

## FINANCIAL PERFORMANCE ANALYSIS OF PT. TELKOM INDONESIA, TBK. BEFORE AND AFTER THE LAUNCH OF BY.U

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### ABSTRACT

*PT Telkom Indonesia is one of the largest telecommunication company in Indonesia and is On mobile segment, its subsidiary PT Telekomunikasi Seluler (Telkomsel) has an important role in supporting one of Telkom Group's goals, transform to the digital telecommunication company. To achieve that, one of the initiatives done by Telkomsel is launching BY.U in 2019, the first end to end digital prepaid cellular services in Indonesia. The release was coincidental with the COVID-19 and had noticeably affected the revenues and returns of companies. The purpose of this paper is to see if there is any effect after the launching of BY.U to Telkom Group by measuring and analyzing the financial performance of Telkom Group. The research method used in this study was descriptive by using financial ratio analysis, and a sample paired t-test was also applied to test 11 financial ratios. The data used in this research were collected from Telkom Group financial statements for the period 2014-2020. The study discovered that there was only 3 variables of financial ratio analysis that significantly affected which is current Ratio, Debt-to-Equity ratio, and Price per Earning ratio. The remaining ratios are insignificantly affected after the BY.U launch.*

**Keywords:** BY.U, Financial Performance, Financial Ratios, PT Telkom Indonesia, PT Telekomunikasi Seluler, Telecommunications Industry, Telkom Group

### INTRODUCTION

Advances in technology provides ample incentives for companies to continue innovation. Agility is often the required part to adapt to the exponentially more rapid pace of technological development. Additionally, agility may be required alongside with the resilience of a company to adapt and resist unforeseen events that may affect the previously established flow of income through existing products and/or services (Nadar & Wadhwa, 2019).

The effects of COVID-19 are global; significant impacts had been found in several industries. Specific to the telecommunications sub-sectors, increasing number of countries impose restrictions on the physical movement of its residents to limit the spread of the infection had concurrently increased the data usage of telecommunications sectors. Network resiliency of such sectors are tested; the massive increase of network usage in form of data usage spikes and increasing number and duration of voice calls may present an additional risk to network instability. Reports related to sudden and massive spike of telecommunications utilizations had been reported in Europe; increase of connection drop rates, lower audio quality, and dropping connection during calls had been reported. Several mitigation efforts had been initiated, such as reducing the picture and/or streaming quality in order to preserve the available bandwidth to temporarily cope with the sudden spike of network usage. On the flip side, the current overloaded conditions of telecommunications had opened several avenues for business opportunities, specifically related to the newfound importance of performing contactless transaction in order to minimize the risk of infection. In theory, increased demand for telecommunication to avoid traditional methods of socialization during the COVID-19 should increase the demand of telecommunication services such as the one offered by BY.U (Agur et al., 2020).

PT Telekomunikasi Seluler (Telkomsel) is a subsidiary of Telkom Group. It has an important role in supporting one of Telkom Group's goals, transform to the digital telecommunication company. The launch of BY.U as the first end to end digital prepaid cellular services in Indonesia was aimed to innovate on the existing platform for the digital telecommunications services in Indonesia. The purpose of this paper is to see if there is any effect after the launching of BY.U to Telkom Group by measuring and analyzing the financial performance of Telkom Group before and during the pandemic (based on the latest available data).

### RESEARCH OBJECTIVES

Based on the introduction and background, the research objectives are:

1. To recognized if there any effect after the launching of BY.U to PT Telkom Indonesia using financial ratio analysis.
2. To analyze whether there are significant differences in the company financial performance between quarter I-III 2019 (Pre-BY.U) and quarter I-III 2020 (Post BY.U) through T-test statistical method

### LITERATURE REVIEW

Contactless digital payments for peer-to-peer (P2P) transfers and purchases in stores may help maintain social distancing, subsequently reducing the risk of spreading and prolonging the pandemic. The existing financial technologies had been provided, such as digital payments, Unified Payments Interface service, Unstructured Supplementary Service Data, and bank prepaid cards. Increasing use of prepaid cards had been noted in a survey in India during the COVID-19 crisis (Agur et al., 2020).

Several benefits had been noted with usage of prepaid cards, particularly during the time of pandemic where restrictions had been placed upon the citizens of Indonesia to prevent further spread of the disease. Digital payments, the one offered by prepaid cards, aside from additional tool to aid during the quarantine process during the pandemic may provide additional convenience. Remittances may also be accelerated using digital forms of payments, increasing the throughput of aid coming to the citizen. Increased coverage and increased ease of use without the requirement to initiate physical contact by usage of the prepaid cards may increase the revenue of the telecommunications service without exposing the consumers to additional health risks by initiating social contact during the time of pandemic (Daryanto, Armintanta, et al., 2020).

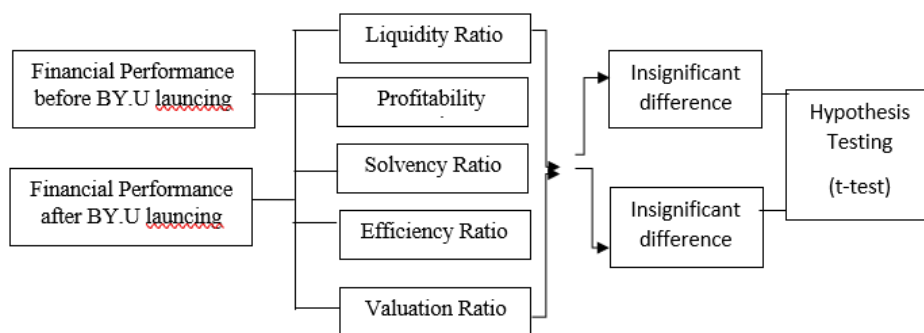
**RESEARCH METHOD**

This study uses descriptive financial ratio analysis and sample t-test based on eleven variables as detailed in the variable section to determine if there were significant differences in the financial performance of PT. Telkom Indonesia, Tbk. before and after Telkom Group launched BY.U in 2019. The source of data used for the analysis was secondary data collected from the company’s audited annual financial statements from 2014 until 2020. Unaudited financial statements are not included in this study; validity of the quarterly financial statements was further validated with the annual report. Reliability data was not tested due to the inclusion of the audited reports.

The data was then processed and analyzed using a comparative analysis method. Firstly, the collected data was divided into two periods, pre BY.U launching using data only from quarter I-III 2019, and after in quarter I-III 2020. The method was chosen as the authors considered it appropriate to examine if there had been any significant differences, be it in increase or decrease, in the financial performance of the company after the launchin of the product.

**Research model**

**Chart 3.1 Financial Model Research Analysis**



Financial statement ratios are useful in analysing and interpreting the financial statements of a company (Nadar & Wadhwa, 2019). After determining the analysis method, chart 3.1 is a form of step adaptation of the method that has been determined for this case.

**Hypothesis**

BY.U is a product of telecommunication business to improve the company's financial performance. The problem that the author is trying to solve here is whether the establishment of BY.U makes a significant difference to the company's financial performance or vice versa. According to Yusup et al., (2019), In quantitative research, the hypothesis is drawn from the theoretical study that comes from literature review as a temporary answer to the research problem. Each component of the financial ratio written on the data sample (quarterly and annual reports) were tested for its difference between the selected time period. The following hypotheses were tested in this study. The null hypothesis would be accepted if there were no significance between before and after launching of BY.U was found with the aforementioned statistical tests.

H0: There were no significant difference on the financial performance between before and after the BY.U launching in 2019

H1: There were significant difference of current ratio in financial performance between before and after the BY.U launching in 2019.

**Variables**

This study uses financial analysis ratios as the variables used to test the hypothesis testing. The variables are listed below:

1. Current Ratio. It measures a company’s ability to pay its short-term liabilities with current total assets of the company. Generally, the higher this ratio is, the better it is for the creditors.

$$\text{Current Ratio} = \text{Current Assets} : \text{Current Liabilities}$$

2. Acid-test Ratio. Also known as quick ratio, it is useful to see if the company has enough cash to cover its immediate liabilities. If the company's acid-test ratio is much lower than current ratio, it usually means its current assets depend highly on inventories.

$$\text{Acid - Test Ratio} = \text{Current Assets} - \text{Inventories} : \text{Current Liabilities}$$

3. Debt to Equity Ratio. This ratio can be used to evaluate how much leverage a company is using. The lower leverage ratio indicates a company or stock with lower risk to shareholders.

$$\text{Debt / Equity Ratio} = \text{Total Liabilities} : \text{Shareholder Equity}$$

4. Profit Margin Ratio. It determines how much profit the company can generate for each dollar of sale.

$$\text{Profit Margin Ratio} = \text{Net Income} : \text{Net Sales Revenue}$$

5. Return on Assets Ratio (ROA). This ratio indicates how efficient a company utilizes its assets to generate profit or net income. The higher the ratio is, the better it is because it hints more asset efficiency.

$$\text{Return on Assets Ratio (ROA)} = \text{Net Income} : \text{Total Assets}$$

6. Return on Equity Ratio (ROE). It tells investors how well a company can generate profit with the money they have invested.

$$\text{Return on Equity Ratio (ROE)} = \text{Net Income} : \text{Shareholder's Equity}$$

7. Working Capital Turnover Ratio. This ratio indicates how much a company generates revenue and uses the available cash on operation within a year. The high working capital turnover ratio means that company management is very efficient in using a company's assets and liabilities for supporting sales.

$$\text{Working Capital Turnover Ratio} = \frac{\text{Sales Revenue}}{\text{Working Capital}} \\ \text{Working Capital} = \text{Total Current Assets} - \text{Total Current Liabilities}$$

8. Asset Turnover Ratio. This ratio determines the sales revenue by using their own assets. The higher the asset turnover ratio means the company is performing better and implies that a company generates more revenue per dollar of assets.

$$\text{Assets Turnover Ratio} = \text{Sales of Revenue} : \text{Total Assets}$$

9. Inventory Turnover Ratio. It measures how fast a company sells inventory. This ratio helps in decision making for pricing, manufacturing, marketing and purchase of new inventory. The higher ratio implies that a company is strong in sales.

$$\text{Inventory Turnover Ratio} = \text{Cost of Goods Sold} : \text{Inventory}$$

10. Earnings per Share (EPS) Ratio. It indicates how much money a company makes per its share of stock and usually is used to measure corporate value. The higher the ratio is, the more profit the company makes to distribute to shareholders.

$$\text{Earnings per Share Ratio} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Number of Shares Outstanding}}$$

11. Price to Earning (P/E) Ratio. This ratio calculates the value of a company's share price with its EPS. It is used to compare a company against its previous records and to see whether the company is overvalued or undervalued. A high ratio hints that high growth rates are expected by the investors in the future.

$$\text{Price to Earning (P/E) Ratio} = \text{Market Price per Share} : \text{Earnings per Share (EPS)}$$

## RESULTS AND DISCUSSIONS

### Hypothesis Testing

Table 4.1 sums up the result of paired sample t-test of PT Telkom Indonesia's financial ratios, with P-value as the measuring tool to prove the hypotheses in this research. The hypotheses will be accepted if the P-value score is < 0.05 and will be rejected if the p-value score exceeds 0.05.

Table 4.1 Summary of PT Telkom Indonesia, Tbk Ratio Analysis using paired sample T-Test.

Variables	Period	Mean	Paired sample t-test (p-value)	Decision
<b>Liquidity Ratio</b>				
Current Ratio	Pre	0.9367	0.01	Accept the first hypothesis
	Post	0.6950		
Acid-test Ratio	Pre	0.9320	0.008	Accept the second hypothesis
	Post	0.6827		
<b>Solvency Ratio</b>				
Debt-to-Equity Ratio	Pre	0.8950	0.03	Accept the third hypothesis
	Post	1.0413		
<b>Profitability Ratio</b>				
Profit Margin	Pre	0.2307	0.051	Reject the fourth hypothesis
	Post	0.2393		
Return on Asset (ROA)	Pre	0.7300	0.073	Reject the fifth hypothesis
	Post	0.6600		
Return on Equity (ROE)	Pre	0.1363	0.508	Reject the sixth hypothesis
	Post	0.1350		
<b>Efficiency Ratio</b>				
Working Capital Turnover	Pre	-4.8823	0.874	Reject the seventh hypothesis
	Post	-3.0780		
Asset Turnover	Pre	0.3190	0.065	Reject the eighth hypothesis
	Post	0.2803		
Inventory Turnover	Pre	66.0983	0.251	Reject the ninth hypothesis
	Post	50.0933		
<b>Valuation Ratio</b>				
Earning per Share (EPS)	Pre	113.6033	0.691	Reject the tenth hypothesis
	Post	112.8233		
Price per Earning (P/E)	Pre	42.0687	0.001	Accept the eleventh hypothesis
	Post	32.1733		

The Table 4.1 shows that PT Telkom Indonesia's debt-to-equity ratio p-value score is less than 0.05 and have a **positive significant difference**. Besides, as shown in Table 4.1, PT Telkom Indonesia's current ratio, price to earnings and acid-test ratio p-value score are 0.01, 0.001, and 0.008. This actively demonstrates that there **are negative significant differences** of 25.8%, 23.52% and 26.74% in PT Telkom Indonesia's current ratio, price to earnings and acid-test ratio performances after the launch of BY.U product, as the p-value is less than 0.05. Therefore, the first, second, third and eleventh hypothesis are accepted.

However, referring to Table 4.1, the rest of the ratios are exceeding the p-value score of 0.05, consequently the hypotheses are rejected. The ratios with **insignificant negative differences** before and after the launch of BY.U are ROA, ROE, asset turnover, inventory turnover and EPS ratio. Thus, the **insignificant positive differences** are the profit margin and working capital turnover ratio.

### Liquidity Ratio Performance

Figure 4.1 and 4.2 demonstrates PT Telkom Indonesia's liquidity by its current ratio and acid-test ratio from the first quarter of 2019 to the third quarter of 2020. Current ratio is a liquidity ratio which measures a company's ability in paying short- and long-term obligations. Looking at the result, PT Telkom Indonesia's current ratio shows a decrease of from Q1 2019 to Q3 2020. The figure also interprets that in Q3 2020, for every IDR 1 of debt, the company was able to pay the debt with IDR 0.64. While the acid test ratio reflected every IDR 1 of current liability, the company has IDR 0.62 in its monetary assets to pay the liability. The liquidity ratio value of PT Telkom Indonesia in 2015-2019 is not acceptable. It means that the company was unable to pay short-term liabilities with its current assets without taking the value of inventory.

Figure 4.2 Telkom Indonesia Current Ratio

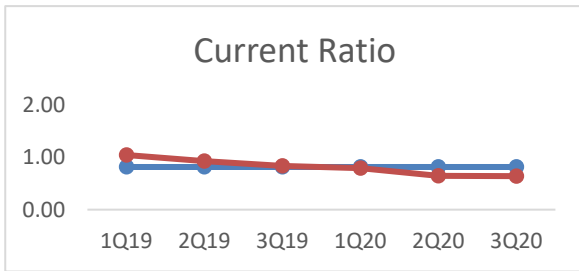
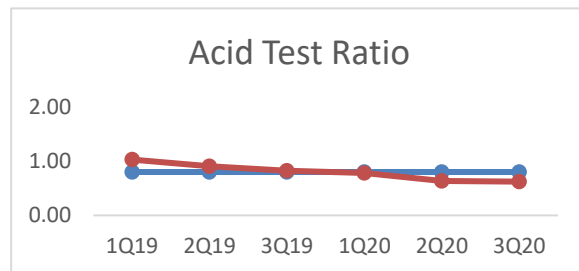


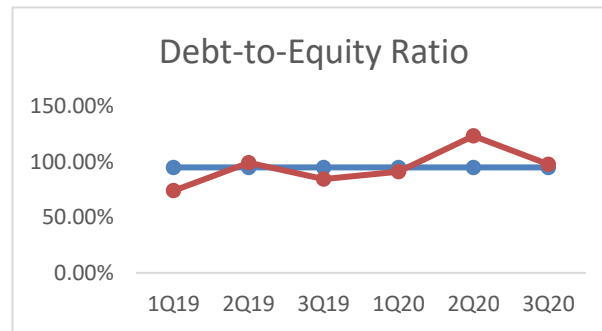
Figure 4.1 Telkom Indonesia Acid Test Ratio



**Solvency Ratio**

The figure 4.3 displays PT Telkom Indonesia Tbk debt-to-equity ratio from Q1 2019 until Q3 2020. It shows that the values fluctuated at the first quarter of 2019 to the third quarter of 2020. Increasing from 74.01% to 99.09% in Q1-Q2 2019, decreased to 84.63%, increased to 123.38% in Q2 2020 and decreased to 97.83% with an average of 95.02%. In this ratio, the lower the ratio reflects the company had a low risk towards shareholders. Based on the t-test, the ratio had a positive significant impact after the product launching which increases the risk of a company to shareholders.

Figure 4.3 Telkom Indonesia Debt-to-Equity Ratio



**Profitability Ratio**

The figure 4.4, 4.5 and 4.6 shows the trend of PT Telkom Indonesia Tbk profit margin ratio, return on asset and return on equity by its percentage from 2019-2020. The company's profit margin ratio decreased from 24.33% to 22.28% in Q2 2019, increased to 25.51% in Q2 2020 and decreased to 23.15% in Q3 2020 with its average of 23.50%. The ROA of the company also fluctuates from Q1 2019 to Q3 2020 starts from 3.87% increased to 10.78% in Q3 2019, decreased to 3.61% and increased to 9.92% in Q3 2020. The result of this ratio is similar with the return on equity ratio, which also fluctuates throughout the year. In Q3 2019, the value increased to 19.91% from 6.73% in Q1 2019, decreased to 6.89% in Q1 2020 then increased to 19.62% in Q3 2020.

In overall, the company profitability ratios are considered fluctuated along the year. Thus, from 1Q2019 TO 3Q2020 there was also an increase and decrease in the average values of profit margin (23.07% to 23.93%), ROA (73% to 66%) and ROE (13.63% to 13.50%). According to the t-test the profitability ratios still have insignificant differences after the launching of BY.U product.

Figure 4.4 Telkom Indonesia Profit Margin Ratio

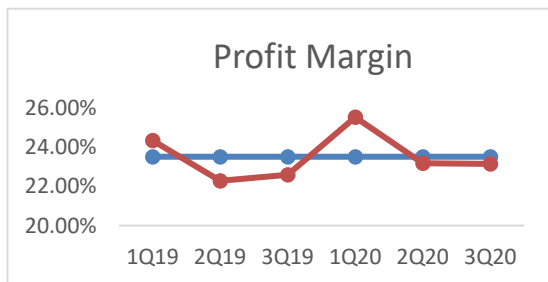


Figure 4.5 Telkom Indonesia Return on Asset Ratio

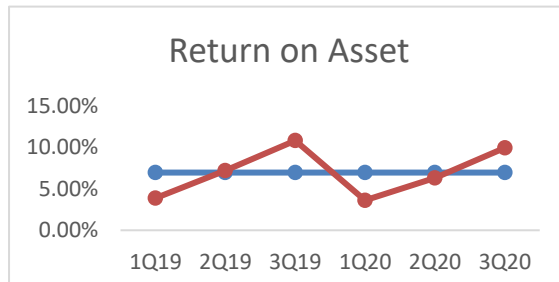
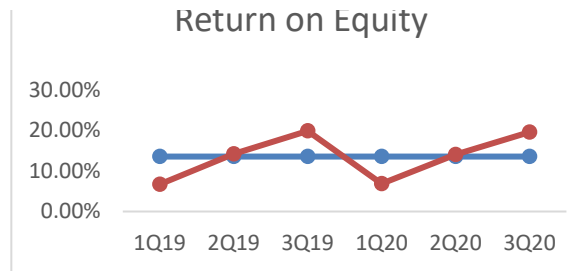


Figure 4.6 Telkom Indonesia Return on Equity Ratio



Efficiency Ratio

Figure 4.7 Telkom Indonesia Inventory Turnover Ratio

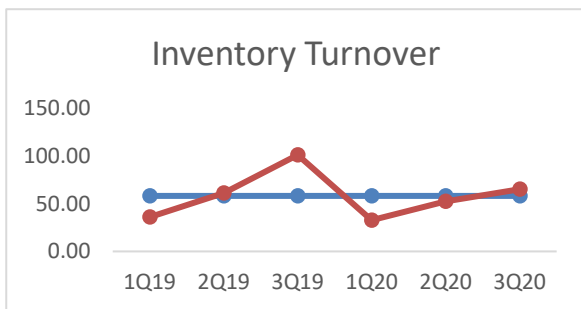
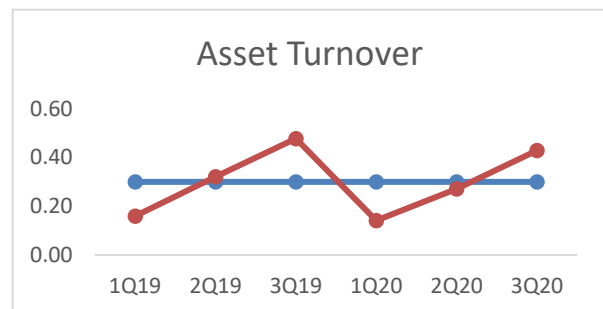


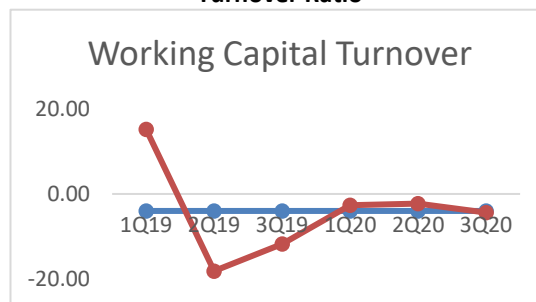
Figure 4.8 Telkom Indonesia Asset Turnover Ratio



The asset turnover ratio and inventory turnover ratio in PT Telkomsel Indonesia experienced a moderate increased and decreased from the first quarter of 2019 to the third quarter of 2020. The asset turnover is used to measure the company's effectiveness in deploying its assets to generate sales, while the inventory turnover ratio indicates how well PT Telkom Indonesia in this case turns inventory into sales.

The figures above suggest that PT Telkom Indonesia had low investment efficiency rate and hadn't effectively utilized its assets, because every 1\$ of asset generates only an average of \$0.30 to the company. In this case, PT Telkom Indonesia as a telecommunication industry might have less efficient rate if compared to other industry such as FMCG (Fast Moving Consumer Goods), which targets high volume sales with low margin (Daryanto, W. M., Dewanti, R. W., and Farras, R. Financial Ratio Analysis of PT Unilever Indonesia Tbk to Measure Financial Performance)(Daryanto, Wijaya, et al., 2020). The inventory turnover ratio figure above displays the rise of the company value inventory from 36.09 to 65.23 times in Q3 2020.

Figure 4.9 Telkom Indonesia Working Capital Turnover Ratio



The working capital turnover shows the company's financial health through the measurement of working capital that used in purchasing inventory, which is then generated into sales revenue to company. PT Telkom Indonesia faced major decreased on this ratio in the second quarter of 2019 from 15.41 times to -18.06 times, then faced an increased -2.61 times in the first quarter of 2020, continued with a considerably stable state on the next quarter. However, the t-test result found that there are negative insignificant impact and positive insignificant differences (working capital ratios) after the launch of BY.U to this efficiency ratio of PT Telkom Indonesia Tbk.

## Valuation Ratio

Figure 4.10 Telkom Indonesia EPS

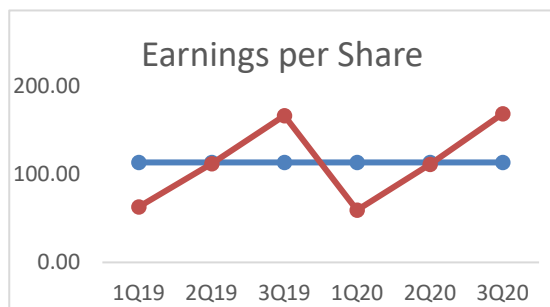
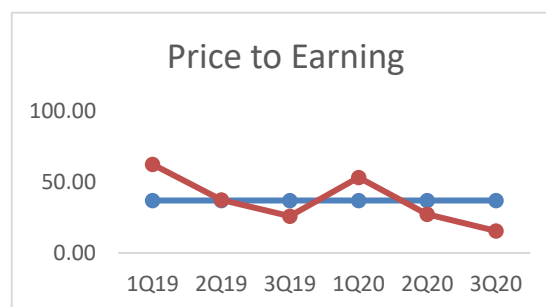


Figure 4.11 Telkom Indonesia PE Ratio



Earnings per Share (EPS) and Price to Earnings Ratio (PER) are the ratio used to attract investors to the company. The trend of PT Telkom Indonesia Tbk EPS and PER are shown in figure 10 and 11. From 2019-2020, the EPS ratio of the company increased from 62.83 to 168.57 times with average of 113.21. Price to Earning (P/E) ratio of the company, shown on figure 11, had significant changes from 2019-2020 with the value of 62.71 times to 15.62 times. However, the t-test result indicates that P/E ratio were significantly affected by the launch of BY.U product. The low value of PE ratio reflects how investors forecast future performance of a company, and investor might not be willing to pay more for the company shares. However, PT Telkom Indonesia's big reputation in telecommunication industry can attract and appeal the shareholder to invest and support the digitalization era, especially with products such as BY.U.

## LIMITATIONS

This research mainly focuses in analyzing the financial performance of PT Telkom Indonesia Tbk as the parent company of its subsidiary (PT Telekomunikasi Seluler), and comparing the result in before and after the launching of BY.U. Considering that BY.U is a new product launched in 10 October 2019 and during this research, the PT Telkom Indonesia financial report is only available until the third quarter of 2019, the periods used in this research were only taken for 9 months before and after the launch of BY.U. Besides, the limitation for this study is only using 11 financial ratios in measuring the company financial performance. Therefore, further research can conduct a similar research but with more periods and financial ratios to compare based on the data availability. Other than that, future researcher can discuss about how the digitalization of telecommunication industry affect financial performance of PT Telkom Indonesia with broader topics and not limited to one product.

## CONCLUSIONS AND RECOMMENDATIONS

This study aims to discover whether there was a significant difference in PT Telkom Indonesia Tbk financial performance comparing before and after the launch of BY.U in the fourth quarter of 2019. This research used 11 financial ratio analysis and paired sample t-test in hypotheses testing. Based on the hypotheses testing performed in this study, 3 variables of financial ratio analysis which is Current Ratio, Debt-to-Equity ratio, and Price per Earning ratio are significantly affected, while the other 8 variables of financial ratio analysis (acid-test ratio, ROA, ROE, asset turnover ratio, inventory turnover ratio, EPS ratio and working capital turnover ratio) are not significantly different post-launch of BY.U product. In overall, this study found that PT Telkom Indonesia Tbk had not have significant impact between 9 months before and after the launch of BY.U. As BY.U is considered a part of digital transformation, this research would also help other telecommunication industry nowadays in facing digitalization and how digital product can affect the company financial performance.

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