
THE IMPACT OF CURRENT RATIO, RECEIVABLE TURNOVER AND TOTAL ASSETS TURNOVER ON ROA AT TELECOMMUNICATION SUB-SECTOR COMPANIES REGISTERED IN BEI YEAR 2009-2017

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Abstract

The purpose of this research study is to examine and analyze the effect of the current ratio, receivable turnover, and total asset turnover on ROA. The data used in this research is secondary data, which is acquired from the financial statements of the telecommunication sub-sector companies that has been registered in the Bursa Efek Indonesia (BEI) or the Indonesian Stock Exchange consistently from 2009 to 2017 with the used of purposive sampling method. The sample is consists of four telecommunication sub-sectors that are listed in Bursa Efek Indonesia. The analytical tool used is multiple regression analysis. The results showed that the current ratio had a significant positive effect on ROA and total asset turnover had a significant positive effect on ROA, while the receivable turnover had no effect on ROA.

Keywords: *Current Ratio, Receivable Turnover and Total Assets Turnover, ROA*

Introduction

Basically every human being cannot be separated from the need of social interaction in the form of communication. In the past, communicating is only been done through face to face (for short distances) and writing letter (for long distance). However, along with the development of science and technology that is increasingly developing and increasingly sophisticated making communication now easy, it can even be said to be very easy. Many companies contribute to the development of technology in Indonesia.

In addition, companies nowadays are trying to improve its quality, the company also seeks to improve its current management systems. Companies must be able to manage every part of the company, especially in terms of financial management to be able to perceive the financial performance, because every company has a purpose to make a profit. Financial managers are required to run financial management as well as possible, so that companies can maintain and develop their company performance.

The financial performance of a company can be measured and perceived through the company's financial statements by analyzing and calculating ratios in its financial performance. Financial statement analysis is a very important way to obtain information relating to the company's financial position and the achievements that have been made in relation to determining the company's strategy to be implemented. By analyzing the company's financial statements, the managers and company leaders should be aware of the status and development of company's financial position with the results achieved in the previous or past and at present records. In addition, by conducting financial analysis in the past, there will be various weaknesses and results that are considered good enough. With the detection of the risk of financial difficulties as early as possible, the management can anticipate by implementing steps and strategies that can be done to overcome them as a solution. The results of the analysis of the company's financial statements can help businessmen who want to invest in a company.

To measure the profitability of a company can be done with several ratios, one of which uses Return on Assets (ROA). Profitability ratios are ratios used to measure the capability of the company to make a profit. In this research study using Return on Assets (ROA) which is a measure of operating efficiency that reflects the financial return of a company from all funding activities provided to the company. The higher the ratio, the better the company is, because the continuity of the company will be guaranteed. But the growth rate of a company's profitability can be influenced by several factors.

To measure how liquidate a company is, it can be measured using a current ratio. The current ratio is the ratio used to measure the company's capability to pay its short-term obligations. According to Kasmir (2015), a

low current ratio usually indicates the occurrence of problems in liquidity, but if the ratio results are high it is uncertain for the company's condition to be good.

And to measure how effective a company is in using its assets, it is necessary to have a receivable turnover ratio and total asset turnover ratio included in the activity ratio. According to Riyanto (2008), accounts receivable turnover is a ratio that shows the length or period of time to convert receivable accounts to cash. The higher the turnover, the shorter the period of time between credit sales and billings. High receivable accounts turnover can increase profitability because the amount of uncollectible account receivables is decreasing. While the total assets turnover is the ratio used to measure the capability of a company to manage the current assets to generate sales that might increase the company's profit in the near future.

The object in this research study is telecommunication sub-sector companies where the companies are a network service provider companies that will continue to experience development because these companies sell an advanced technological sophistication and has good future prospects, so it is interesting to study. This is also supported by the increasing number of telecommunication users and is increasingly needed by many people who make this a market opportunity that should be promising for telecommunication companies.

There are several studies that examine the influence of current ratio, accounts receivable turnover, and inventory turnover on ROA. As done by Putri and Teguh (2013) on their research, which shows the current ratio and total assets turnover have a significant effect on the profitability of ROA. Hidayat and Anik's (2015) research study which shows the results of receivable turnover have a significant effect on ROA profitability. Jin's research (2015) which shows the results of the current ratio and receivable turnover have a positive effect on profitability ROA. And Putri and Sasi's research (2017) which shows that the current ratio and total assets turnover have a significant effect on ROA profitability.

Based on these descriptions, it is interesting to conduct a research entitled **The Effect of Current Ratio, Account Receivable Turnover, and Total Assets Turnover on ROA at Telecommunication Sub-Sector Companies Registered on the BEI year 2009-2017**. The ratio used in this analysis is the current ratio, accounts receivable turnover, and total assets turnover on ROA.

Research Method

The type of data used in this study is secondary data. According to Sujarweni (2015), secondary data is/are data obtained from notes, books and magazines in the form of company publication reports, government reports, articles, books as theories, magazines, and so on. The data used in this study comes from the annual financial statements of Telecommunication Companies in 2009 to 2017 obtained from the *Bursa Efek Indonesia* (BEI) or the Indonesian Stock Exchange.

While the research design used is descriptive quantitative design. According to Sujarweni (2015), descriptive quantitative is a research conducted to determine the value of each variable, whether one variable or more, independent variables without making relationships or comparisons with the other variables.

The population used in this research study are all telecommunication sub-sector companies in Indonesia which are registered in the *Bursa Efek Indonesia* (BEI) year 2009-2017, as many as 6 telecommunication companies in the country. However, from this population there are two companies that do not comply with the research criteria. Therefore, the four (4) other companies that fit the research criteria are the only companies that were included in the research sample, namely PT XL Axiata Tbk, PT Smartfren Telecom Tbk, PT Indosat Tbk, and PT Telekomunikais Indonesia Tbk.

Research Results and Discussion

The description of the data in this research study covers or involves the mean as a measure of data centralization and standard deviations as a measure of the spread of data.

Table.1

Descriptive Statistics Results

	Mean	Std. Deviation	N
ROA	1.547	11.2779	36
CR	61.597	30.4487	36
RATO	7.633	.5088	36
TATO	43.328	20.5086	36

Source: Secondary data processed by SPSS, 2018

From the results of the analysis using descriptive statistics on Return On Assets (ROA) which shows the mean result of 1.547 and the standard deviations of 11.2779. The results of the analysis of Current Ratio (CR) show the mean value is 61.597 and the Standard Deviations is 30.4487. The results of the analysis of Receivable Account Turnover (RATO) shows the mean value is 7.633 and the Standard Deviations is 0.5088. The results of the analysis of Total Asset Turnover (TATO) shows the mean value of 43.328 and Standard Deviations of 20.5086.

The value of standard deviation that is greater than the average indicates the magnitude or high amount of big data variable, or any considerable gap from the lowest and highest ROA. The value of standard deviation that is lesser than the average indicates the magnitude or amount of the small data variable or the absence of a large enough gap from the lowest and highest current ratio.

Before the data is tested using regression, the data used must meet the classic assumption test. According to Gozali (2011), classical assumption testing includes normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

1. Classical Assumption Test

a) Normality Test

A good regression model is to have normal or near normal data distribution. To detect data normality, it can be done in two ways, namely the first Kolmogorov-Smirnov test and normal probability plot chart.

First, the data is said to be normally distributed if the Kolmogorov-Smirnov results show a significant value above 0.05. Here are the results of the Kolmogorov-Smirnov test in table 2.

Table.2
Test Result *Kolmogorov-Smirnov*

		Unstandardized Residual
N		36
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	5.63589570
Most Extreme Differences	Absolute	.139
	Positive	.135
	Negative	-.139
Kolmogorov-Smirnov Z		.834
	Asymp. Sig. (2-tailed)	.490

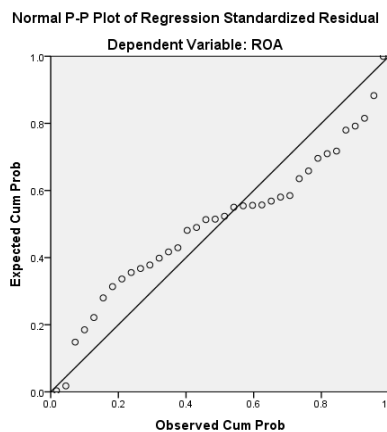
Source: data

Secondary processed by

SPSS, 2018

Based on the table above, the data in this study can be said to be normally distributed because the Kolmogorov-Smirnov test results show that a significant value of 0.490 means greater than 0.05.

Secondly, to find out the data is normally distributed, the data must spread around the diagonal line and follow the direction of the diagonal line.



Source: Secondary data processed by SPSS, 2018

Figure 1

Normal Probability Plot Graph

From Figure 1, it can be seen that the data is normally distributed, because the data is spread around the diagonal line and follow the direction of the diagonal line. So from both ways, it is known that the researcher data is normally distributed

b) Multicollinearity Test

Multicollinearity can be seen from the tolerance value and its opposite, variance inflation factor (VIF). If the Tolerance value is greater than 0.10 and the VIF value is less than 10, the regression model is said to have no signs or symptoms of multicollinearity. Following are the results of the multicollinearity test:

Table.3
Multicollinearity Test Results

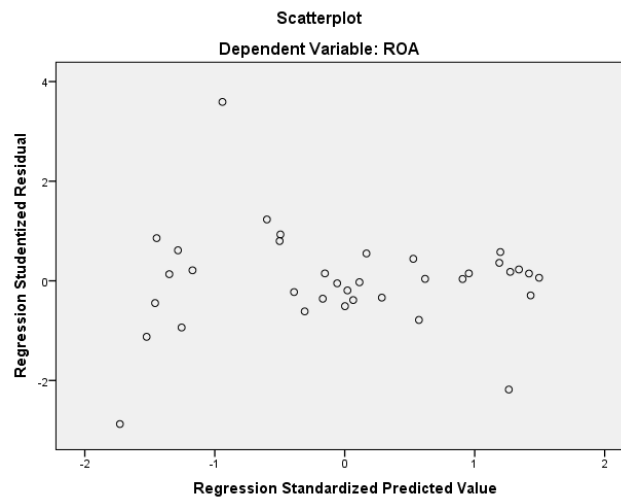
Model		Correlations		Collinearity Statistics	
		Partial	Part	Tolerance	VIF
1	(Constant)				
	CR	.384	.208	.513	1.948
	Ppi	.277	.144	.786	1.272
	TATO	.718	.515	.534	1.874

Source: Secondary data processed by SPSS, 2018

In the table above shows that the tolerance value at the current ratio is 0.513, accounts receivable turnover is 0.789, and total asset turnover is 0.534 which means that the value is greater than 0.10 and has a VIF value at the current ratio of 1.948, receivable turnover of 1.2272, and total asset turnover of 1.874 means that the value is lesser than 10. These results indicate that there are no signs or symptoms of multicollinearity and can be used in this study.

c) Heteroscedasticity test

This test is done using Scatter Plots. It is stated that heteroscedasticity does not occur, that is if there is no clear pattern, and the points spread above and below the number 0 on the Y axis.



Source: Secondary data processed by SPSS, 2018

Figure 2

Scatter Plot Test Results

The results of the Scatter Plot test show that the Scatter Plot pattern of the regression spreads. This indicates that there is no symptom of heteroscedasticity.

d) Autocorrelation test

A good regression model is a regression that is free from autocorrelation. In this Autocorrelation test, the test was carried out using the Durbin-Watson test. If the Durbin-Watson number is between the numbers -2 to +2, it means there is no autocorrelation.

Table.4
Durbin-Watson Test result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.866 ^a	.750	.727	5.8942	1.344

Source: Secondary data processed by SPSS, 2018

From the test results in the table it is found that the Durbin-Watson value was 1.344 which means that the DW value was between -2 to +2, so it can be concluded that there is no autocorrelation problem in this study.

2. Resgression Analysis

Regression analysis is used to measure the strength of linear associations (relation) between two or more variables.

Table.5
Regression Analysis Testv Result

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	-49.356	18.190	
	CR	.108	.046	.290
	Ppi	3.599	2.209	.162
	TATO	.388	.066	.705

Source: Secondary data processed by SPSS, 2018

From the table above can be explained that a regression equation to determine the effect of current ratio, accounts receivable turnover, and total asset turnover, to Return On Assets (ROA) as follows:

$$ROA = -49.356 + 0,108CR + 3,599RATO + 0,388TATO + e$$

From the regression equation above it can be interpreted that:

1. Signs of the regression coefficient

Signs of the regression coefficient reflect the relationship between independent variables current ratio, accounts receivable turnover, total asset turnover with the dependent variable Return on Assets (ROA). The (+) sign means there is a positive or unidirectional relationship between the independent variable and the dependent variable. Whereas for the (-) sign, it means there is no relationship between the independent variable and the dependent variable. So from these results it can be seen that the negative value is owned by the variable Return on Assets (ROA) and positive value is owned by the current ratio variable, receivable accounts turnover, and inventory turnover. From these results it can be concluded that the increasing value of the independent variable current ratio, receivable turnover and total asset turnover will increase the value of the dependent variable ROA on the company.

2. Constants

In the multiple linear regression equation above, it is known that the constant value is -49.356, meaning that if the current ratio, receivable accounts turnover, and total assets turnover is equal to 0, and the profitability will be -49.356 units.

3. The regression coefficient of the current ratio is 0.108

The magnitude or amount of the coefficient is 0.108 which means it shows the direction of a positive (directional) relationship between the current ratio with Return on Assets (ROA). Positive signs indicate the effect of the current ratio directed to ROA, ie if the current ratio variable rises by one unit, the ROA will increase by 0.108, that is, by assuming the variables of receivable turnover and total asset turnover constant.

4. The regression coefficient of receivable turnover is 3.599

The magnitude of the coefficient is 3.599, which means that it shows the direction of a positive (unidirectional) relationship between receivable account turnover and Return on Assets (ROA). A positive sign indicates that the receivable turnover is in line to ROA, that is, if the receivable account turnover variable rises by one unit, then the ROA will increase by 3.599, that is, assuming the current ratio variable and the total asset turnover are constant.

5. The regression coefficient of total asset turnover is 0.388

The magnitude of the coefficient is 0.388 which means it shows the direction of a positive (unidirectional) relationship between total asset turnovers with Return on Assets (ROA). A positive sign shows the effect of total assets turnover in line to ROA, ie if the total asset turnover variable rises by one unit, then the ROA will increase by 0.388, that is assuming the current ratio variable and receivable accounts turnover

3. Hypothesis Test

Statistical test t basically shows how far the impact of an independent variable individually in explaining or determining the variation of the dependent variable.

Table.6
T-analisis Test Result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-49.356	18.190		-2.713	.011
1 CR	.108	.046	.290	2.356	.025
Ppi	3.599	2.209	.162	1.629	.113
TATO	.388	.066	.705	5.833	.000

Source: Secondary data processed by SPSS, 2018

From the results of the analysis, it can be explained as follows:

1) The Effect of Current Ratio on ROA

The 1st hypothesis test shows that the T-value of the current ratio to Return on Assets (ROA) is 2.356 with a significant value of $0.025 < 0.05$. This means that 1st hypothesis is accepted because the current ratio affects ROA. The (+) number on the t-test shows that there is a unidirectional movement between the variable current ratio to ROA, where if the current ratio increases then ROA will increase and vice versa.

Current ratio variable is usually used to indicate a company's capability to fulfill its obligations. The lower the value of the current ratio, it will indicate the incapability of the company to meet or complete its short-term obligations, so that this can affect the level of profitability of the company, where the company is unable to fulfill its obligations. As with companies with the FREN code in year 2010, the value of the company's current ratio is low and it can be seen that the ROA value in that year is also low. While companies with high current ratio values such as companies with TLKM codes from year 2014 to 2016 were also followed by high ROA values as well. This company means that it can fulfill its obligations properly so that it can conclude a high ROA value as well. Thus it can be said that the increase in current ratio will have an impact in increasing ROA. With the increase in ROA, it can be concluded that companies with high profit results, can attract investors who want to invest in a company.

The results of this research study are supported by the research of Jin (2015) that the current ratio variable has a positive effect on the ROA variable. And Putri and Sasi (2017) research studies which states that the current ratio has a significant effect on profitability (ROA).

2) The effect of Receivable Accounts Turnover on ROA

The 2nd hypothesis test shows that the value of t-test receivable turnover on ROA is 1.629 with a significant value of $0.113 > 0.05$. This means that the 2nd hypothesis is rejected because the receivable accounts turnover has no effect on ROA. This means that the error from the effect of receivable account turnover on profitability is greater than the acceptable error rate of 5%. The (+) number in the t-counting or test indicates that there is a unidirectional movement between the variable receivable account turnover to ROA, where if the receivable account turnover increases then ROA will also increase and vice versa.

Low receivable turnover means that accounts receivable takes a longer period of time to be billed in cash. Managers must be able to increase credit sales and keep the average receivable accounts must remain low so that the turnover increases. Many companies sell their products or services in the form of credit, resulting in receivable accounts. As been done by this telecommunications sub-sector companies. It aims to retain current customers and to attract new customers.

It is also indicated that the receivable accounts turnover with the company code FREN in year 2011, accounts receivable turnover is 4360.3 (8.4) but the company's ROA is -19.5. So high receivable turnover does not always have high ROA results.

The results of this study are inconsistent from some previous studies, because in previous studies the accounts receivable turnover had an effect on ROA.

However, the results of this research study are supported by the existence of research from Diana and Bambang (2016), which states that inventory turnover does not significantly influence

the profitability of ROA. And supported also by the research conducted by Sari (2017) which states that receivable accounts turnover does not affect its profitability.

3) Effect of Total Assets Turnover on ROA

The 3rd hypothesis shows that the value of t-Test total assets turnover toward ROA is 5.833 with a significance value of $0.000 < 0.05$. This means that 3rd hypothesis is accepted because total asset turnover has a positive and significant effect on ROA. The (+) number in the t-Test shows that there is a unidirectional movement between the total assets turnover variable to ROA, where if the total assets turnover increases then ROA will increase and vice versa.

From the data that has been processed, it can be seen if the total asset turnover is low, the ROA results will also be low. As with companies with the FREN code in year 2010 and 2011 with total assets turnover of 8.4 and 7.8 with a low ROA value which are -31.3 and -19.5. And the results of a high total asset turnover also have high ROA as well. Like companies with TLKM code with a high total asset turnover as in year 2012 amounting to 69.0 with a ROA value of 16.5 which means high. From these data can be identified which companies are able to utilize the assets they have in income earnings or profit. By looking at the results of this total asset turnover, it will also be beneficial for investors who wants to invest in whichever company.

This research is supported by the research of Putri Teguh (2013) which states that total asset turnover has a positive and significant effect on ROA.

a) Determination Coefficient Test (R2)

This determination coefficient is used to find out which is the most influential of the independent variables consisting of current ratio, accounts receivable turnover, and total assets turnover against Return on Assets (ROA).

R2 is used to measure the best accuracy of multiple regression analysis. R2 approaches 1 so it can be said that the stronger the capability of the independent variable in the regression model is to explain or affect the dependent variable. Conversely, if R2 approaches 0, the weaker the independent variable explains the dependent variable.

Table.7
Determination Coefficient Test (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.866 ^a	.750	.727	5.8942	1.344

Source: Secondary data processed by SPSS, 2018

From the results of the table above, it can be seen that the value of Adjusted R Square is 0.727 or equal to 72.7%, which means that the variable ROA can be explained or affect by the variables which are current ratio, accounts receivable turnover, and total assets turnover. While 27.3% of the ROA variable can be affected by other factors not explained in this research study.

Conclusions and recommendations

Based on the results of the data analysis discussed in the previous chapter, it can be concluded that:

1. The results of the t test on the current ratio show that the current ratio has a significant positive effect on ROA.
2. The results of the t test on accounts receivable turnover shows that the receivable turnover does not have a positive effect on ROA.
3. The results of the t test on total asset turnover indicate that total asset turnover has a significant positive effect on ROA.

From this research the researcher wants to give some advice to several parties so that in the near future it can be better, such as following:

1. For companies

Companies that are listed on the IDX should report their financial statements regularly and consistently, so as to facilitate anyone, whether researchers or investors who want to see their financial statements.

2. For Researchers

We recommend adding a variable that can describe the Return on Assets (ROA) of a company, so that further research can provide better research results from this study.

References

- Aunuddin. 1989. *Bahan Pengajaran Analisis Data*. Departemen Pendidikan dan Kebudayaan Direktorat Jendral Pendidikan Tinggi Pusat Antar Universitas Ilmu Hayat. Bogor: Institut Pertanian Bogor.
- Dewi, et al. 2014. *Manajemen Keuangan*. Edisi revisi. Jakarta: Mitra Wacana Media
- Diana, P dan Bambang.H. 2016. *Pengaruh Perputaran Kas, Piutang, Persediaan, Terhadap Profitabilitas pada Perusahaan Semen di BEI*. STIESIA Surabaya.
- Eka, Y dan Suwitho. 2016. *Analisis Faktor-Faktor yang Mempengaruhi Profitabilitas pada Perusahaan Telekomunikasi*. STIESIA Surabaya.
- Fahmi, Irham. 2014. *Manajemen Keuangan Perusahaan dan Pasar Modal*. Jakarta: Mitra Wacana Media.
- Ghozali, Imam. 2011. *Aplikasi Analisis Multivariat dengan Program SPSS* Cetakan kelima. Semarang: Badan Penerbit Universitas Diponegoro
- _____. 2013. *Aplikasi Analisis Multivariate Dengan Program SPSS*. Edisi ketujuh. Semarang: Badan Penerbit Universitas Diponegoro.
- Hidayat, W dan Aniek. 2015. *Analisis Faktor-Faktor yang Mempengaruhi Profitabilitas Pada Perusahaan Semen yang Terdaftar di BEI*. STIESIA Surabaya.
- Horne, J.C. V dan J. M. Wachowicz, JR. 2009. *Fundamentals of Financial Management Prinsip-Prinsip Manajemen Keuangan*. Edisi Dua Belas. Jakarta: Penerbit Salemba Empat.
- Jin, T.F.. 2015. *Analisis Faktor-Faktor yang Mempengaruhi Profitabilitas Perusahaan yang Terdaftar di BEI*. STIE Trisakti.
- Kasmir. 2008. *Analisis Laporan Keuangan*. Jakarta: Rajawali Grafindo
- _____. 2013. *Analisis Laporan Keuangan*. Edisi Pertama. Jakarta : Cetakan Keenam. Rajawali Pers.
- _____. 2015. *Analisis Laporan Keuangan*. Cetakan Kedelapan. Jakarta: Rajagrafindo Persada.
- Munawir, S. 2007. *Analisa Laporan Keuangan. Edisi Keempat*. Liberty. Yogyakarta.
- Prihadi, Toto. 2012. *Praktis Memahami Laporan Keuangan Sesuai IFRS & PSAK*. Cetakan Kesebelas. Jakarta Pusat: PPM
- Putri, Q. A dan Sasi A. 2017. *Analisis Faktor-Faktor yang Mempengaruhi Profitabilitas Perusahaan Food and Beverage Indonesia*. STIESIA Surabaya.
- Putry, N. A. C dan Teguh. E. 2013. *Pengaruh current Ratio, Total Assets Turnover, dan Net Provit Margin Terhadap Return On Assets*. Universitas Sarjana Wiyata Taman Siswa.
- Riyanto, B. 2008. *Dasar-Dasar Pembelian Perusahaan*. Edisi Keempat. BPFE. Yogyakarta.
- Santoso, Singgih. 2010. *Statistik Non Parametrik Konsep dan Aplikasi*. Yogyakarta: Pustaka Pelajar
- Sari, Nur. E. P. 2017. *Pengaruh Persediaan dan Piutang Terhadap Profitabilitas pada Industri di Bidang Farmasi yang Terdaftar di Bursa Efek Indonesia Periode 200-2014*. Universitas Bina Widya,
- Siregar, S. 2012. *Metode Penelitian Kuantitatif*. Jakarta: Kencana
- Sugiyono. 2016. *Metode Penelitian Kuntitatif, Kualitatif, dan RD*. Bandung: Alfabeta.
- Sujarweni, Wiratna. 2015. *Metodologi Penelitian Bisnis & Ekonomi*. Yogyakarta: Pustaka Baru.
- Wibowo. 2012. *Manajemen Kinerja*. Jakarta: Rajawali Pers

www.bumn.go.id, access on 6 March 2018, 14:22

www.idx.co.id, *Laporan Keuangan dan Tahunan BTEL 2009-2016*. Access on 24 March 2018, 09.49

www.idx.co.id, *Laporan Keuangan dan Tahunan EXCL 2009-2016*. Access on 24 March 2018, 09.51

www.idx.co.id, *Laporan Keuangan dan Tahunan ISAT 2009-2016*. Access on 24 March 2018, 10.09

www.idx.co.id, *Laporan Keuangan dan Tahunan FREN 2009-2016*. Access on 24 March 2018, 09.43

www.idx.co.id, *Laporan Keuangan dan Tahunan TLKM 2009-2016*. Access on 24 March 2018, 09.55

www.manajementelekomunikasi.org, *Pertumbuhan Industri Telekomunikasi*, access on 18 April 2018, 18.00