scatterplots method. According to Ghozali, (2011) there is no heteroscedasticity, if there is no clear pattern (wavy, widened, then narrowed) in the scatterplots image, and the points spread above and below the number 0 on the Y axis.



(Source: SPSS data processed by the author, 2022)

Figure 2 Heteroscedasticity Test Results

From the table of heteroscedasticity test results above, it can be seen that the significance value of each variable exceeds 0.05. it can be concluded that there is no symptom of heteroscedasticity in the regression model in this study.

**4.6. Multiple Linear Regression**

Table 9 Results of Multiple Linear Regression Analysis

| Model                    | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|--------------------------|-----------------------------|------------|---------------------------|-------|------|
|                          | B                           | Std. Error | Beta                      |       |      |
| (Constant)               | 4.085                       | 2.021      |                           | 2.021 | .046 |
| Beauty Influencers       | .213                        | .108       | .185                      | 1971  | .051 |
| 1 Social Media Marketing | .148                        | .065       | .206                      | 2.286 | .024 |
| Brand Image              | .476                        | .139       | .302                      | 3.414 | .001 |

(Source: SPSS data processed by the author, 2022)

From the table of data processing results above, the following multiple regression equation is obtained:

$$Y = 4.085 + 0.231 X_1 + 0.148 X_2 + 0.476 X_3$$

**4.7. Coefficient of Determination Test (R<sup>2</sup>)**

Table 10 Results of the Coefficient of Determination Model Summaryb

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1     | .539a | .291     | .272              | 1,864                      |

- a. Predictors: (Constant), Brand Image, Social Media Marketing, Beauty Influencer
- b. Dependent Variable: Purchase Decision

(Source: SPSS data processed by the author, 2022)

The interpretation of the correlation coefficient (R) shown in the table above means that there is a significant relationship between the independent variable and the dependent variable. Because the value of R is 0.539 which proves that the relationship between the independent and dependent variables is strong. coefficient of determination R<sup>2</sup> according to the table above is 0.272, meaning that the linear relationship in this case the model is able to explain the Purchase Decision (Y) of 27.2%. And the remaining 72.8% is caused by other factors not discussed in this study.

#### 4.8. Simultaneous Test F

The F test is a statistical test intended to determine whether the independent variables simultaneously affect the dependent variable. This test is done by comparing the value of Fcount with Ftable. If Fcount > Ftable as a 95% confidence level = 0.05).

Table 11 Simultaneous Test Results (F)

| ANOVA <sup>a</sup> |                |     |             |        |       |
|--------------------|----------------|-----|-------------|--------|-------|
| Model              | Sum of Squares | df  | Mean Square | F      | Sig.  |
| 1 Regression       | 162,419        | 3   | 54,140      | 15,582 | .000b |
| Residual           | 396,098        | 114 | 3.475       |        |       |
| Total              | 558,517        | 117 |             |        |       |

a. Dependent Variable: Purchase Decision

b. Predictors: (Constant), Brand Image, Social Media Marketing, Beauty Influencer

(Source: SPSS data processed by the author, 2022)

Based on the data in the table above, in the Sig. it is known that the value of sig. 0.000 < 0.05, then the independent variables Beauty Influencer (X1), Social Media Marketing (X2), and Brand Image (X3) simultaneously affect the dependent variable, namely Purchase Decision (Y1).

#### 4.9. T. Partial Test

T test is done by comparing the significance value. Where if the significance value < 0.05 means that each independent variable partially has a significant effect on the dependent variable.

Table 12 Partial Test Results (T)

| Coefficients <sup>a</sup> |                        |       |      |
|---------------------------|------------------------|-------|------|
| Model                     |                        | t     | Sig. |
| 1                         | (Constant)             | 2.021 | .046 |
|                           | Beauty Influencers     | 1.971 | .051 |
|                           | Social Media Marketing | 2.286 | .024 |
|                           | Brand Image            | 3.414 | .001 |

a. Dependent Variable: Purchase Decision

(Source: SPSS data processed by the author, 2022)

Based on the data in table 4.38 above, it is known that:

- sig value. The Beauty Influencer (X1) variable is 0.051 > 0.05, so it has no partial effect
- sig value. Social Media Marketing (X2) variable is 0.024 < 0.05, so it has a partial effect
- sig value. The Brand Image (X3) variable is 0.001 < 0.05, so it has a partial effect

## 5. Conclusion

- The study was conducted using multiple linear regression equations, this study shows the simultaneous influence of Beauty Influencers, Social Media Marketing, and Brand Image on purchasing decisions.
- Partially it only has a significant effect on Social Media Marketing and Brand Image variables and for the Beauty Influencer variable it does not have a partially significant effect on Purchase Decisions.
- With the results of Adjusted R square that Beauty Influencers, Social Media Marketing, and Brand Image on purchasing decisions are 27.2% of Purchase Decisions. And the remaining 72.8% is influenced by other variables not examined in this study.

**Referencess**

- Aaker, D. A. (1997). *Menejemen Ekuitas Merek*. Mitra Utama.
- Ghozali, I. (2011). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang : BP Universitas Diponegoro – *Teorionline*. BP Universitas Diponegoro.
- Gunelius, S., York, N., San, C., Lisbon, F., Madrid, L., City, M., New, M., San, D., Singapore, J. S., & Toronto, S. (2011). *SOCIAL MEDIA MARKETING FAST AND FREE*.
- Hair. (2014). *Multivariate Data Analysis, New International Edition*. Pearson.
- Kotler, P., Maulana, A., Sabran, B., & Keller, K. L. (2009). *Manajemen Pemasaran* (13th ed.). Erlangga.
- Lerbin R., A. R., & Risman, S. (2007). *Riset Pemasaran : Teori dan Praktik*. Ghalia Indonesia.
- Putri, B. R. (2017). *Manajemen Pemasaran*. Universitas Udayana.
- Rangkuti, F. (2008). *Analisis SWOT Teknik Membedah Kasus Bisnis : Reorientasi Konsep Perencanaan Strategis Untuk Menghadapi Abad 21*. Gramedia Pustaka Utama.
- Sangadji, Mamang, E., WK, S., & Nikoemus. (2013). *Perilaku Konsumen : Pendekatan Praktis Disertai Himpunan Jurnal Penelitian*. Andi.
- Sugiyono. (2015). *Metode Penelitian Kuantitatif, Kualitatif dan Kombinasi (Mixed Methods)*. Alfabeta.
- Sumadi, S. (2018). *Metode Penelitian*. 28, 1–180.
- Supriyadi, S., Fristin, Y., & K.N, G. I. (2016). Pengaruh Kualitas Produk Dan Brand Image Terhadap Keputusan Pembelian. *Jurnal Bisnis Dan Manajemen*, 3(1). <https://doi.org/10.26905/JBM.V3I1.81>
- Tuten, T. L. (2008). *Advertising 2.0 : social media marketing in a Web 2.0 world*. 202.
- Widiastuti, M., Danial, A., Oktiawanti, L., Kurniawan, D., Masyarakat, J. P., & Keguruan, F. (2019). Pelatihan Menjahit Dalam Meningkatkan Motif Berwirausaha Di Skb Kota Tasikmalaya. In *Jendela PLS: Jurnal Cendekiawan Ilmiah Pendidikan Luar Sekolah* (Vol. 4, Issue 2). <https://doi.org/10.37058/JPLS.V4I2.1604>

# The Effect of Good Corporate Governance on Financial Performance at PT. Bank Bri, Mandiri and Bni (Persero) Conventional and Sharia Tbk Listed on the Indonesia Stock Exchange 2016 – 2020

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## Abstract

Study this aim for find influence of GCG (board of directors, board of commissioners and audit committee) to performance finance (ROA) at PT. Bank BRI, BRI sharia, Mandiri, Mandiri sharia, BNI and BNI sharia Tbk. study this use analysis descriptive With quantitative data, the data source used in this study is a secondary data source. Secondary data is data taken from the financial statements of PT Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah which are listed on the Indonesia Stock Exchange in 2017 6-20 20 published by the Indonesia Stock Exchange through the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)). The data analysis technique in this study uses the classical assumption test, to test the hypothesis using multiple linear analysis tests and T tests. The results showed that partially the Board of Directors (DD) partially had a significant effect on Financial performance (NPM) or  $H_{01}$  is rejected and  $H_{a1}$  is accepted. Due to the value of sig. DD is smaller than 0.05, i.e.  $0.000 < 0.05$  and the t-count value is greater than t-table, i.e.  $4.101 > 2.06$ . The Board of Commissioners (DK) partially has no effect on Financial Performance (NPM) or  $H_{02}$  is accepted and  $H_{a2}$  is rejected. Due to the value of sig. DK is greater than 0.05, which is  $0.268 > 0.05$  and the t-count value is smaller than t-table, namely  $1.131 < 2.06$ . The Audit Committee (KA) partially has no significant effect on Financial Performance (NPM) or  $H_{03}$  is accepted and  $H_{a3}$  is rejected. Because the sig KA value is greater than 0.05, namely  $0.07 > 0.05$  and the t arithmetic value is smaller than t table, namely  $1.888 < 2.06$

## Keywords:

Good Corporate Governance (GCG), Financial Performance.

## 1. Introduction

Banking is a managed financial entity based on trust user service or customer in embed the funds and is foundation in the process of development Indonesian economy. according to Law of the Republic of Indonesia No. 10 of 1998 concerning Banking Function main Indonesian banking aims for Upgrade well-being people through disbursement of funds from society. Stability economy a country is influenced by good bad management and distribution of banking funds from society, then from Banks need a performance system stable finance in order to fulfil purpose from the above bank function.

Currently, Indonesia is hit by the Covid-19 pandemic. Situation this is very influential to stability economy and impact significant to the banking sector. Given that bank function as tool government for guard stability economy monetary and finance so this is Duty big for banks to minimize slump economy. If Indonesia 's economy is declining so activity Public in the velocity of money will decreased, because Public will minimize less spending \_ important. The public will also more often take money from the bank save. more no interested invest or take loan from the bank. Impact bad other if economy decrease is customer will difficulty in pay credit, thing this Becomes problem for the banking world in his obligations maintain and/ or Upgrade level performance finance as effort for guard trust and interest society.

Good Corporate Governance System take effect to system performance something company which means creditors and holders of invest stock will believe and feel protected by the company. for establish good management governance needed planned thoughts from the Corporate Governance in it There is a board of directors, board of commissioners and audit committee.

PT Bank BRI, BRI sharia, Mandiri, Mandiri sharia, BNI and BNI syariah is an incorporated bank in SOEs. As described \_ on that current state of Indonesia this currently fight overcome the impact of covid-19 on the economy including BRI, BRI sharia, Mandiri , Mandiri sharia, BNI and BNI syariah . Slowdown economy due to the emerging COVID -19 since march 2020 made profit Bank Rakyat Indonesia's net is eroded enough in. Throughout in 2020 Bank BRI, Mandiri and BNI experienced drop profit clean. BRI experienced drop by 45.70%

compared to year previous (2019) ([cnbcindonesia.com](http://cnbcindonesia.com)). Mandiri Bank experience drop profit clean by 38% ([detik.com](http://detik.com)). and Bank BNI experienced drop profit clean by 78.7% ( [Financial Bisnis.com](http://FinancialBisnis.com) ). BNI Syariah Bank has experienced drop profit clean by 15.42% ( [Republika .co.id](http://Republika.co.id) ). could concluded that the above bank experience drop significant of 2019 to 2020 due to the COVID -19 pandemic.

Enhancement efficiency economy required connection good Among management company, holders stock and stockholders other is key from implementation of Good Corporate Governance. Application of good corporate governance is answers and solutions the right one in miss from entanglement crisis moderate economy \_ hit by Indonesia.

Based on background the back that has been explained, problem in study this is as following :

1. How influence size of the board of directors to performance finance on. PT Bank BRI, BRI sharia, Mandiri , Mandiri sharia, BNI and BNI sharia?
2. How the influence of the board of commissioners to performance finance at PT Bank BRI, BRI sharia, Mandiri , Mandiri sharia, BNI and BNI sharia?
3. How influence audit committee on performance finance at PT Bank BRI, BRI sharia, Mandiri , Mandiri sharia, BNI and BNI sharia?
4. Based on existing theories, then \_ submitted a number of proposed hypothesis \_ in study this, namely :
5.  $H_{01}$  : the size of the board of directors has no significant effect on the financial performance of PT. Banks BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah listed on the IDX in 2016-2020.
6.  $H_{a1}$  : the size of the board of directors has a significant effect on the financial performance of PT. Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah listed on the IDX in 2016-2020.
7.  $H_{02}$  : the size of the board of commissioners has no significant effect on the financial performance of PT. Banks BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah listed on the IDX in 2016-2020
8.  $H_{a2}$  : the size of the board of commissioners has a significant effect on the financial performance of PT. Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah which are listed on the IDX in 2016-2020.
9.  $H_{03}$  : the size of the audit committee has no significant effect on the financial performance of PT. Banks BRI, BRI Syariah, Mandiri, Mandiri Syari'ah, BNI and BNI Syariah listed on the IDX in 2016-2020
10.  $H_{a3}$  : the size of the audit committee has a significant effect on the financial performance of PT. Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah listed on the IDX in 2016-2020.

## 2. Method

Researcher use method descriptive with quantitative data that is in calculate existing data in report finance or annual something acquired company for complete something problem in accordance with purpose researcher. Researcher use method assisted data analysis use SPSS software.

### 2.1. Object and Sample

Object study is object determined by the researcher in the research that will studied and understood so that they can interesting conclusion. Researcher take object research at PT Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah. With method collect and analyze report finance and reports annual PT Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI and BNI Syariah in 2016 – 2020 which are listed on the stock exchange indonesian. (Sugiyono, 2016) .

### 2.2. Data Analysis

Method analysis is working method \_ complete problem in testing hypotheses carried out use data analysis. Researcher use method descriptive statistical analysis with method analysis multiple linear regression. Which later analyzed through output result with using the SPSS program.

## 2.3. Descriptive Research Data

### 2.3.1. Board of Directors (DD)

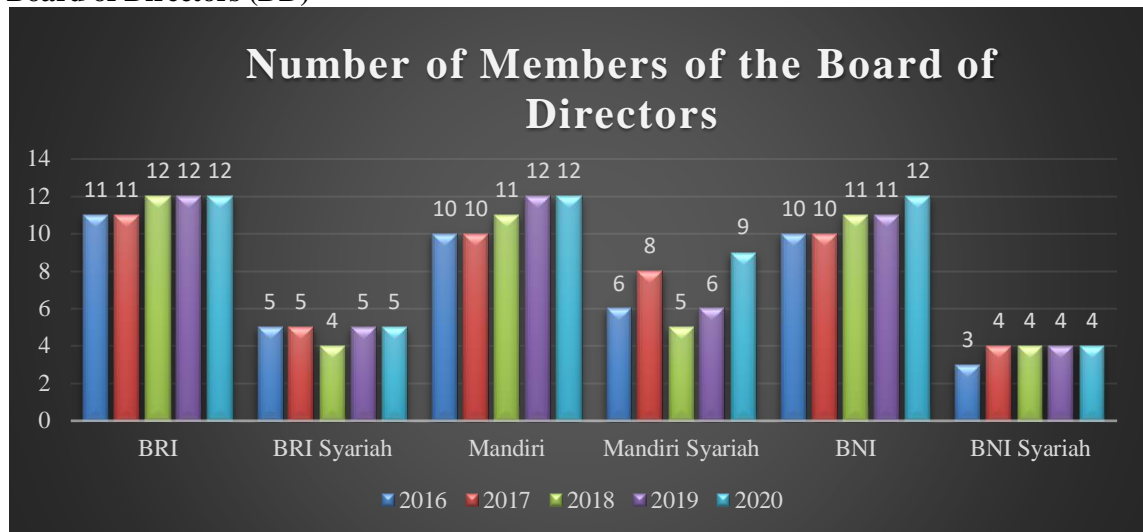


Figure 1. Bar Chart Amount Member of the Board of Directors

Could seen in the diagram above that number of board of directors in board of directors is part company responsible answer full on management company in doing interest company, as well as Becomes representative company inside \_ nor outside court based on purpose company and terms budget base.

1. Bank BRI from 2016 to 2017 were 11 members and experienced \_ increase of 1 member in 2018-2020.
2. Bank BRI Syariah in 2016 and 2017 amounted to 5 members, experiencing 1 member down that is became 4 members in \_ 2018, while in 2019 and 2020 experienced increase back 1 member to 5 members.
3. Bank Mandiri in 2016-2017 amounted to 10 members, experiencing increase of 1 member in 2018 namely become 11 members, and experience increase Back in 2019-2020 to 12 members.
4. Bank Mandiri Syariah in 2016 amounted to 6 members of the board of directors, experiencing increase by 2 members became 8 members in 2017, in 2018 experienced drop became 5 members, and happened increase by 1 member Back in 2019 to 6 members, then in 2020 experiencing \_ increase by 3 members from in 2019 became 9 members.
5. Bank BNI in 2016-2017 number of board of directors by 10 members experience 1 member increase in 2018 and 2019 to 11 members then in 2020 happens \_ add 1 member become 12 members
6. Bank BNI Syariah in 2016 had 3 members of the board of directors and happened addition of 1 member in 2017-2020 to 4 members of the board of directors.

### 2.3.2. Board of Commissioners (DK)

Board of commissioners is members of the board of commissioners who do not have connection with company. Formation of the board of commissioners is one of the pillars of implementing governance company (Good Corporate Governance) that is expected working as tool for convince investors that they will accept return on funds that have been they investment.

$$\text{Dewan Komisaris} = \text{Jumlah Anggota Dewan Komisaris}$$

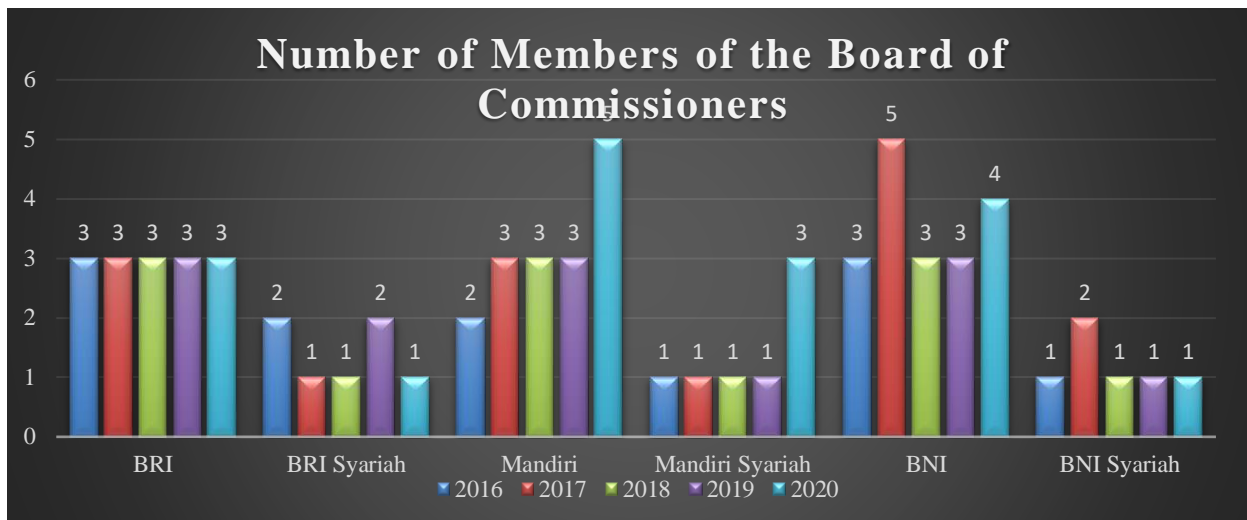


Figure 2 Diagram stem Amount Member of the Board of Commissioners

Could see in the diagram above that number of commissioners on

1. Bank BRI from 2016-2020 has \_ total board of commissioners as many as 3 members and not experience increase
2. Bank BRI Syariah in 2016 has 2 members of the board of commissioner’s experience decreased 1 member in 2017-2018 to 1 member, in 2019 back \_ occur add 1 member became 2 members, then in 2020 happened \_ drop again become 1 member of the board of commissioners.
3. Bank Mandiri in 2016 had 2 members of the board of commissioners, experienced addition of 1 member in 2017-2019 to 3 members then in 2020 happens \_ occur addition as many as 2 members become 5 members of the board of commissioners in 2020
4. Bank Mandiri Syariah throughout the year 22016-2019 has 1 member of the board of commissioner’s experience addition of 2 members in 2020 to 3 members.
5. Bank BNI in 2016 had 3 members of the board of commissioners, experienced addition of 2 members in 2017 to 5 members, then experience decreased 2 members in 2018-2019 to 3 members and in 2020 happened \_ addition of 1 member Back to 4 members.
6. Bank BNI Syariah in 2016 had 1 member of the board of commissioners, and experienced addition of 1 member in 2017 to 2 members, then occur drop back in 2018-2020 to 1 member.

### 2.3.3. Committee (KA)

GCG components that play a role active in the reporting system finance in do supervision against participation management and independent auditors are one of the Duty audit committee (Mutia Handayani, 2021)  
 Size Audit Committee = Member Audit Committee

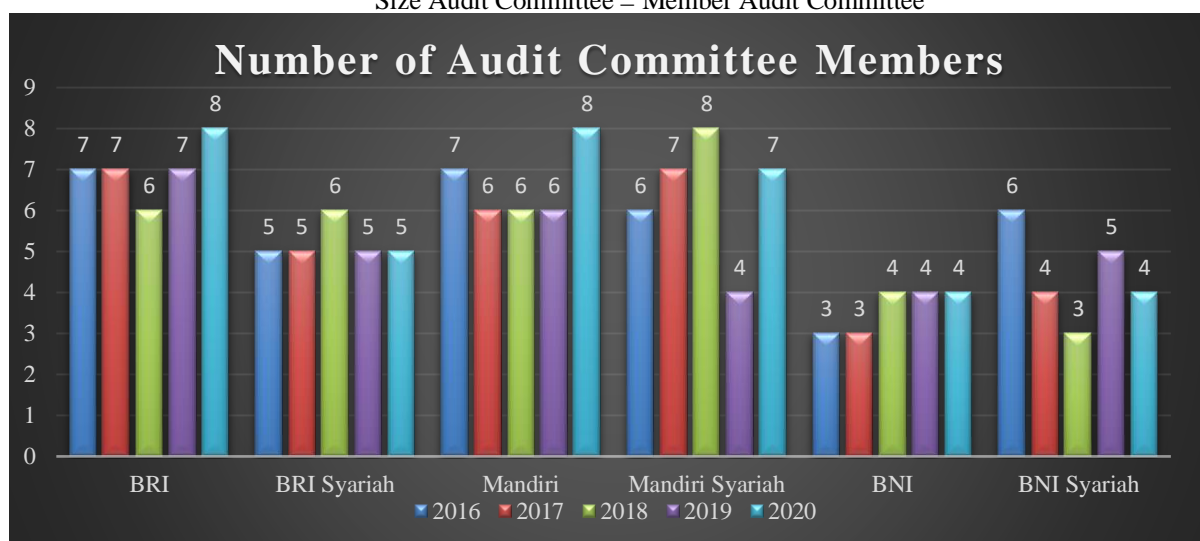


Figure 3 Diagram stem Amount Member Audit Committee

Could seen in the diagram above that number of commissioners on

1. Bank BRI from 2016-2017 has total member audit committee as many as 7 members, experienced decreased by 1 member in 2018 to 6 members, increased by 1 member in 2019 to 7 members then increase 1 more member in 2020 to 8 members audit committee
2. BRI Syariah Bank in 2016,2017,2019 and 2020 has total member audit committee as many as 5 members and happened add 1 member only in 2018 that is become 6 members audit committee.
3. Bank Mandiri in 2016 has 7 members audit committee and experienced drop as many as 1 member in 2017-2019 became 6 members, then experience addition members in 2020 to 8 members audit committee.
4. Bank Mandiri Syariah from 2016-2018 experienced add 1 member every year namely in 2016 there were 6 members, 2019 there were 7 members and 2018 there were 8 members, happened decreased in 2019 to 4 members, then in 2020 experienced addition of 3 members again become 7 members in 2020.
5. Bank BNI in 2016-2017 there are 3 members audit committee and experienced addition of 1 member in 2018-2020 to 4 members in 2018,2019 and 2020.
6. Bank BNI Syariah in 2016 has 6 members audit committee happened 1 member down in year every 2017 and 2018 i.e. 4 members in 2017 and 3 members in 2018, then occur addition an 2 members again in 2019 to 5 members and down again in 2020 to 4 members audit committee.

**2.3.4. Financial Performance**

according to Greece (Kusumo, 2008) performance finance is achievement something company in operate his business in obey the rules good regulation government or regulations company where enhancement profit company affected by performance finance .

One of them is to measure the rate of return on assets from the company's profit, namely the Net Profit Margin (NPM) . Ratio in measure big percentage remainder income is using NPM. From measuring NPM could produce total profit net earned \_ of total income reduced whole cost related.

$$NPM = \frac{\text{Laba Setelah Pajak}}{\text{penjualan bersih}}$$

Following is example NPM calculation at PT Bank BRI in 2016

$$NPM = \frac{26.227.991}{65.439.190} = 0,40$$

Based on the table above, we can see that NPM (Net Profit Margin) shows minimum value as big as 0.09 % shown by PT. Bank Negara Indonesia (Persero) Tbk in 2020. This thing caused in \_ the PT. Bank Negara Indonesia experience deceleration performance acquisition profit consequence the pressure of the covid-19 pandemic, ([kontan.co.id](http://kontan.co.id)) based on report company, total profit BNI net of Rp. 3.28 trillion in the 2020 period, realization this experience depreciation by 78.7% compared to year previously of Rp. 15.28 trillion. Maximum value as big as 0.78% indicated by PT. Bank Mandiri Syariah (Persero) Tbk in year 2017 7, pg this caused because the largest profit owned by Bank Mandiri Syariah was

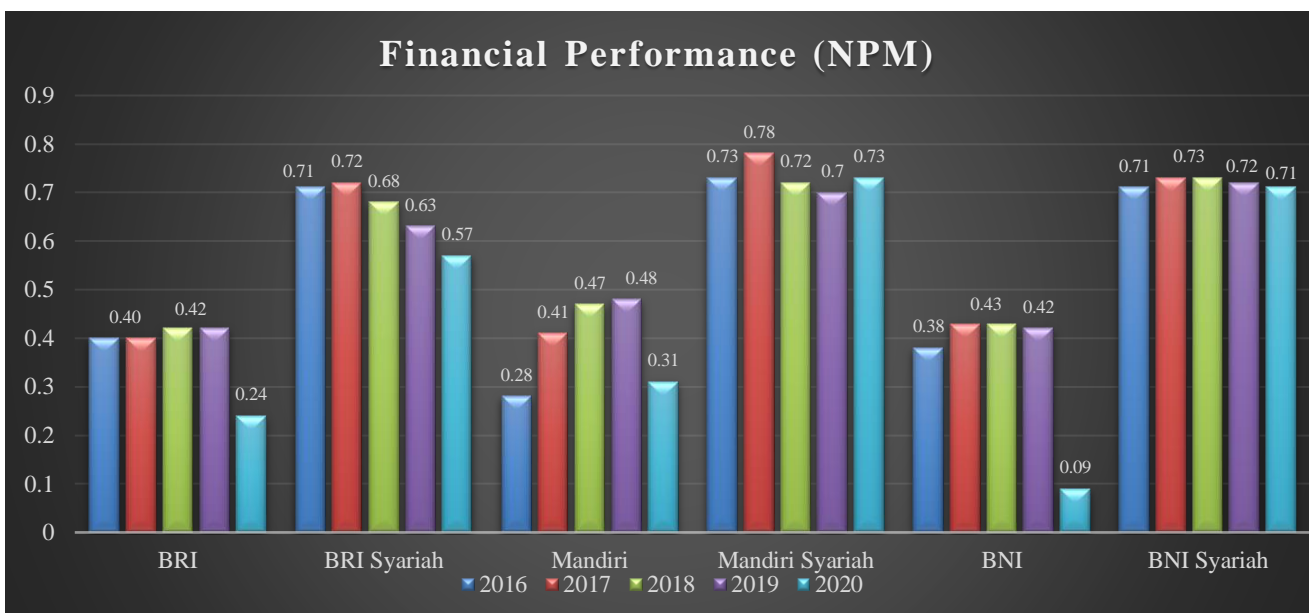


Figure 4 NPM Nilai Value Bar Chart

Seen in the diagram that NPM value on:

1. Bank BRI in 2016 and 2017 has NPM value of 0.40%, in 2018 and 2019 occurred increase the NPM value was 0.02% to 0.42%, while in 2020 it occurred significant decrease by 0.18% of year 2018 that means NPM value in 2020 is 0.24%.
2. Bank BRI Syariah in 2016 has NPM value is 0.71% and occurs an increase of 0.01% in 2017 which is 0.72%, while in 2018-2020 it occurred drop every year i.e. in 2018 have NPM value of 0.68% decreased 0.04% from 2017, the year 2019 has NPM value of 0.63% decreased 0.05% from in 2018, and the NPM value in 2020 was 0.57, down 0.06% from year 2019.
3. Bank Mandiri in 2016 had NPM value of 0.28%, occurs increase by 0.13% in 2017 to 0.41 % and up 0.006% from year 2017 to in 2018 to 0.47%, then in 2019 experienced increase again 0.02% of in 2018 to 0.48%, while in 2020 it happened drop which significant by 0.17% of in 2019 to 0.31%.
4. Bank Mandiri Syariah in 2016 had NPM value of 0.73%, experiencing an increase of 0.05% in 2017 to 0.78 %. in 2018 have NPM value of 0.72%, realization this down 0.02% from 2017, same thing happened in 2019 that is down 0.02% from 2018. While in 2020 it has NPM value of 0.73%, realization this is up 0.03% from year 2019.
5. Bank BNI in 2016 had NPM value of 0.38%, experiencing increase by 0.05% in 2017 and 2018 to 0.43%, and in 2019 experienced 0.01% increase from in 2018, while in 2020 it is experiencing drop significant by 0.33% of 2019 which means that NPM value in 2020 is 0.09%.
6. BNI Syariah Bank has experienced ups and downs Sufficient NPM value small every year could seen that in 2016 have Mark by 0.71% and in 2017 and 2018 only experience increase NPM value is 0.002% and in 2019 has value 0.72% realization this down 0.01% from in 2018 while in 2020 it has value 0.71%, realization this down 0.01% from year 2019.

## 2.4. Description of Research Results

### 2.4.1. Analysis Statistics Descriptive

Analysis descriptive used for analyze the variables in study this namely the board of directors, board of commissioners, audit and performance committee finance. (NPM). Population used in study this for analyze statistics descriptive is Bank BRI, BRI Syariah, Mandiri, Mandiri Syariah, BNI, BNI Syariah listed on the IDX in 2016 - 2020.

Tabel 1 Statistisk Deskriptif

|                    | N  | Descriptive Statistics |         |       |                |
|--------------------|----|------------------------|---------|-------|----------------|
|                    |    | Minimum                | Maximum | Mean  | Std. Deviation |
| DD                 | 30 | 3                      | 12      | 8.13  | 3.298          |
| DK                 | 30 | 1                      | 5       | 2.30  | 1.208          |
| KA                 | 30 | 2                      | 8       | 5.37  | 1.629          |
| NPM                | 30 | 9                      | 78      | 53.83 | 18,668         |
| Valid N (listwise) | 30 |                        |         |       |                |

The variable NPM (Net Profit Margin) shows Mark maximum by 9.00% indicated by PT. Bank Negara Indonesia (Persero) Tbk in 2020. This is because in that year PT. Bank Negara Indonesia drop profit BNI 's net was 78.7%. Maximum value by 78% indicated by PT. Mandiri Syariah (Persero) Tbk in 2017 7. This thing caused the largest profit owned by the company in 2017 7, the average value of 53.83 % and as well as standard deviation by 18.668%.

### 2.4.2. Assumption Test Classic

#### 1. Normality Test

The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. To approach the normality of the data can be done through statistical analysis Kolmogrov-Smirnov test (KS).

Table 2 Kolmogorov Smirnov  
One-Sample Kolmogorov-Smirnov Test

| N                                |                | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
|                                  |                | 30                      |
| Normal Parameters <sup>a,b</sup> | mean           | .0000000                |
|                                  | Std. Deviation | 9.23789265              |
| Most Extreme Differences         | Absolute       | .105                    |
|                                  | Positive       | .105                    |
|                                  | negative       | -.104                   |
| Test Statistics                  |                | .105                    |
| asympt. Sig. (2-tailed)          |                | .200 <sup>c,d</sup>     |

If the value of sig. more than 0.05 then the residual value is normally distributed, if sig value 0.2 more big of 0.05 then smaller so not normal. the data is normally distributed.

The basis for making decisions for this test, namely:

- a. If the value of sig. more than 0.05 then the residual value is normally distributed.
- b. If the value of sig. less than 0.05 then the residual value is not normally distributed.

Could see from table 4.6 One-Sample Kolmogorov-Smirnov Test that the significant value (Asymp. Sig. (2-tailed)) is greater than 0.05, namely 0.200 which means the residual value is normally distributed or the data used in this study is normally distributed.

### 2. Multicollinearity Test

The multicollinearity test aims to test whether the regression model is determined by the correlation between the independent variables (independent).

Table 3 Multicollinearity Test (VIP Test)  
Coefficients a

| Model        | Collinearity Statistics |       |
|--------------|-------------------------|-------|
|              | Tolerance               | VIF   |
| 1 (Constant) |                         |       |
| DD           | .308                    | 3,244 |
| DK           | .319                    | 3.133 |
| KA           | .938                    | 1.067 |

if the TOL value is greater than 0.10, it means that there is no multicollinearity. smaller than 0.1 occurs multicollinearity

Decision:  
DD TOLL = 0.38 more big than 0.1 then no occur multicollinearity  
DK TOLL = 0.319 more big than 0.1 then no occur multicollinearity  
TOLL TRAIN = 0.938 more big than 0.1 then no occur multicollinearity

### 3. Heteroscedasticity Test

The method used to test the presence of heteroscedasticity is to look at the scatterplot.

The characteristics that do not occur heteroscedasticity are:

- 1) The data points spread above and below or around zero.
- 2) The dots don't collect just above or below.
- 3) The spread of data points should not form a wave pattern, widen then narrow and widen again.
- 4) The spread of data points is not patterned.

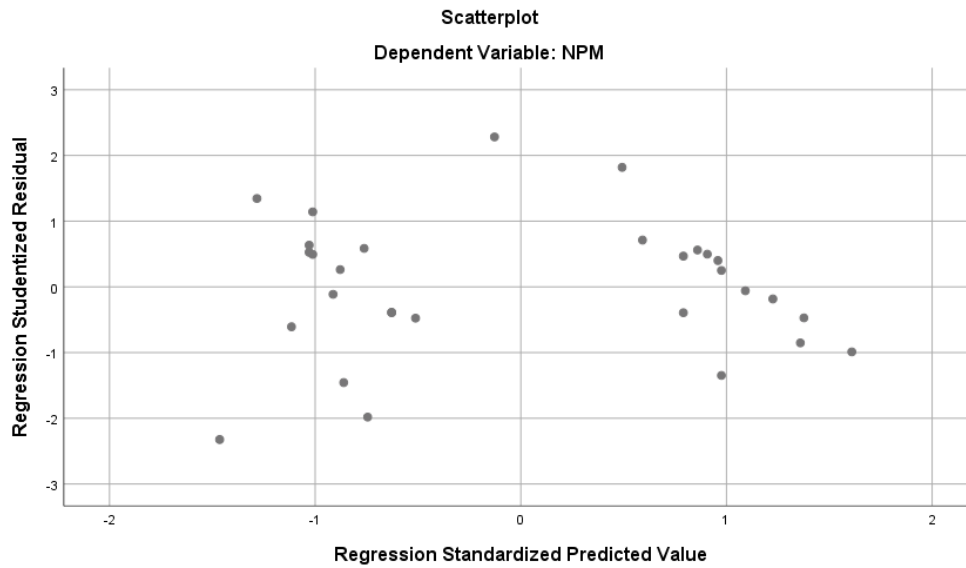


Figure 3: SPSS Processed Data Heteroscedasticity Test (Scatterplot)

The analysis of the SPSS output (scatterplot image) above shows that the points spread below and above the Y axis, and do not have a regular pattern. So, the conclusion is that the independent variable above does not occur heteroscedasticity or homoscedasticity.

4. Autocorrelation Test

The autocorrelation test aims to test whether in a previous regression model there is a correlation between the error of period t and period t-1 (previous). If there is a correlation, it is called an autocorrelation problem. A good regression model is one that is free from autocorrelation. Autocorrelation testing can be done by looking at the value of Durbin Watson.

The basis for making decisions for the Durbin-Watson test are:

|  |                              |
|--|------------------------------|
| $D < d_L$ or $D > 4 - d_L$                 | Be found Autocorrelation     |
| $d_u < D < 4 - d_u$                        | No. be found autocorrelation |
| $d_L < D < d_u$ or $4 - d_u < D < 4 - d_L$ | No. there is conclusion      |

Table 5 Autocorrelation Test

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | .869 <sup>a</sup> | .755     | .727              | 9.756                      | 1.705         |

Source: SPSS Processed Data

- c. Predictors: (Constant), KA, DK, DD
- d. Dependent Variable: NPM

Based on table 4.9 above, it can be concluded that

1. Durbin-Watson value of 1.705
2. Amount of data used as much as 30 (N = 30)
3. Amount 3 independent variables (K=3)

So obtained value of  $d_L$  and  $d_u$  (get from the Durbin-Watson table in the appendix)

1.  $d_L = 1.214$
2.  $d_u = 1.650$

after got value of  $d_L$  and  $d_u$  so obtained value  $4 - d_u = 2,350$ , from results this so could concluded that Durbin- Watson value is between  $d_u$  and  $d_L$  namely  $1.214 < 1.750 < 2.350$  ( $d_L < D < 4 - d_u$ ) which means study this no there is autocorrelation

## 5. Test Hypothesis

### a. Analysis Multiple Linear Regression

Multiple linear regression analysis is a technique that aims to determine the relationship of one or two independent variables (independent) and the dependent variable (dependent). The following table shows the results of multiple regression analysis:

Table.6 Multiple linear regression

| Model        | Unstandardized Coefficients |            | Standardized Coefficients |  | t      | Sig. |
|--------------|-----------------------------|------------|---------------------------|--|--------|------|
|              | B                           | Std. Error | Beta                      |  |        |      |
| 1 (Constant) | 82,105                      | 7,073      |                           |  | 11,608 | .000 |
| DD           | -4.057                      | .989       | -.717                     |  | -4.101 | .000 |
| DK           | -3.004                      | 2,655      | -.194                     |  | -1.131 | .268 |
| KA           | 2,168                       | 1,148      | .189                      |  | 1,888  | .070 |

Sumber : Data Olahan SPSS

### b. Dependent Variable: NPM

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

$$NPM = 82.105 + (-4.057 DD) + (-3.004 DK) + (2.168 KA) +$$

The interpretation of the equation is as follows:

1. Constant value is NPM value of 82.105 is assumed that Variable dependent (DD, DK and KA) is worth n constant (fixed)
2. DD coefficient of -4.057, coefficient negative value which means the more DD goes up then the more decline NPM value (for example if DD increases by 1% then NPM experiences drop of 405.7%)
3. DK coefficient of -3.004 coefficient negative value which means the more DK goes up then the more decline NPM value.
4. KA coefficient of 2.168, coefficient worth positive which means the higher the train, the more the higher the NPM value (for example if KA increases by 1% then NPM value will increase by 216.8%)

## 6. T Uji test

T test (Partial Test) is used for look the influence of independent variables by Partial to the dependent variable. For look result the test could seen in the coefficient table.

1. If  $t_{count} > t_{table}$  and  $sig > 0.05$ , then by Partial independent variable effect to variable dependent
2. If  $t_{count} < t_{table}$  and  $sig < 0.05$ , then by Partial independent variable not take effect to dependent variable

The following are the results of t-count and its significance level, namely:

Table 6 T Uji test  
Coefficients<sup>a</sup>

| Model |            | T      | Sig  |
|-------|------------|--------|------|
| 1     | (Constant) | 11,608 | .000 |
|       | DD         | -4.101 | .000 |
|       | DK         | -1.131 | .268 |
|       | KA         | 1.888  | .070 |

Based on the data above, the t table value will be obtained first, namely:

$$\begin{aligned}
 T \text{ table} &= t(\alpha/2) \text{ nk}-1 \\
 &= t(0.05/2) \text{ } 30 - 3 - 1 \\
 &= t(0.025) \text{ } 26 \text{ T} \\
 &= 2.056 / 2.06 \text{ (results can be seen from the attachment table t)}
 \end{aligned}$$

Furthermore, it can be seen whether the independent variables (DD, DK, KA) have an effect on spirit by Partial to variable dependent (NPM). So could concluded results the hypothesis as following:

1. Sig value. DD of 0,000 < 0.05 and the value of t arithmetic > t table (-) 4.101 > 2.06 means H 01 rejected and H a1 received can be interpreted that the Board of Directors take effect to performance finance (NPM) at Bank BRI, BRI Syraiah, Mandiri, Mandiri Syariah, BNI, and BNI Syariah which are listed on the Indonesia Stock Exchange.
2. Sig value. DK of 0.268 > 0.05 and the value of t count < t table (-) 1.131 < 2.06 means H 02 accepted and H a2 rejected can be interpreted that the Board of Commissioners no take effect to performance financial services (NPM) at Bank BRI, BRI Syraiah, Mandiri, Mandiri Syariah, BNI, and BNI Syariah which are listed on the Indonesia Stock Exchange.
3. Sig value. KA of 0.070 > 0.05 and the value of t count > t table 1.888 < 2.06 then H 03 accepted and H a3 rejected can mean that the Audit Committee does not take effect to performance finance (NPM) at Bank BRI, BRI Syraiah, Mandiri, Mandiri Syariah, BNI, and BNI Syariah which are listed on the Indonesia Stock Exchange.

### 3. Discussion of Research Results

The results of the study show that Net Profit Margin (NPM) can be explained by DD, DK, and KA as following:

1. Influence of the Board of Directors (DD) on Financial Performance (NPM) at Bank BRI, BRI Syraiah, Mandiri, Mandiri Syariah, BNI, and BNI Syariah which are listed on the Indonesia Stock Exchange. data management and calculations assisted by SPSS version 25.0, the variable of the Board of Directors own sig value of 0.000 < 0.05 and t count > t table (-) 4.101 > 2.06 which shows that DD variable has an effect significant to performance finance, which means board of directors own role important in Upgrade performance finance. But on the result testing multiple linear regression Mark coefficient from the board of directors where is negative value Case this showing that the more increase number of board of directors so the more decrease performance finance. Supervision carried out by the board of directors could push happening conducive environment that can Upgrade performance finance. increase number of board of directors no help in the process of upgrading performance finance, however with number of regular and maintained board of directors professionalism so could help enhancement performance finance banking so from it's the board of directors take effect significant to performance finance.
2. Influence of the Board of Commissioners (DK) Against Financial Performance (NPM) At Bank BRI, BRI Syraiah, Mandiri, Mandiri Syariah, BNI, and BNI Syariah which are listed on the Indonesia Stock Exchange Result of data processing and calculation assisted by SPSS version 25.0 variables of the Board of Commissioners own sig value of 0.268 > 0.05 and t count < t table (-) 1.131 < 2.06, it means that DK variable not take effect to performance finance (NPM). This result in line with testing multiple linear regression where the coefficient showing negative result (-3.004) which means that the more increase number of commissioners so the more decrease performance finance (NPM). This thing because if too many commissioners big considered not enough effective in monitor and implement supervision to management company, because will difficult communicate and coordinate in taking related decisions \_ with function supervision. In accordance with PJOK regulation no.55/PJOK.03/2016 board of commissioners must ensure GCG implementation is implemented with good on every activity Bank's business throughout level organization. So from that important for arrange good composition of the board of commissioners, the number of members of the board of commissioners who do not big will more good in monitor more good corporate governance good.
3. Influence Audit Committee (KA) on the financial performance of Banks BRI, BRI Syraiah, Mandiri, Mandiri Syariah, BNI, and BNI Syariah which are listed on the Indonesia Stock Exchange. The results of data processing and calculation assisted by SPSS version 25.0 variables the audit committee has sig value of 0.070 > 0.05 and t count < t table 1.888 < 2.06 which shows that variable KA no take effect significant to performance finance (NPM), but on multiple linear regression test Mark coefficient audit committee marked positive which means if increase audit committee then the more increase NPM value. Audit committee on duty help the board of commissioners in operate function supervision on report finance as well as implement from GCG. Due to Duty audit committee is for help the board of

commissioners so the more many member audit committee, then supervision carried out the more good, However Case this no ensure happening enhancement performance finance or profit owned company that. This thing caused because still many companies in Indonesia that take decision by significant still based on influence influence holder share controller and not on base ability and or skill candidate member audit committee. Without existence effectiveness supervision reporting finance although total multiple audit committees no could ensure will Upgrade performance company. Namum if rapture member audit committee based on expertise and background appropriate education background so the implementation of GCG will walk with good.

### 3.1. Conclusion

Based on results study concluded that:

1. Board of Directors (DD) individually Partial take effect significant to Net Profit Margin (NPM) or H O1 rejected and H a1 accepted. Due to sig value. DD smaller from 0.05, i.e.,  $0.000 < 0.05$  and the value of t count bigger from t table i.e.,  $4.101 > 2.06$
2. The Board of Commissioners (DK) Partial no take effect to Net profit margin (NPM) or HO is accepted and H a2 is rejected. Due to sig value. DK bigger from 0.05, i.e.,  $0.268 < 0.05$  and the t value smaller from t table ie  $1.131 < 2.06$
3. Audit Committee (KA) individually Partial no take effect significant against Net Profit Margin (NPM) or H O3 is accepted and H a3 is rejected. Due to KA sig value bigger from 0.05 that is  $0.07 > 0.05$  and the value of t count smaller from t table ie  $1.888 < 2.06$

### 3.2. Suggestion

1. For Academic  
Research results this could made guidelines or reference for study next in researching more far about study In this case, it is hoped that researchers next could add samples and variables awesome research researched so that could look tendencies and differences in long term.
2. For Bank
  - a. hoped that the bank can implementing corporate governance (GCG) with ok, so that you can attract investors to invest in companies that have good governance
  - b. hoped that the bank can elect the board of directors, board of commissioners and audit committee more selective because position this is very decisive success and improve performance company.

### References

- Aslam, E., & Haron, R. (2021). Corporate governance and banking performance: the mediating role of intellectual capital among OIC countries. *Corporate Governance (Bingley)*, 21 (1), 111–136. <https://doi.org/10.1108/CG-08-2020-0312>
- Awlia Az'ari, N., & Irfan, M. (2019). *Accounting And Business Research Trilogy*. <https://doi.org/10.10022/tabr.2019.08.10022>
- Ekasandy, A. (2018). The Effect of Good Corporate Governance on Financial Performance in Indonesian Sharia Banking. *Journal of Accounting*, 5 (1), 1–10.
- Imam Ghozali. (2017). *Multivariate Analysis Application with SPSS program*.
- Indriyani, I., & Asytuti, R. (2019). Influence of Good Corporate Governance on Financial Performance of Sharia Commercial Banks. *Accuracy: Journal of Accounting and Financial Research*, 1 (2), 111–120. <https://doi.org/10.36407/accuracy.v1i2.117>
- Kusumo, YES (2008). Financial Performance Analysis of Bank Syariah Mandiri Period 2002 – 2007 (with PBI Approach No. 9/1/PBI/2007). *La\_Riba*, 2 (1), 109–131. <https://doi.org/10.20885/lariba.vol2.iss1.art8>
- Mustapha, UA, Rashid, N., Bala, H., & Musa, H. (2020). Corporate governance and financial performance of Nigeria listed banks. *Journal of Advanced Research in Dynamical and Control Systems*, 12 (1), 5–10. <https://doi.org/10.5373/JARDCS/V12I1/20201002>
- Mutia Handayani. (2021). The Effect of Good Corporate Governance on Financial Performance in Soe Companies Listed on The Indonesia Stock Exchange. 6.
- Novitasari, I., Endiana, Idm, & Arizona, Pe (2020). The Effect Of Good Corporate Governance Mechanism On The Financial Performance Of Banking Companies Listed On The Idx. *Journal Of Kharisma*, 2 (1), 47–57.
- OJK. (2016). Financial Services Authority Regulation Number 55 /POJK.03/2016 concerning Implementation of Governance for Commercial Banks. *Financial Services Authority Regulation Number 55/POJK.03/2016 concerning Implementation of Governance for Commercial Banks*, 1–31. <https://www.ojk.go.id/id/kanal/perbankan/regulation/peraturan-ojk/Pages/POJK-about-Penerapan-Tata-Kelola-bagi-Bank-Umum.aspx>

- Orazalin, N., Mahmood, M., & Jung Lee, K. (2016). Corporate governance, financial crises and bank performance: lessons from top Russian banks. *Corporate Governance (Bingley)*, 16 (5), 798–814. <https://doi.org/10.1108/CG-10-2015-0145>
- Otieno, K., Mugo, R., Njeje, D., & Kimathi, A. (2015). Effect of Corporate Governance on Financial Performance of SACCOS in Kenya. 6 (2), 48–59.
- Situmorang, CV, & Simanjuntak, A. (2019). The Effect of Good Corporate Governance on the Financial Performance of Banking Companies Listed on the Indonesia Stock Exchange. *Journal of Accounting and Business: Journal of Accounting Studies Program*, 5 (2), 160. <https://doi.org/10.31289/jab.v5i2.2694>
- Sugiyono. (2016). *Quantitative, Qualitative, and R&D Research Methods*.  
RI Law NO 10 of 1998 concerning Banking

# Financial Performance Analysis Using the Du Pont System Method (Study of PT. Indofood Sukses Makmur Tbk and PT. Tiga Pilar Sejahtera Food Tbk 2016-2020 Period)

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## Abstract

This study aims to determine the results of the financial performance of companies in the food sector listed on the Indonesia Stock Exchange (IDX) from 2016 to 2020. study was used to measure financial performance using the results of the Du Pont system analysis: ROE, NPM, TATO, TATE , Capital structure impact, Tax Ratio, PPE/Capital Assets Turn over, WCT, Ebit Margin, GPM, DEP&AMORT, R&D, PTO, ITO, RTO, CTO. This study uses quantitative data and the data used is secondary data with collection techniques using data available on the website. The results of calculations using the du pont system analysis method at PT. Indofood Sukses Makmur Tbk shows good financial performance on indicators, TATE, Tax Ratio, EM, GPM, R&D, PTO, and CTO. Poor financial performance on indicators ,ROE, NPM, TATO, CSI, PPE/CAT, WCT, SG&A, DEP&AMORT, ITO, and RTO. Financial performance of PT. Tiga Pilar Sejahhtera Food Tbk with du pont method analysis showed good performance on indicators, ROE, NPM, TATE, Tax Ratio, EM, R&D and CTO. Poor financial performance on indicators, TATO, CSI, PPE/CAT, WCT, GPM, SG&A, DEP&AMORT, PTO, ITO and RTO.

## Keywords :

Du pont system analysis, Financial performance

## 1. Introduction

In the face of increasingly modern and open economic conditions, business activities are accelerating. The financial sector should receive more serious attention as the economy becomes more complicated and uncertain, with increasing intense competition between companies. Due to the large number of competitors, both local and international oriented (multinational companies), companies must be able to clearly display their performance, which must be supported by a mature strategy in all fields, especially financial management.

Financial statements are information that describes the condition of a company, which in turn will become information that describes the performance of a company. (Iram Fahmi, 2017)

The corona pandemic or covid -19 had an impact in early March 2020, Indonesia confirmed the first case of corona virus infection. Not only the health sector has been affected by COVID-19, but sector economic also been affected by COVID-19 which has begun to spread in Indonesia, causing the transportation sector experienced a loss, then for manufacturing companies, food, beverage and other services also experienced the same thing. So, by the current situation Indonesia and the whole world are facing the covid-19 virus, the covid-19 virus itself has had a significant impact on economy. One of the consequences is that inflation has decreased due to the corona virus. When inflation decreases, it will automatically affect the company's financial performance, such as the activities of companies engaged in property, tourism, manufacturing, automotive financing and even SMEs. Good performance can help the management of a company in achieving company goals. The higher the company's performance, the higher the value of the company for investors. its performance clearly, which must be supported by a mature strategy in all fields, especially financial management.

The financial performance of a company is how position financial reflects all of its financial activities at a certain time (within a certain period of time). Strong financial performance will make it easier for organizations to identify and implement the best plans for the company, as well as improve previous tactics. The company's strategy will have an impact on the financial statements; the better the strategy, the better the performance of the existing financial statements.

Du Pont System approach is more integrative and uses the composition of financial statements as an element of analysis in assessing the company's financial performance, Du Pont considers the return on investment (ROI) important, so he starts from this figure (Harahap, 2006)

method DuPont about various factors that cause the ups and downs performance a business this uses Du Pont's analysis to analyze the company's performance. Du Pont's analysis provides an overview of how well the company's financial performance is and how well the company's revenue is generated. This analysis is

comprehensive because it not only calculates the profits obtained by the company from its products, but also includes the level of efficiency and measures the level of company profits.

Financial analysis is one method that can be used for du pont systems, this analysis comprehensive that includes the margins of all activities and profit margins and shows how the ratios each other influence determine the financial performance of an asset.

Based on the description above, the researcher is interested in replicating the title: Financial performance analysis using the du pont system method (Study of PT. Indofood Sukses Makmur Tbk and PT Tiga Pilar Sejahtera Food Tbk 2016-2020 period).

The formulation of the problem in this research are:

1. How is the financial performance of PT. Indofood Sukses Makmur Tbk and PT. Tiga Pilar Sejahtera Food Tbk from 2016-2020 using the Du Pont system analysis method?

## 2. Literature

Research with the title "Du Pont System Analysis in Measuring Financial Performance of Companies at Pt Fast Food Indonesia, Tbk Listed on the Indonesia Stock Exchange" This study uses du Pont research variables net profit margin (npm), asset turnover (ATO), return on assets (ROA) and return on equity (ROE). The sample in this study is PT fast food Indonesia Tbk. The results showed that net profit margin (NPM), asset turnover (ATO), return on assets (ROA) and return on equity (ROE) decreased so that the company's financial performance decreased and was poor. The equity multiplier has increased. The dominant factors causing a decrease in company performance are the cost of goods sold, selling and distribution expenses, general and administrative expenses, other operating expenses, increased income tax expenses, financial expenses and the existence of a final tax on financial income. The results of this study suggest that companies should maximize the use of assets. , optimize sales and further minimize expenses (Hutasoit et al., 2019).

Research with the title "Analysis of financial performance with the Dupont method at pt. Telekomunikasi Indonesia (Persero) Tbk for the period 2015-2019." This study uses a du pont analysis research variable, return on investment (ROI). The sample of this research is PT. Telekomunikasi Indonesia (Persero) Tbk for the period 2015-2019. The results showed that the Return on investment (ROI) of pt. Telekomunikasi Indonesia (Persero) Tbk is not in good condition. This is due to a decrease in net income and an increase in the company's liabilities or expenses (Anisa & Ali, 2021).

Research with the title: "Analysis of the financial performance of pt. Sanshiro hopes to prosper by using the du pont system method". This study uses du pont research variables, analysis of return on equity (ROE), returns on investment (ROI). The sample of this research is PT. Sanshiro hope prosper. The results showed that the financial performance of pt. Sanshiro hopes for prosperity as seen in the fluctuating return on equity (ROE) and the return on investment (ROI) tends to decline during the 2010-2014 period. This fluctuating return on equity (ROE) was caused by several things, including inefficiency in increasing total costs and not being matched by earnings after tax (eat) resulting in fluctuating net profit margins (npm) for five years (Aminiar et al., 2015).

Research with the title "Du Pont System Analysis to Measure Company Financial Performance". This study uses du pont analysis variables, return on equity (ROE) and return on investment (ROI). The samples of this research are PT Mayora Indah Tbk, PT Indofood Sukses Makmur Tbk. The results showed that the Du Pont, Return on Equity (ROE) system analysis showed that PT Mayora Indah Tbk which produced the highest Return On Equity compared to PT Indofood Sukses Makmur Tbk. and from the calculation of Return On Investment (ROI) and Return On Equity (ROE), PT Indofood Sukses Makmur Tbk and PT Mayora Indah Tbk, fluctuate every year (Shabri Indrawan, Budihardjo, 2019).

Research with the title Du Pont system analysis in measuring financial performance (empirical study at PT. Salim Ivomas Pratama Tbk which is listed on the IDX)". This study uses du pont analysis variables, return on assets (ROA), net profit margin (NPM), total asset turnover (TATO). The sample of this research is PT. salim ivomas pratama Tbk which is listed on the BEI. The results showed that the financial performance of pt. Salim ivomas pratama calculated using the du pont system analysis is not good, with a decreased roa value from 2012, 2013, and 2015. This is due to a decrease in the value of npm and tato because basically the roa value is influenced by tato and npm. This situation is also influenced by the high sales of the total assets generated by the company. (Dharma, 2017)

Research entitled "Analysis of financial performance using du pont system approach". This study uses du pont analysis variables, return on equity (ROE), return on investment (ROI). The sample of this research is in the textile and garment industry companies listed on the Stock Exchange. The results of the study show Roe and Roi

in the textile and garment industry listed on BEI for the 2015-2017 period were not good because only 3 out of 8 companies had very good Roi and Roe results, namely pt. Eratex djaja tbk, pt sri rejeki isman tbk and pt asia pacific investama tbk and that means their financial performance is good. While the other 5 companies always show negative values and the results of Roi and Roe are not good with the lowest one company, namely PT

Panasia Indoe Resources tbk which shows the value of Roi and Roe which tends to decrease from year to year (Male et al., 2019).

Research entitled "Financial performance of pharmaceutical industry in India using dupont analysis". This study uses du pont analysis variables, return on equity (ROE), return on investment (ROI). The sample of this research is the pharmaceutical industry. The results showed that the financial performance of cipla pharmaceutical was high, followed by dr. reddy's la boratories and then ranbaxy pharmaceutical. All three companies are significant at their level. In conclusion, ROE & ROI is the most comprehensive measure of company profitability. It considers the operating and investment decisions made as well as decisions regarding financing and taxes (S. Christina sheela, 2012).

Research entitled "A study of financial performance using dupont analysis in food distribution market." This study uses du pont analysis variables, return on equity (ROE), return on investment (ROI). this study is the food distribution market. The results show Roe & Roi is the most comprehensive measure of a company's profitability. It takes into account operating and investment decisions can be made as well as financing and decisions related to their leverage (Kim, 2016).

Research entitled "Performance Scrutiny of Nepal Electricity Authority using DuPont Analysis". This study uses the variable du pont analysis Nea, Return on equity (Roe) Equity multiplier (Em). The research sample is the Nepal Electricity Authority. The results showed that despite being the sole distributor of electricity in the country, financial performance, measured in ROE, NEA was very poor in the first five years (2010/11 – 2015/16) of the study period. The main source of such poor performance is negative profit margins. In addition, the NEA is also exposed to higher financial risk as measured in terms of the equity multiplier. However, these two measures, ROE and EM have increased in the last two years (2016/17 – 2017/18) of the study period (Risal, 2019).

Research entitled "Analysis on Financial Performance Using Du Pont System Method at PT Indofood Sukses Makmur Tbk Period Year 2015-2019". This study uses research variables du pont analysis Return on investment (Roi), Net profit margin (Npm), Total asset Turnover (Tattoos). The research sample is PT. Indofood suksesfully prosperous tbk. The results of the study show that since 2015-2019 the results of the ROI variable are weak because they are still below the industry average value. Meanwhile, the NPM is categorized as quite good because it is above the industry average. The TATO variable is still categorized as not being able to activate effectiveness because it is still below the average of similar industries (Aminiar et al., 2020).

### **3. Methods**

#### **3.1. Research Approach**

This study uses a qualitative approach, a qualitative research approach is a method based on the philosophy of postpositivism, used to examine the condition of a natural object, (as opposed to an experiment) where the researcher is the key instrument, the data collection technique is done by triangulation (combined), analysis the data are inductive/qualitative, and the results of qualitative research emphasize the meaning of generalizations (Sugiyono, 2017).

Research does not use hypotheses like quantitative research in general, so this research uses a qualitative approach with quantitative data.

#### **3.2. Source of data**

Data used in this study is secondary data. Secondary data is an indirect data source but is obtained from other primary (Sugiyono, 2017). The data of this study were taken from the financial statements of PT. Indofood Sukses Makmur Tbk and PT. Tiga Pilar Sejahtera Food Tbk published on the IDX website with the website address [www.idx.co.id](http://www.idx.co.id).

#### **3.3. Data collection technique**

Collection technique used in this study is a documentation technique by collecting secondary data related to the object of research. The research data was collected using the data available on the website pages associated with PT. Indofood Sukses Makmur Tbk and PT. Tiga pilar Sejahtera Food Tbk from 2016-2020.

### 3.4. Data analysis techniques

In analyzing data, using quantitative methods, namely calculations related to the problem under study. The analytical method used is the Du Pont System.

The analytical tools used in the Du-Pont System are as follows:

1. Return on equity This ratio is used to measure net profit after tax with own capital. This ratio shows the efficiency of the use of own capital (Kasmir, 2019).

$$ROE = \frac{\text{Profit after interest and taxes}}{\text{ekuity}}$$

2. Net Profit Margin (return on sales) shows how much net profit the company earns (Kasmir, 2019)

$$\text{Net profit margin} = \frac{\text{earning after interest and tax (EAT)}}{\text{sales}} 100\%$$

3. Total assets to equity the ratio of assets to capital is the ratio of company assets funded by shareholders. The inverse of this ratio shows the ratio of assets funded by liabilities (Kasmir, 2019).

$$\text{Total assets to equity} = \frac{\text{total assets}}{\text{Total equity}}$$

4. Total assets turnover Is a ratio used to measure the turnover of all assets owned by the company and measure the amount of sales obtained from rupiah assets (Kasmir, 2019).

$$\text{Total assets turn over} = \frac{\text{net profit}}{\text{total assets}}$$

5. Capital Structure Impact Is a ratio used to assess debt to equity. This ratio is sought by comparing all debt ratios, including current debt with all equity (Kasmir, 2019).

$$DER = \frac{\text{debt}}{\text{total ekuity}}$$

6. Tax Ratio is a measure of the performance of tax revenue in a country. However, from various literatures, the tax ratio is not the only indicator used to measure tax performance. However, until now the tax ratio has become a measure that is considered to give a general description of the taxation conditions in a country (Luz Yolanda Toro Suarez et al., 2015).

$$\text{Tax ratio} = \frac{\text{total tax revenue}}{\text{gross domestic product}}$$

7. PPE / Capital assets turnover is the ratio used for the number of times the funds invested in fixed assets rotate in one period (Kasmir, 2019).

$$\text{PPE/Capital assets turnover} = \frac{\text{sales}}{\text{total assets}}$$

8. Working capital turnover is one of the ratios to measure and assess the effectiveness of the company's working capital during a certain period (Kasmir, 2019).

$$\text{Working capital assets turnover} = \frac{\text{sales}}{\text{total assets}}$$

9. Ebit Margin is measure financial of a company's profitability and is calculated without interest or taxes.

$$\text{Ebit Margin} = \frac{\text{Operational profit}}{\text{income}}$$

10. Gross profit margin This ratio is the gross profit margin, which shows the relationship between sales and cost of goods sold, measuring a company's ability to control inventory costs (Kasmir, 2019).

$$\text{GPM} = \frac{\text{Profit margin on sales}}{\text{sales}}$$

11. Debt Assets Ratio / DEP&AMORT Debt ratio is debt used to measure the ratio between total debt and total assets (Kasmir, 2019).

$$DTA = \frac{\text{total debt}}{\text{total assets}}$$

12. R&D The Expense to Revenue Research & Development (R&D) ratio measures the percentage of sales allocated to R&D spending. This is not as effective when looking at companies in different industries because different industries place different values on R&D. Tech companies and pharmaceutical companies are more likely to have high R&D ratios. (Article Source: [https://ycharts.com/glossary/terms/rnd\\_to\\_revenue](https://ycharts.com/glossary/terms/rnd_to_revenue))

$$R\&D = \frac{\text{Research and Development Expense}}{\text{Total Revenue}}$$

13. Payable Turnover Measurement of account payable turnover is intended to find out how many times the company's trade payables rotate in a year. (Article source: <https://eprints.umm.ac.id/20334/3/jiptummpp-gdl-abdulmuin2-36826-3-babii.pdf>)

$$\text{Payable turnover} = \frac{\text{Total supplier purchases}}{\text{Average accounts payable}}$$

14. Inventory Turnover is a ratio used to measure the number of times the funds invested in this inventory rotate in a period (Kasmir, 2019).

$$ITO = \frac{\text{Cost Of Goods Sold}}{\text{inventory}}$$

15. Receivable Turnover Accounts receivable turnover is a ratio used to measure how long it takes to collect receivables during a period or how many times the funds invested in these receivables rotate in one period (Kasmir, 2019).

$$\text{Receivable turnover} = \frac{\text{credit sales}}{\text{avarege receivable}}$$

16. Cash turnover explains the notion of cash turnover that: "Cash turnover describes the company's cash capability in generating income so that it can be seen how many times the cash rotates in a certain period (Bambang Riyanto, 2010).

$$\text{Cash turnover} = \frac{\text{sales}}{\text{cash averege}}$$

#### 4. Result and Discussion

Table 1. The results of the analysis of the du pont system method PT. Indofood Sukses Makmur Tbk period 2016-2020

| No | Indicator                  | 2016    | 2017    | 2018    | 2019    | 2020    | Avarege Industri | Industri standard  |
|----|----------------------------|---------|---------|---------|---------|---------|------------------|--------------------|
| 1  | Return On Equity           | 11.99%  | 11.00%  | 9.94%   | 10.89%  | 11.06%  | 10.98%           | 40%                |
| 2  | Net Profit Margin          | 7.90%   | 7.72%   | 7.44%   | 8.86%   | 13.13%  | 9.01%            | 20%                |
| 3  | Total Assets To Equity     | 2.15    | 2.14    | 2.07    | 2.29    | 1.94    | 2.12             | 1                  |
| 4  | Asset Turnover             | 0.81    | 0.80    | 0.76    | 0.80    | 0.50    | 0.73             | 2                  |
| 5  | Capital Structure Impact   | 87.01%  | 88.08%  | 93.40%  | 77.48%  | 106.14% | 90.42%           | 90%                |
| 6  | Tax Ratio                  | 207.95% | 204.70% | 199.66% | 207.36% | 238.20% | 211.57%          | 15%                |
| 7  | Ppe/Capital Asset Turnover | 1.87    | 1.88    | 1.93    | 1.77    | 2.06    | 1.90             | 5 Kali             |
| 8  | Working Capital Turnover   | 1.51    | 1.50    | 1.07    | 1.27    | 1.37    | 1.34             | 6 Kali             |
| 9  | Ebit Margin                | 11.08%  | 10.91%  | 10.15%  | 11.42%  | 15.20%  | 11.75%           | 10%                |
| 10 | Gross Margin               | 70.99%  | 71.69%  | 72.46%  | 70.34%  | 67.27%  | 70.55%           | 30%                |
| 11 | Sg&A                       | -5.98%  | -5.80%  | -6.09%  | -6.13%  | -6.22%  | -6.05%           | 10% - 25%          |
| 12 | Dep&Amort                  | 46.53%  | 46.83%  | 48.29%  | 43.66%  | 51.49%  | 47.36%           | 35%                |
| 13 | R&D                        | 10.08%  | 9.95%   | 9.47%   | 10.22%  | 7.90%   | 9.52%            | 2.5%               |
| 14 | Payable Turnover           | 2.34    | 2.15    | 2.27    | 2.17    | 2.92    | 2.37             | 0/90 Hari          |
| 15 | Inventory Turnover         | 5.59    | 5.19    | 4.57    | 5.58    | 4.93    | 5.17             | 20 Kali            |
| 16 | Receivable Turnover        | 12.81   | 7.34    | 8.09    | 9.03    | 7.38    | 8.93             | 15 Kali            |
| 17 | Cash Turnover              | 0.39    | 0.38    | 0.56    | 0.43    | 0.50    | 0.45             | 130 Hari Per Tahun |

Table 2. The results of the analysis of the du pont system method PT. Tiga Pilar Sejahtera Food Tbk period 2016-2020

| No | Indicator                  | 2016    | 2017      | 2018    | 2019    | 2020    | Avarege industri | Standart Industri  |
|----|----------------------------|---------|-----------|---------|---------|---------|------------------|--------------------|
| 1  | Return On Equity           | 16.87%  | 156.35%   | 3.58%   | 68.45%  | 145.48% | 78.14%           | 40%                |
| 2  | Net Profit Margin          | 10.99%  | 268.34%   | 7.80%   | 75.13%  | 93.89%  | 91.23%           | 20%                |
| 3  | Total Assets to Equity     | 1.85    | 0.37      | 0.34    | 0.53    | 1.70    | 0.96             | 1                  |
| 4  | Asset Turnover             | 0.71    | 0.98      | 0.87    | 0.81    | 0.64    | 0.80             | 2                  |
| 5  | Capital Structure Impact   | 117.02% | 159.20%   | 152.64% | 212.73% | 142.87% | 156.89%          | 90%                |
| 6  | Tax Ratio                  | 401.35% | 21851.42% | 325.55% | 494.05% | 613.01% | 4737.07%         | 15%                |
| 7  | Ppe/Capital Asset Turnover | 2.17    | 0.59      | 0.53    | 1.13    | 2.43    | 1.37             | 5 kali             |
| 8  | Working Capital Turnover   | 2.38    | 0.21      | 0.15    | 0.41    | 0.81    | 0.79             | 6 kali             |
| 9  | Ebit Margin                | 13.73%  | 267.12%   | 5.40%   | 90.34%  | 78.58%  | 91.03%           | 10%                |
| 10 | Gross Margin               | 25.72%  | 28.61%    | 29.04%  | 29.62%  | 24.79%  | 27.56%           | 30%                |
| 11 | Sg&A                       | -10.20% | -28.94%   | -24.97% | -35.66% | -37.41% | -27.44%          | 10% - 25%          |
| 12 | Dep&Amort                  | 53.92%  | 268.92%   | 289.99% | 188.70% | 58.83%  | 172.07%          | 35%                |
| 13 | R&D                        | 13.85%  | 257.31%   | 0.51%   | 79.56%  | 105.99% | 91.44%           | 2.5%               |
| 14 | Payable Turnover           | 6.50    | 13.19     | 0.03    | 5.28    | 6.41    | 6.28             | 0/90 hari          |
| 15 | Inventory Turnover         | 2.35    | 15.15     | 16.63   | 13.78   | 9.94    | 11.57            | 20 kali            |
| 16 | Receivable Turnover        | 33.99   | 1.91      | 3.79    | 7.27    | -5.24   | 8.34             | 15 kali            |
| 17 | Cash Turnover              | 2.43    | 38.54     | 2.63    | 20.61   | 53.12   | 23.46            | 130 hari per tahun |

### 1.1. Results and discussion of the Analysis du pont system

Discussion Results PT Indofood Sukses Makmur Tbk and PT. Tiga Pilar Sejahtera Food Tbk Using the Du Pont System Analysis in the Year (2016-2020).

1. Return on equity Based on the du pont system analysis at PT Indofood Sukses Makmur Tbk for 5 years, namely in 2016-2020 the company's condition was not yet capable because with an average of 10.98% this was due to the declining rate of return on assets and return on equity which was still below industrial average of PT. Tiga Pilar Sejahtera Food Tbk condition of the company is able to generate Return On Equity with an average of 78.14% because it is above the industry average, this shows that there is an efficient use of the company's capital.
2. Net Profit Margin of PT Indofood Sukses Makmur Tbk Based on the analysis results show the value of NPM or net profit margin with an average of 9.01% and the company has not been able to control production costs, HPP efficiently because the net profit after tax generated is small, still below 20%. PT. Tiga Pilar Sejahtera Food Tbk shows a stable NPM value with an average of 91.23% times.
3. Total Assets to Equity PT Indofood Sukses Makmur Tbk Based on the analysis results show the value of Total Assets to Equity has increased with an average of 2.12 which means the debt owned by the company continues to grow. PT. Tiga Pilar Sejahtera Food Tbk shows a fairly good total assets to equity with an average of 0.96 times.
4. Total Assets Turnover of PT Indofood Sukses Makmur Tbk Based on the analysis results show the value of Total Assets Turn Over the company's condition is unstable because it is still below the industry average with an average of 0.73 and the level of effectiveness in utilizing assets to generate income. PT. Tiga Pilar Sejahtera Food Tbk showed an unstable Total Assets Turn Over with an average of 0.80 times because it was still below the industry average.
5. Capital structure impact/ Debt to equity ratio PT Indofood Sukses Makmur Tbk Based on the analysis results show the CSI value with an average of 90.42% provided by shareholders that the company is financed by debt as much as 90.42% if the industry average 80% of the company is not good because it is above average. PT Tiga Pilar Sejahtera Food Tbk Based on the results of the analysis shows the CSI value is not good with an average of 156.89%.
6. Tax Ratio PT Indofood Sukses Makmur Tbk Based on the analysis results show the value of the Tax ratio with an average of 211.57% times below the company has the ability to pay good taxes to the government. PT. Tiga Pilar Sejahtera Food Tbk Based on the results of the analysis shows the value of the Tax ratio with an average of 4737.07% times below the company has a good ability to pay taxes to the government.

7. PPE/ Capital Assets turnover of PT Indofood Sukses Makmur Tbk Based on the analysis results show an unstable value with an average of 1.90 times and it is stated that the company has not been able to because it is below the industry average of PT. Tiga Pilar Sejahtera Food Tbk showed an unstable CAT value with an average of 1.37 times.
8. Working Capital Turnover of PT Indofood Sukses Makmur Tbk Based on the results of the analysis, the WCT value is unstable with an average of 1.34 times, it is stated that low working capital turnover means that the company is having excess working capital because it is below the industry average of PT. Tiga Pilar Sejahtera Food Tbk shows an unstable WCT value with an average of 0.79 times.
9. Ebit Margin PT Indofood Sukses Makmur Tbk Based on the results of the analysis shows the value of Ebit Margin with an average of 11.75%, it can be stated that the income generated before tax has increased which can be said to be good. PT. Tiga Pilar Sejahtera Food Tbk shows a stable Ebit margin value with an average of 91.03% times.
10. Gross Profit Margin of PT Indofood Sukses Makmur Tbk Based on the analysis results show the value of GPM or gross profit margin is stable with an average of 70.55% and the company is able to control production costs and HPP efficiently because it produces a gross profit margin that is above average (30%). PT. Tiga Pilar Sejahtera Food Tbk shows an unstable GPM value because it is below the average of 27.56%
11. SG&A PT Indofood Sukses Makmur Tbk Based on the analysis results show the value of SG&A with an average of -6.05% the condition of the company experienced unstable increases and was not in accordance with the income earned by PT. Tiga Pilar Sejahtera Food Tbk showed an unstable SG&A value with an average of -27.44% times.
12. DEP&Amort/ Debt to assets ratio PT Indofood Sukses Makmur Tbk Based on the results of the analysis showed an unfavorable value with an average of 47.36% times, it was stated that the company's assets were funded by debt at 47.36% when compared to the industry average standard, the condition of the company was financed by debt exceeds the industry average. PT. Tiga Pilar Sejahtera Food Tbk shows an unstable DTA value with an average of 172.07% times because the company's condition is financed with debt exceeding the industry average.
13. R&D PT Indofood Sukses Makmur Tbk Based on the results of the analysis showed the value of R&D with an average of 2.37 times the company's condition experienced a steady increase PT. Tiga Pilar Sejahtera Food Tbk shows a stable R&D value with an average of 91.44 times.
14. Payable Turn over PT Indofood Sukses Makmur Tbk Based on the analysis results show a stable PTO value with an average of 2.37 and having PTO means the company pays suppliers more slowly. PT. Tiga Pilar Sejahtera Food Tbk showed an unstable PTO value with an average of 6.28 times.
15. Inventory Turnover PT Indofood Sukses Makmur Tbk Based on the results of the analysis shows the ITO value is Fluctuating with an average of 5.17 this shows the company's ability to manage inventory to sales is not effective because it is below the industry average. PT. Tiga Pilar Sejahtera Food Tbk shows a fluctuating ITO value with an average of 11.57 times.
16. Receivable Ratio of PT Indofood Sukses Makmur Tbk Based on the analysis results show the RTO value is unstable with an average of 8.93 times and the company has not been able to collect receivables in 1 year there are 5 times the receivables are collectible. PT. Tiga Pilar Sejahtera Food Tbk shows an unstable RTO value with an average of 8.34 times because it is still below the industry average.
17. Cash Turnover PT Indofood Sukses Makmur Tbk Based on the results of the analysis shows the CTO value with an average of 0.45 times it can be stated that cash turnover has increased well. PT. Tiga Pilar Sejahtera Food Tbk showed a stable CTO value with an average of 23.46 times.

## 5. Conclusion

From all du pont system analysis as a whole of the financial performance of PT. Indofood Sukses Makmur Tbk from 2016 to 2020 and PT Tiga Pilar Prosperous Food Tbk from 2016 to 2020 are generally stated as follows:

1. The financial performance of PT Indofood Sukses Makmur Tbk in 2016-2020 using the du pont method showed good performance on TATE, Tax Ratio, EM, GPM, R&D, PTO, and CTO. Poor financial performance on performance indicators ROE, NPM, TATO, CSI, PPE/CAT, WCT, SG&A, DEP&AMORT, ITO, and RTO.
2. The financial performance of PT Tiga Pilar Prosperous Food Tbk in 2016-2020 using the du pont method showed good performance on ROE, NPM, TATE, Tax Ratio, EM, R&D and CTO. Poor financial performance on the performance indicators of TATO, CSI, PPE/CAT, WCT, GPM, SG&A, DEP&AMORT, PTO, ITO and RTO.
3. The company's financial performance using the du pont method as a whole found that PT Indofood Sukses Makmur Tbk and PT Tiga Pilar Sejahtera Food Tbk with good indicators were the TATE, Tax Ratio, EM, GPM, R&D, PTO, CTO, ROE, and NPM indicators.

### 5.1. Sugestion

Based on the results of the analysis of the du pont system method, the researcher gives advice to the company that is the object of research, namely PT. Indofood Sukses Makmur Tbk and PT. The three Pillars of Prosperity Food Tbk for 5 years from 2016 to 2020 are as follows:

1. PT. Indofood Sukses Makmur Tbk should improve the indicators of ROE, NPM, TATO, CSI, PPE/CAT, WCT, SG&A, DEP&AMORT, ITO, and RTO, because they have values below the industry average.
2. Company PT. The Three Pillars of Sejahtera Food should improve the indicators of TATO, CSI, PPE/CAT, WCT, GPM, SG&A, DEP&AMORT, PTO, ITO and RTO, because they have scores below the industry average.
3. Research can use the du pont method to analyze the financial performance of other sector companies.

### References

- (S. Christina sheela, dr. K. K. 2012). (2012). Financial Performance Analysis of the Jordanian Arab Bank by Using the DuPont System of Financial Analysis. *International Journal of Economics and Finance*, 4(4), 86–94. <https://doi.org/10.5539/ijef.v4n4p86>
- Aminiar, C., Novitasari, D., & Asbari, M. (2015). Analysis on Financial Performance Using Du Pont System Method at PT Indofood Sukses Makmur Tbk Period Year 2015-2019. 3, 2015.
- Aminiar, C., Novitasari, D., & Asbari, M. (2020). Analysis on Financial Performance Using Du Pont System Method at PT Indofood Sukses Makmur Tbk Period Year 2015-2019. *Journal of Industrial Engineering & Management Research (JIEMAR)*, 1(3), 122–134. <https://doi.org/https://doi.org/10.7777/jiemar.v1i2>
- Anisa, N., & Ali, A. (2021). Analisis Kinerja Keuangan Dengan Metode Dupont Pada PT. Telekomunikasi Indonesia (Persero) Tbk. Periode 2015-2019. *Jurnal Manajemen*, 1(1), 31–40.
- Bambang Riyanto. (2010). Cash Turn over.
- Dharma, M. B. (2017). Analisis Du Pont System Dalam Mengukur Kinerja Keuangan (Studi Empiris Pada PT. Salim Ivomas Pratama Tbk Yang Terdaftar Di BEI). *Jurnal Riset Akuntansi & Bisnis*, 17(1), 15–32.
- Harahap. (2006). Analisis Kritis Atas Laporan Keuangan.
- Hutasoit, Y. R., Siahaan, Y., Putri, D. E., & Grace, E. (2019). Analisis Du Pont System dalam Mengukur Kinerja Keuangan Perusahaan Pada PT. Fast Food Indonesia, Tbk yang Terdaftar di Bursa Efek Indonesia. *Financial: Jurnal Akuntansi*, 5(2), 40–49. <https://doi.org/10.37403/financial.v5i2.109>
- Irham Fahmi. (2017). Analisis kinerja keuangan. Alfabeta, Cv.
- Kasmir. (2019a). Debt Assets Ratio / DEP&AMORT (revisi).
- Kasmir. (2019b). Debt to equity ratio (revisi).
- Kasmir. (2019c). Gross profit margin (revisi).
- Kasmir. (2019d). Inventory turn over (revisi).
- Kasmir. (2019e). Net Profit Margin (Revisi).
- Kasmir. (2019f). PPE/Capital assets turn over (revisi).
- Kasmir. (2019g). Receivable turn over (revisi).
- Kasmir. (2019h). Return on equity (revisi).
- Kasmir. (2019i). Total assests turn over (revisi).
- Kasmir. (2019j). Working capital turn over (revisi).
- Kim, H.-S. (2016). A Study of Financial Performance using DuPont Analysis in Food Distribution Market. *Culinary Science & Hospitality Research*, 22(6), 52–60. <https://doi.org/10.20878/cshr.2016.22.6.005005005>
- Luz Yolanda Toro Suarez, DURI KARTIKA, C., RI, kementerian kesehatan, Studi, P., Dokter, P., Kedokteran, F., Udayana, U., ך, מזלי, Oliver, J., Abdul Majid, J., Sulaiman, M., Zailani, S., Shaharudin, M. R., Saw, B., Wu, C. L., Brown, D., Sivabalan, P., Huang, P. H., Houston, C., ... Luz Yolanda Toro Suarez. (2015). Tax Ratio. *經濟研究*, 16(1994), 1–27.
- Male, M. M. G., Amali, L. M., & Dungga, M. F. (2019). Analysis of Financial Performance Using Du Pont System Approach. *Jambura Science of Management*, 1(2), 27–37. <https://doi.org/10.37479/jsm.v1i2.2494>
- Risal, N. (2019). Performance Scrutiny of Nepal Electricity Authority using DuPont Analysis. *PYC Nepal Journal of Management*, 12(1), 79–85. <https://doi.org/10.3126/pycnjm.v12i1.30597>
- Shabri Indrawan, Budihardjo, T. S. (2019). Analisis Du Pont Untuk Mengukur Kinerja Keuangan Perusahaan. *Inovator*, 8(1), 52. <https://doi.org/10.32832/inovator.v8i1.1842>
- Sugiyono. (2017). Metode penelitian kuantitatif,kualitatif dan R&D. Alfabeta, Cv.