The Impact of Firm Financial Fundamentals on Stock Performance: An Empirical Evidence on Indonesian Telecommunication Sector

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Abstract. The rapid development and market rivalry eventually posed massive challenges in determining the future development trend of organizations to become market winners. Several types of research were conducted exploring the factors affecting investment in telecommunication companies. One has found significant relevance in financial management, which consists of financing, investment, and dividend decisions in private sector mobile telecomm businesses. This study aimed to examine the impact of financial performance on the stock price of telecommunication companies listed on the IDX (Indonesia Stock Exchange) in the period of 2014-2020. The financial fundamentals used are current ratio (liquidity), return on asset (profitability), total asset turnover ratio (activity), and debt to asset ratio (solvency). This research applies qualitative data method. The population in this study is nine telecommunication companies listed on the IDX (Indonesia Stock Exchange) for seven-year period, and the sample selection technique used was purposive sampling. It resulted in 63 samples in total being obtained in this study. Moreover, the data type of this research uses secondary data, which is the annual financial report. The data analysis method in this study is descriptive analysis, classical assumption test, and multiple linear regression analysis processed using e-views 12. This research result is based on the fixed-effect method run since it is more suitable for the model of this research. The result shows that the financial fundamentals variables mutually have a significant impact on the stock performance. Yet, not all variables are significant individually.

1 Introduction

Unprecedented change is the common term and probably becomes overused when the topic of potential megatrends in the future serves on the table. Yet, it is what is happening nowadays, another day, another period of unprecedented change. These days, creating new technologies with economic challenges will give more significant changes and bigger opportunities for astute investors. According to GIIN (Global Impact Investing Network), The worldwide impact investment market is worth $715 billion and is rapidly growing. The 2020 impact investor survey had the biggest number of responders in ten years, with 294 worldwide impact investors managing $404 billion in impact investing assets. Given the constant technological changes that affect the telecommunications sector, it is essential to understand the factors that influence the stock return in this sector. The development of the mobile internet and the consequent impact on the lives of all of us means telecommunications companies play a fundamental role in the world economy, increasing interest in the literature on the viability of telecommunications as one of the determinants of economic growth.

In terms of telecommunication connectivity, Indonesia is currently amidst a national transformation. Over the past decade, the country has seen dramatic improvements in telecommunications availability, technology awareness, and usage; investment in digital infrastructure by government and private sector players; regulatory oversight; and development planning. And based on the preceding reporting, the positive development in the telecommunications sector should positively influence investors’ perceptions of the telecommunication sector, causing stock prices in telecommunication sector businesses to rise due to increased investor interest.

Given the telecommunication industry’s economic importance, a better understanding of the telecommunication stock performance determinants of telecommunication stock return will aid potential investors, managers, public policymakers, and regulators evaluate related risks and making better decisions. Hence, in this research, the writer contributes to the literature by analyzing the impact of financial fundamentals such as current ratio (liquidity), return on asset (profitability), total asset turnover ratio (activity),
and debt to asset ratio (solvency) on the stock performance of telecommunication companies listed in IDX period of 2014-2020. This study will define the effect of financial fundamentals on the stock performance of telecommunication companies listed in the IDX (Indonesian Stock Exchange) period of 2014-2020, which can help policymakers make decisions and define their strategy. This study will give several recommendations to the policymakers and regulators to look after their interest in the country’s financial sector. To the academic, this study will provide a new perspective regarding the impact of financial fundamentals, especially on the telecommunication industry. Moreover, for investors, this research will be able to give a new idea for investors who prefer to know or predict a company’s intrinsic value more accurately.

2 Literature Review

2.1 Theory of Financial Fundamentals

The fundamentals of finance are the basic concepts and principles embedded in the operation of the financial world. Understanding the fundamentals of finance can be helpful on a personal level and for anyone involved in business and investing. Musyoki and Kadubo (2012) stated that financial performance is calculated by operating cash and net income, meaning that it can measure the ability of the company to generate additional resources over time by starting with day-to-day activities. According to Makanga (2015), the influence of debt financing on financial performance is significant. Working capital and inventory turnover variables, average turnover, and cash conversion cycle influence a company’s financial performance (Bagh et al. 2016). Khan (2013) assert that capital structure affects financial performance in terms of long-term debt, short-term debt, and overall debt. This study’s financial success is based on a profitability metric called Return on Assets (ROA). Saleh (2015) stated that NPM, ROA, and ROE substantially influence stock returns in Pakistan’s Oil and Gas sector.

Other factors, such as capital structure, are also important factors that can impact the cost of capital (Khan 2013). Velnampy et al. (2012) stated that debt as one variable in the capital structure significantly influences the successful selection and use of capital, an essential critical financial strategy. It is either short-term debt or long-term debt. Hadhek and Fatma (2014) stated that debt is a company’s liability to other parties and becomes the source of funds that a company can get, especially from external resources. Eventually, debt as external funds can significantly impact financial performance. This was aligned with Shubita and Alswailahh’s (2012) study, showing that debt can boost profitability because interest payments can lower tax payments, implying a significant positive influence on financial performance.

2.2 Stock Performance

The stock return can be used to assess a company’s performance. In simple terms, stock return refers to the profit made on a stock investment over a set period of time. A variety of factors influence the average rate of return on stocks that an investor achieves. The stock return indicates its worth to investors; therefore, a high stock return entices investors to put money into the company (Lee and Zhao 2014). Stock markets have also become a worldwide phenomenon. Being one of the world’s fastest-growing economies, Indonesia has considerable prospects for companies in various industries.

Investors and analysts commonly use stock price movements or financial ratios to forecast stock returns. When it comes to financial ratios, there are a lot of conflicting outcomes, forcing consumers to compare ratios and decide. Nevasalmi (2020) suggests that the ability to predict stock returns from its financial statement accurately is critical for building trading strategies. Poženel and Lavički (2019) stated that by hedging against probable market risks, speculators might benefit from stock index trading. According to Rjumohan (2019), forecasting a company’s stock returns is very important because its high value most likely indicates the profit of its shareholders. Yuniningsih (2018) argues that stock returns are utilized to determine a publicly-traded company’s worth. The stock market has fluctuated highly, and the dynamic system with high specifications and non-linearity requires attention and relationships that are not always predictable.

2.3 Current Ratio

To measure company liquidity, commonly, a company uses the current ratio calculated by dividing the company’s current assets by its current or short-term liability. Current assets examples are cash, accounts receivable, inventory, and securities. A high Current Ratio demonstrates the company’s better liquidity because it can pay higher amounts in order to satisfy all of its financial obligations. Alliant to the previous statement, Öztürk (2017) declares that the current ratio is part of the financial performance measurement that shows how much a company’s current liabilities can be met by the company’s current assets Bagharzadeh and Mahboobeh (2013) supported this theory in their study regarding the relationship between the Current ratio and Share Price analyzing the data from NSE, INDIA using cross-sectional - correlation analysis that shows there is a significant positive effect of the current ratio on stock prices.

2.4 Return on Asset

Return on assets (ROA) is a ratio to measure how important assets are in generating net income. Novalita and Yulistina (2022) shows that there is a significant negative impact of ROA on stock return using the sample from LQ45 companies listed on the Indonesian Stock Exchange. Suyono et al. (2021) examined the
The impact of ROA on the value of consumer goods industry companies listed on the Indonesia Stock Exchange, showing that ROA has a significant negative impact on the company’s value. On the other hand, several studies namely from Hutapea et al. (2017) shows that the Return on Assets (ROA) has no significant effect on stock returns in the examination of automotive industry companies listed in IDX.

2.5 Total Asset Turnover Ratio

Total asset turnover ratio is a ratio to show how great a business can utilize its asset to generate sales. Baginski, Wahlen et al. (2017) stated that the total asset turnover ratio (TATO) is a tool to show how effectively a business can utilize its asset to produce revenues. The higher the revenue they earn with the particular level of assets indicates the more effective the company utilizes those assets. It will also eventually increase the corporate’s income. As result, it will attract more investors to invest in a business that gives potential stock returns in the future. With that being said, the total asset turnover ratio moves in the same line as the stock price. Adipalgun and Gede (2016) supported this theory in their previous study reveals that total asset turnover ratio has a significant positive effect on the stock return. Yet, on the other hand, according to Hutapea et al. (2017), total asset turnover ratio negatively impacts stock returns.

2.6 Debt to Asset Ratio

The debt to asset ratio (DAR) can be used as an indicator to measure the solvency rate of a company. It compares the total debt to the total asset of the company usually in a yearly period of time. The greater rate of debt to asset ratio (DAR), the bigger degree of leverage (DoL) of a company. Thus, it indicates the bigger risk the company offers if investors would put their money on them. There are some previous research regarding this ratio have been conducted. According to Siagian et al. (2021), in their research about factors that influence the stock price of pharmaceutical companies listed on the Indonesia Stock Exchange for the period 2016 - 2019 found that there is no significant effect of debt to asset ratio on the stock returns.

2.7 Hypothesis Development

A hypothesis in general meaning is a testable claim or statement that still needs to be tested or observed about the link between two or more variables in a particular occurrence or phenomenon. These variables include the relationship of the dependent variable with the independent variable (Creswell, 1994). The dependent variable is the variable that is being observed and anticipated to change, while the independent variable is the variable that is being tested on what is the impact or how it could affect the dependent variable. In this study, the independent variables are Current Ratio (Liquidity), Return on asset (Profitability), Total asset turnover ratio (Activity), and Debt to Asset ratio (Solvency). Furthermore, the dependent variable is The stock price of the telecommunication companies listed in BEI (Bursa Efek Indonesia) 2014-2020. Based on the previous research, the hypotheses of this study are:

Hypothesis 1: Current Ratio (CR) has a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020.

Hypothesis 2: Return On Asset (ROA) has a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020.

Hypothesis 3: Total Asset turnover ratio (TATO) have a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020.

Hypothesis 4: Debt to Asset Ratio (DAR) has a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020.

3 Methods

To conduct this research, the researchers use the qualitative method, which usually emphasizes data collection by analyzing the secondary data from the company’s financial statement report to provide quantifiable data in the quantitative technique. The data information is obtained from the target sample that matches the requirement of the total population. To understand and operate the data more accessible, the collected data is presented by numbers and then arranged in tables, charts, graphs, and non-textual forms. This research focuses on the impact of financial performance on stock returns for the telecommunication companies listed on the Indonesian Stock Exchange from 2014 to 2020. The analysis was confined to seven years, from 2014 to 2020, and only included telecommunications companies listed in IDX and had not been delisted during that time. Finally, the data for this study came from the company’s official financial statements, which were issued between 2014 and 2020.

According to Queirós et al. (2017), the quantitative method provides more objective and dependable findings through the examination process. It also uses a standardized measure to examine causal linkages between an independent and dependent variable and verify the hypothesis. It generalizes the specific concept that one wants to observe. In this study, the dependent variable is the variable that is being tested or commemorated in this research. Meanwhile, the
4 Data Collection

The data for this study was collected from the company’s official financial statements, which were released between 2014 and 2020. However, because the information is initially generating an annual time series model, it must be turned into dynamic panel data before being used. It also necessitates specific changes in the number of firms and observed variables. The population in this research is all the telecommunication companies listed in IDX, sector J311 (Wired Telecommunication Service), J312 (Integrated Telecommunication Services), and sector J321 (Wireless Telecommunication Services) which are 16 companies start from 2014-2020. Hence the population of this study are 105. While the sample of this study is nine from sixteen telecommunication companies, sector J311 (Wired Telecommunication Service), J312 (Integrated Telecommunication Services), and sector J321 (Wireless Telecommunication Services) in seven years with a timeline from 2014 until 2020 and not delisted during that time. Therefore, the sample of this study is 63.

The dependent variable in this study is Stock Return as for indicators to measure the stock performance, whereas the independent variables are Current Ratio, Return on Asset, Debt to Asset Ratio, and Total Asset turnover ratio. The researcher has provided a model framework for this investigation, which is shown below in Figure 1.

The collected data allow the analysis to consider panel data techniques. There are several methodologies to process panel data, however this study uses a Fixed Effect model. In the fixed effect model method, the regression model’s intercept can change freely across people or groups, but the slope is fixed between individuals. To capture intercept differences between people, this method uses dummy variables. The presence of not all variables included in the model equation permits not constant intercepts. Alternatively, in other words, for every single person and time, this intercept may change. This thinking is the rationale for the formation of the model. Moreover, the correlation coefficient is the test statistic between two continuous variables that tests the statistical relationship or association. This is known as the best method through which the relation between interest variables is measured, as it is based on the covariance test. It provides information on the size of the relationship or connection and the direction of the relation. The values range from -1.0 to 1.0. An error in the correlation calculation was determined by a number higher 1.0 or less than -1.0. A correlation of -1.0 is a perfectly negative relationship, while the relationship of 1.0 is perfectly positive. There is no linear relation between the movement of the two variables with the correlation of 0.0.

5 Results and Discussion

The data collected from the company’s financial statement are the independent variables of this research which consist of, the current ratio, return on asset ratio, total asset turnover ratio, and debt to asset ratio. The ratio is presented and processed in the form of percentages and each ratio has represented the liquidity, profitability, solvency, and activity of the company. The raw data used in this study can be found in Table 1 and Appendix 1. The data then is processed by the researcher using e-views 12 to get the result and finally draw the conclusion regarding the impact of firm financial fundamentals on stock performance on telecommunication sector at IDX 2014-2020.

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics</th>
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<tr>
<td>Mean</td>
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<tr>
<td>Median</td>
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<td>Maximum</td>
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<td>Minimum</td>
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<td>Std. Dev.</td>
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<td>Jarque-Bera</td>
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<td>Probability</td>
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<tr>
<td>Sum</td>
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<td>Sum Sq. Dev.</td>
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<tr>
<td>Observations</td>
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</table>
The regression involves 63 observations with 9 cross-sections and seven-time series. The cross-section or panel variable is well balanced since each cross-section has the same amount of observations. The mean of SR as the dependent variable (Y) is 11.4, with an overall minimum value of -83 and an overall maximum value is 346. The standard deviation of SR is 71.48. For the first independent variable, CR (X1), the overall minimum value of CR is 1, while the overall maximum value is 280, and the mean of the variable is 67. The standard deviation of CR (X1) is 56.9. For the second independent variable, ROA (X2), the overall minimum value of ROA is -50, while the overall maximum weight is 60, and the mean of the variable is 3.8. The standard deviation of ROA (X2) is 12.7. For the independent variable TATO (X3), the overall minimum value of TATO is 3, while the overall maximum weight is 68, and the mean of the variable is 33. The standard deviation of TATO (X3) is 20.2. Lastly, for the independent variable DAR (X4), the overall minimum value of DAR is 2, while the overall maximum weight is 93, and the mean of the variable is 49.4. The standard deviation of DAR (X4) is 26.

Table 2. Correlation Among Variables

<table>
<thead>
<tr>
<th></th>
<th>SR</th>
<th>CR</th>
<th>ROA</th>
<th>TATO</th>
<th>DAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR</td>
<td>1.000</td>
<td>0.063</td>
<td>0.323</td>
<td>-0.092</td>
<td>-0.112</td>
</tr>
<tr>
<td>CR</td>
<td>0.063</td>
<td>1.000</td>
<td>0.286</td>
<td>0.040</td>
<td>-0.309</td>
</tr>
<tr>
<td>ROA</td>
<td>0.323</td>
<td>0.286</td>
<td>1.000</td>
<td>0.363</td>
<td>-0.324</td>
</tr>
<tr>
<td>TATO</td>
<td>-0.092</td>
<td>0.040</td>
<td>0.363</td>
<td>1.000</td>
<td>-0.127</td>
</tr>
<tr>
<td>DAR</td>
<td>-0.112</td>
<td>-0.309</td>
<td>-0.324</td>
<td>-0.127</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The multicollinearity test is a commonly used assumption test that will be used in this study. In this research, the researcher utilizes the Pearson correlation matrix test. The correlation value between the two independent variables should not exceed 0.75 when utilizing the Pearson correlation to determine multicollinearity. From Table 2, it is proven that there is no variable that has a correlation above 0.75. The correlation between the dependent variable SR (Y) with the dependent variables CR, ROA, TATO, and DAR, is 0.06, 0.32, -0.09, and -0.11 respectively. Moreover, the correlation of CR to ROA, TATO, and DAR is 0.28, 0.04, and -0.32 respectively. The correlation of ROA to TATO and DAR is 0.36 and -0.32 respectively. Lastly, the correlation between TATO and DAR is -0.12. In conclusion, there is no multicollinearity between variables in this research.

Table 3 shows the regression result of the fixed-effect method. It shows that variables CR (X1) and DAR (X4) have a negative relation with the dependent variable SR (Y), while ROA (X2) and TATO (X3) have a positive influence on SR (Y). The R-square is 0.31, which means the independent variables, which are CR, ROA, TATO, and DAR could explain 31% of SR as the dependent variable, while the remaining 69% might be explained by other variables outside this model.

The P-value for the F-test of this model based on the regression analysis is 0.049628. This value is lower than the significance level of 0.05, which means reject the H0 and accept the H1. It is safe to conclude that the model is fit and feasible to be used. The independent variables mutually could predict the dependent variable.

Based on the Table 3, the p-value of CR is higher than the significance level of 0.05 (0.12 > 0.05), which implies that the Current Ratio (CR) does not have a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020. Moreover, based on the coefficient, there is a negative relationship between the current ratio and stock performance here. SR decreases by 1 point where CR increase by 0.44 points.

Based on the Table 3 it is shown that the p-value of ROA is smaller than the significance level of 0.05 (0.001 < 0.05), which implies that the Return on Asset (ROA) has a significant influence on the stock performance of telecommunication companies listed in IDX (Indonesian Stock Exchange) 2014-2020. Moreover, based on the coefficient, there is a positive relationship between the return on assets and stock performance here. When ROA increases by 2.95 points, the stock return also will increase by 1 point.
From Table 3, the p-value of TATO is higher than the significance level of 0.05 (0.17 > 0.05), which implies that the Total Asset Turnover (TATO) does not have a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020. Moreover, based on the coefficient, there is a positive relationship between the total asset turnovers and stock performance here. SR increases by 1 point when TATO increases by 3.73 points.

Table 3 shows that the p-value of DAR is higher than the significance level of 0.05 (0.27 > 0.05), which implies that the Debt to Asset Ratio (DAR) does not have a significant influence on The Stock Performance of Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020. Moreover, based on the coefficient, there is a negative relationship between the debt to asset ratio and stock performance here. SR decreases by 1 point when DAR increases by 1.53 points.

To sum up, this research result is based on the fixed-effect method run since it is more suitable for the model of this research. The result shows that the financial fundamentals variables mutually have a significant impact on the stock performance. Yet, not all variables are significant individually. Current asset, total asset turnover, and debt to asset ratio reportedly have no significant impact on the stock performance. This result is consistent with the research by Manopo and Jan (2017) and Siagian et al. (2021). On the other hand, return on asset (ROA) has a significant relationship with the stock performance of telecommunication companies in Indonesia. This result aligns with the theory by Schipper (1989) and DeAngelo (1990), firm income is one of the signals that is frequently used as a reference to create important decisions, such as in the context of capital market investment, takeovers (acquisitions), and business mergers. This idea backs up research that shows that investors prefer telecoms businesses with a high degree of corporate earnings in the form of profitability, which is predicted to boost stock returns in the future.

There are several recommendations implied from the result of the study. First, for the telecommunication company, in order to increase the stock performance, telecommunication companies should increase the ROA value since ROA can significantly impact the stock return of the company. Moreover, to increase the stock return, the company should not take the number of their current ratio (CR), total asset turnover (TATO), and debt to asset ratio (DAR) into consideration since those three variables have no significant impact on stock performance, in this case, the stock performance was measure by stock return. Moreover, since the return of

### Table 3. Regression of the Fixed Effect Method

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-17.20963</td>
<td>130.2239</td>
<td>-0.132594</td>
<td>0.8950</td>
</tr>
<tr>
<td>CR</td>
<td>-0.447036</td>
<td>0.282898</td>
<td>-1.580201</td>
<td>0.1204</td>
</tr>
<tr>
<td>ROA</td>
<td>2.953871</td>
<td>0.884702</td>
<td>3.388833</td>
<td>0.0016</td>
</tr>
<tr>
<td>TATO</td>
<td>3.730099</td>
<td>2.719031</td>
<td>1.371838</td>
<td>0.1762</td>
</tr>
<tr>
<td>DAR</td>
<td>-1.534929</td>
<td>1.388653</td>
<td>-1.05337</td>
<td>0.2743</td>
</tr>
</tbody>
</table>

To sum up, this research result is based on the fixed-effect method run since it is more suitable for the model of this research. The result shows that the financial fundamentals variables mutually have a significant impact on the stock performance. Yet, not all variables are significant individually.
assets has a significant influence on stock return, the company should focus more on increasing the number of returns on assets in order to attract more investors and gain more profit. For instance, a company can arrive at a high ROA either by boosting its profit margin or, more efficiently, by using its assets to increase sales. Since ROA gives a quick indication of whether the business is continuing to earn an increasing profit on each dollar of investment. Investors expect that good management will strive to increase the ROA to extract a greater profit from every dollar of assets at its disposal. For investors, it is clear that to gain more returns, investors better put their money on telecommunication stock that has a high return on asset (ROA).

This research investigated the effect of financial fundamentals on the stock performance of the Telecommunication Companies Listed in IDX (Indonesian Stock Exchange) 2014-2020. It is limited to nine telecommunication companies for seven years period only. Moreover, the variables used in this study are only limited to Current Ratio (Liquidity), Return on asset (Profitability), Debt to Asset ratio (Solvency), Total asset turnover ratio (Activity), and one independent variable named a stock return. Therefore, for future studies to get a wider view of the industry, it could be better to expand the type of company and use a longer period of time such as 15 to 20 years. Using the time dummy variable also recommended identifying the different results related to the time period, for example, differentiating the time in normal years and in pandemic years. There are also many other variables that can be used as financial fundamental indicators, for instance, Debt to Equity or Return on Equity to get new ideas on how equity-related ratios could impact the stock return of companies in a particular sector.

References


