

# Does Fundamental Analysis Still Influence Share Market Price?

Aida Wijaya\*, Nabilla, Zaki Dzulfikar Ramadhani, Vania Faza Aulia, Raissa Syanindhita  
Faculty of Economic and Business, Widyatama University, Cikutra 204A-Bandung,  
Indonesia  
\*rafael.aida@widyatama.ac.id

## Abstract

*Often research in accounting were conducted in Stock Exchange, due to the assumption that financial report should be used for decision making and stock exchange is the place where decision making occurred every seconds. Financial report provides information for fundamental analysis, such as profitability ratio. This ratio often used for the decision for share trading and in theory should be reflected in the share market price. Due to the many factors, which could affect the share pricing, the question raised was: does profitability ratio still significantly influence the share market price? This research aimed to find out whether profitability ratio influence the share market price, using the regression method and paired sample test to measure the influence of profitability ratio on the share market price before and after the release of financial report. The sample of this research was financial reports and share market price of automotive component manufacture companies listed in Indonesian Stock Exchange (IDX) during the period of 2016 – 2019. The regression models showed that the profitability ratios did not have any significant influence on the share market price and no significant differences in share market price between before and after the issuance of financial report. This concludes that profitability information was not the major factor in determining share market price.*

**Keywords:** ROA, ROE, NPM, Share Market Price.

## I. INTRODUCTION

Sure profitability is a key factor when investment decision making is involved. The Indonesian Stock Exchange (IDX) provides the investor or potential investors with financial information, which should reflect the fundamental condition of financial health of every company listed there.

Bhattacharya (1979) explained that the high rate of profitability ratio would result in the increase of company's value. The investor would put his trust in the companies with high profitability ratio because they believe the management would be capable to revolve his capital in an efficient way, which in the end would result in a more profit and more dividends for the investor. That condition would lead to the increasing price of the trading securities.

However, the fact was not always the same as the theory. There was phenomenon where the result was the opposite. In 2019, along with the decrease of manufacturing industries, 11 out of 13 automotive component manufacture industries listed in IDX experienced a decrease in share value, even when they still reported profit (Saleh, 2020).

Hendriksen stated that stock exchange was a good place for accountant to test the impact of new regulations on financial statements presentation. And how investor reacts on it would be reflected in the share market price (Hendriksen & Breda, 1992).

It has been a long time since then. Stock exchange had grown more complex and so many factors influence the share market price in a daily basis, not to say in minutely basis. For example, a more recent study in Bangladesh selected 17 variables, which effectively affect the movement of share market price in Bangladesh Stock Exchange (Islam et al., 2015). Among them, five were major factors; those were performance of industry and of company, market condition, investor decision, and financial factor.

Some recent studies' findings were also not all along with the theory. For example, study by Avalovic and Milencovic (2017) at Belgrade Stock Exchange which found that ROE and Price Earning Ratio (PER) did not significantly influence the share market price. Similar result came from the study at Amman Stock Exchange by Al Qaisi (2016) that ROE did not have any significant influence on the share market price.

This research objective was to find out whether there were significant differences of influences between before and after the release of financial report on the share market price, in regard of profitability ratio: ROA, ROE, and NPM. The study was restricted to automotive component industries at Indonesian Stock Exchange (IDX) from the period of 2016 to 2019.

To be more specific, the objectives of this research were stated as follows:

1. To measure the influence of Return on Assets ratio on share market price before and after the issuance of financial report
2. To measure the influence of Return on Equity ratio on share market price before and after the issuance of financial report
3. To measure the influence of Net Profit Margin ratio on share market price before and after the issuance of financial report.

## **II. LITERATURE REVIEW**

To describe some important elements related to this research, here are some literatures:

### **The Profitability Ratio**

Profitability ratio is a ratio to measure the capability of a company to gain profit. It could rate the degree of success or failure of a company for a period of time (Kieso et al., 2015). This ratio also shows the measurement of management effectivity in managing the resources in the company.

Profitability could be calculated using several ratios. This research used three profitability ratios; those are the Return on Assets (ROA), Return on Shareholders' Equity (ROE), and Profit Margin (NPM).

ROA is an overall measurement of profitability. It would show the efficiency of managers in handling the company's resources in gaining income. Therefore, the formula of ROA ratio is as follows:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Average Assets}}$$

(Kieso et al., 2015)

The net income earned by the company is divided by the average value of assets (the resources) used in the company in one period. This ratio is good to assess the capability or effectivity of managers in managing the assets in order to gain income.

The second ratio is the Return on Shareholders' Equity, with the formula as follows:

$$\text{ROE} = \frac{\text{Net Income}}{\text{Average Shareholder's Equity}}$$

(Kieso et al., 2015)

This ratio shows how many monetary units could be earned from each of invested monetary units by the investor. This ratio is used to measure how high the rate of return of investment that investor would want compare to the average investment he made.

The third ratio is the Profit Margin ratio, calculated as follow:

$$\text{NPM} = \frac{\text{Net income}}{\text{Net Sales}}$$

(Kieso et al., 2015)

This ratio shows how much of sales could result in the net income, measured in percentage. This ratio also could be seen as the capability of managers in managing the company's resources, that is, the ability to make sales in one side and to suppress expenses on the other side.

### Share Market Price

A market price is formed by the law of supply and demand. That is the same as the condition in the capital market where shares are traded (Jogiyanto, 2010). Since the market price would form every time there is a deal between buyer and seller, therefore the share market price could change once every second. Then at the end of every trading day, the stock market would record the closing price on every shares traded that day.

There were many factors affecting the movements of share market price. Both Internal and external factors could influence the price of shares. Among others, internal factors such as announcement regarding marketing, labor policy, financing, changes in Board of Directors, company take over, investment or expansion, and the issuance of financial statement. In addition, external factors such as legal announcement by authorities, changes in interest rates, exchange rates, political situation, etc. (Zulfikar, 2016).

In his study, Islam et al used 17 factors which were common for the considerations in deciding to buy a company' shares. Those factors were: EPS, PER, dividend, stock split, share buyback, company news, industry performance, investor' sentiment, economic factor, new product, takeover information, insider information, economic strength of the market, substitute, incidental transactions, share price trends, liquidity.

### III. METHODOLOGY

This research used multiple regression method to find out how significant was the influence of the ROA, ROE and NPM on share market price. The regression was calculated using data before and after the issuance of financial statement.

The regression model used in this research was:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e \quad (1)$$

Description:

- Y = Share Market Price, which were the average closing price 2 weeks before/after the issuance of financial reports
- $\beta_0$  = constant
- $\beta_1$  = regression coefficient of X1
- $\beta_2$  = regression coefficient of X2
- $\beta_3$  = regression coefficient of X3
- X1 = ROA
- X2 = ROE
- X3 = NPM
- e = residual error

The second step was to compare the share market price before versus after the issuance of financial statement. This step was to find out whether there was significant difference of value affecting the share price before and after investor was provided with the profitability ratio information. Based on the rationale of the theory, there should be significant difference of value between before and after the release of financial information, due to the difference of financial information received by investors.

### Research Hypothesis

Based on the theory described above, the hypothesis drawn for the research were:

- H1: Partially, ROA, ROE, and NPM have significant influence on share market price before the issuance of financial statement.
- H2: Simultaneously, ROA, ROE, and NPM have significant influence on share market price before the issuance of financial statement.
- H3: Partially, ROA, ROE, and NPM have significant influence on share market price after the issuance of financial statement.
- H4: Simultaneously, ROA, ROE, and NPM have significant influence on share market price after the issuance of financial statement.

The above hypothesis was tested using the regression method to come up with the formula for both before and after the issuance of financial statements. This was to find out whether the profitability ratios had significant influence on the share market price both partially and simultaneously. In addition, to see whether the nature of these ratios were consistent with the theory, which stated that when a company publishes a statement of profit, the market price should presumably increase.

The last hypothesis drawn was:

- H5: There are significant differences of the share market price between before and after the issuance of financial report.

The fifth hypothesis was tested using the paired sample test, to find out whether there were significant differences of the average share market price before and after the issuance of financial statement.

### Population and Sample

The population of this research was the financial statements and share market price of the automotive component manufacturing companies which listed in the Indonesian Stock Exchange (IDX) during the period of 2016 to 2019, which consisted of 13 companies.

The sample was taken using purposive sampling method, by deducting one company, which did not issue financial report, and one company, which did not have share market price data during the researched period. Therefore, the sample taken was 144 units.

**IV. RESULTS AND DISCUSSION**

The normality test showed that the regression models was fit to be used, no multicollinearity, no heteroscedasticity, and no autocorrelation were found in the model. The first regression model showed the influence of the ROA, ROE, and NPM on the share market price, as follows:

$$SMP = 0,895 - 4,212ROA + 2,300ROE + 0,122NPM + e \tag{1}$$

The first regression model formed from the data before the issuance of financial report. The determinant coefficient ( $R^2$ ) for this regression model was 0.12, which meant that the profitability ratio only had 12% of influence on the share market price. After the issuance of the financial report, the regression model is as follows:

$$SMP = 0,968 - 4,212ROA + 2,300ROE + 0,122NPM + e \tag{2}$$

The determinant coefficient ( $R^2$ ) for the second regression model was 0.111, which meant that the profitability ratio only had 11.1% of influence on the share market price. Also, in both model. The direction of the ROA, showed a condition, which was the opposite of the theory. The negative coefficient meant that when ROA increase, the share market price would decrease. That was not in accordance with the logic of the theory, where the share market price should increase when ROA increase. The low influence of the ratios on the share market price also confirmed by the significance test, which is shown in Table 1. Partially and simultaneously, the profitability ratios did not have significant influence on the share market price, both before and after the issuance of the financial report.

**Table 1. Significance Value**

Sig 0.05  
 $t_{table}$  2.018  
 $F_{table}$  2.83

	Before		After	
	sig	$t_{cal}$	sig	$t_{cal}$
Partial ROA	.118	1.597	.166	1.409
Partial ROE	.165	1.415	.203	1.293
Partial NPM	.803	0.25	.846	.195
		$F_{cal}$		$F_{cal}$
Simultaneous	.143	1.906	.173	1.74

Table 1 showed that all the significance value was greater than 0.05 and all  $t_{calculation}$  were lower than  $t_{table}$  2.018. The simultaneous test result of  $F_{calculation}$  was lower than  $F_{table}$ . Based on those results, it concludes that H1, H2, H3, and H4 were not accepted. The results showed that the profitability ratios of the automotive component manufacture industries listed in IDX, which was one important information regarding a company's financial condition, had no significant influence in the forming the share market price. It meant that the many other factors were the major considerations in setting the price.

Then, the next step was to find out whether there were any significant changes in the average share market price before the publication of financial reports compare to the average price after the issuance of financial reports.

Table 2 showed the two-week average share market price before and after the issuance of financial reports. The data showed that there was no specific pattern that could be seen in the increase or decrease of the share market price during the researched period.

**Table 2. Average of Share Market Price Before and after Financial Report Issuance**

Year	Before (=yr)	After (=yr+1)	Difference +/-(-)	
	Rp	Rp	Rp	%
2016	2,184	2,463	279	12.77
2017	2,242	2,143	99	(4.41)
2018	2,393	2,357	36	(1.50)
2019	1,691	1,617	74	(4.38)

Table 2 showed that the average share market price was indifference before and after the financial information were published. This could mean that financial information was not a significant factor in deciding to buy or sell shares in the stock market.

The result of the paired sample test was that the mean value of the share market price before the issuance of financial report was 3.05650, while the mean value after the issuance of financial report was 3.05535. The significance level was 0.738, which was greater than 0.05, also the  $t_{\text{calculation}}$  value was 0.336, lower than the  $t_{\text{table}}$  2.015. These meant that there were no significant differences of the average share market price between before and after the issuance of financial report. Therefore, H5 was not accepted.

So, how is it possible? Do nowadays investors decide to buy or to sell without financial information considerations taking into account?

To avoid any hasten conclusion in generalizing the result of this research, some conditions here were to be considered as the limitation of this research:

- Among others, the research only uses ROA, ROE, and NPM as the indicators of the profitability ratio. Using other financial information may have result in different findings.
- The average share market price used was from a two-week period before and same period after the issuance of financial reports. Longer periods may have different result. Because, the financial information is tending to be a relatively “long-period” information (published once in 3 months’ periods), compare to the share market price which could change almost every seconds.
- These findings resulted from the data of the automotive component manufacturing industry only. Other industries may show different result.
- The research was using average data industry. The same technique applied to specific company may produce different result. After all, decision to buy or to sell applied to a specific company.
- The indifference value of the share market price could be caused by the relatively the same value of ratios reported from year to year. Therefore, even when investor did use the profitability ratio in deciding to buy or sell, when the expectation remains the same, then the result would be relatively in the same price.

However, there was an interesting condition appeared in the regression model, which was the direction of the ROA. All the ratios were to measure profitability, so why be this ROA different? One answer was that ROA was not in consideration when deciding to sell or buy

shares. That lead back to the same question, do investors nowadays still use this financial information in deciding to buy or sell in the stock market.

Even when accountant say that financial information is the “fundamental most important” thing to take into consideration when valuing a company, the fact probably is far from that. Point to recent statement from an expert in finance accounting (Achdiat, 2020). As an investor, he admitted that when deciding to buy or sell a company’s share, he preferred to lay his decision mostly in other than financial information. Much more than  $\frac{3}{4}$  of his considerations resided on non-financial information, such as: period when the company started its business, the innovation it provided, or even more, the human capital it had. He believed an excellent top manager would lead a company to a success. It is interesting to hear such an acknowledgment from an expert in financial accounting.

Another possibility was that the lack of movement in share price was caused by the “reluctant” market. Some companies may be exclusively good in sharing dividend that no investor wanted to sell if not in a forced condition that he had to. In this case, the market price would seem dormant for relatively quite a long time. Therefore, dividend may be a dominant factor that would influence the market price.

Also, the orientation of short-term investors and long-term investors should be taken into account. The price share movement in a relatively short-term period would probably be the impact of short-term oriented investors’ action. Most likely, their actions were driven by so many factors but financial report, since it will remain the same for 3 months’ period. Even when stock market regulator changes the rule to demand company to provide monthly statement, still it would not be equal to the speed of the short-term oriented investors in making decision from seconds to seconds.

On the other hand, is it the role of the mediator, which was dominant in the stock market? Not all investors had the ability and knowledge to run the market, despite the fact that he owned the money. In some cases, the mediator (broker) had the authority to do the exchange. Agency theory may play a role in this situation.

If it is the nowadays fact that investors resided his decision mostly not on financial information, then what it is left for the accountant to do? One thing is for sure, the day of bad earning management is over. Obviously, investor is not interested anymore in a “polished earnings” reported in a financial report. This would make the job of a CPA auditor much easier and less risky.

Then, it is the time for accountant (and top managers) to shift the focus from historical financial reports to other way of reporting which would provide investor an insight into the future of the company. The IDX recently added the Sustainability Report into one of the compulsory report to be published in the stock market. This report could have more benefit for investor to predict the future of the company.

## **V. CONCLUSION**

This research gives a clear fact that profitability ratio was not an important significant factor to be considered in valuing company. Then when historical financial information was not the focus anymore, then company should move its effort to a more beneficial information reports, for example the Sustainability Report.

Some suggestions for future research were as follows:

- a. Study on other industries or on specific company.
- b. Use other period of research, for example every three months
- c. Further study to find out the different information used between long-term and short-term oriented investors.

- d. Use other financial factors, such as dividend, leverage, cash flows.
- e. Further explorations on major factors affecting the decision of trading in share market.
- f. Comparative study in different share market exchange, for example market in developing countries versus developed countries. See any difference in the habit of the investors.
- g. Study to find out how far a broker influences the decision in share trading and connecting it to the Agency Theory.

## **REFERENCES**

1. Achdiat, Isnaeni. (2020). Impact of Economic Reset and Digital Disruption on Sustainability of Accounting Profession. Webinar Accounting Series, Sekolah Tinggi Ilmu Ekonomi (STEI), Jakarta.
2. Al Qaisi, F., Tahtamouni, A., & Al-Qudah, M. (2016). Factors affecting the market stock price-The case of the insurance companies listed in Amman Stock Exchange. *International Journal of Business and Social Science*, 7(10), 81-90.
3. Avdalovic, S. M., & Milenković, I. (2017). Impact of company performances on the stock price: An empirical analysis on select companies in Serbia. *Economics of Agriculture*, 64(2), 561-570.
4. Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *The Bell Journal of Economics*, 10(1), 259-270.
5. Hendriksen, E. S., & Michael, F. Van Breda. 1992. *Accounting Theory*. McGraw-Hill.
6. Herawati, A., & Putra, A. S. (2018). The influence of fundamental analysis on stock prices: The case of food and beverage industries. *European Research Studies Journal*, 21(3), 316-326.
7. Islam, M. S., Salam, M. A., & Hasan, M. M. (2015). Factors affecting the stock price movement: A case study on Dhaka stock exchange. *International Journal of Business and Management*, 10(10), 253.
8. Jogyanto, Hartono M. (2010). *Teori Portofolio dan analisis Investasi*. BPFE. Yogyakarta.
9. Saleh, Tahir. (2020). Manufaktur RI Loyo, Kinerja Emiten Otomotif & Komponen Lesu. CNBC Indonesia, <https://www.cnbcindonesia.com/market/20200206121200-17-135789/manufaktur-ri-loyo-kinerja-emiten-otomotif-komponen-lesu/3>.
10. Zulfikar. (2016). *Pengantar Pasar Modal Dengan Pendekatan Statistika*. Yogyakarta: Gramedia.