

The Effect of Return on Equity, Net Profit Margin, and Cash Ratio on Tobin's Q at PT. Steel Pipe Industry of Indonesia, Tbk in 2014-2021

Desi Berliantiana Pudji Lestari, Reswanda

Department of Management, Narotama University.
Jl. Arif Rahman Hakim No 51, 60117, Surabaya, Indonesia
berliantianadesi@gmail.com, reswanda@gmail.com

Abstract

This research aims to see the effect of Return on Equity, Net Profit Margin, and Cash Ratio on Tobin's Q. This research was conducted in one company, PT. Steel Pipe Industry of Indonesia, Tbk in 2014-2021. The independent variables in this research use the ratio of Return on Equity, Net Profit Margin, and Cash Ratio. And the dependent variable in this study is Tobin's Q. The results of this research indicate that the Return on Equity variable has a positive and significant influence on Tobin's Q, Net Profit Margin has a positive and significant effect on Tobin's Q. While the Cash Ratio variable has a negative influence on Tobin's Q.

Keywords:

Cash Ratio, Net Profit Margin, Return on Equity, Tobin's Q.

1. Introduction

In the current era of globalization, industrial companies are always expected to keep abreast of developments in the business world. This is due to competition in the business world, especially between large companies in the manufacturing industry. Therefore, every company is expected to be able to improve its performance to be able to compete in the business world and achieve its goals.

Business competition in this era of globalization requires companies to continue to grow to increase the company value, which is seen from the company's stock price level. The higher the company's stock price, the higher the company's value. Company value is the shareholder's assessment of the company's success concerning stock prices (Lestari et al., 2020). The company aims to generate revenue and high sales so that the company's value is perceived positively by investors.

One of the industrial companies that survive amid intense competition is PT. SPINDO (Indonesian Steel Pipe Industry), Tbk. The company was founded in 1971 and is an industrial company engaged in producing various kinds of steel pipes or tubes; and is one of the largest steel pipe manufacturers in Indonesia. In addition, the company is experienced in exporting different types of steel pipes or tubes and other products. The products produced by this company consist of various products such as custom products (made to order), standard carbon products, and stainless-steel pipes that have been widely used for various industrial construction, infrastructure, utilities, oil and gas, and furniture and automotive industries.

Achieving the goal of corporate value can be seen from the position of financial performance in the company. Financial performance is an analysis to determine what a company is doing with the correct and appropriate financial performance rules (Tikawati, 2016). Financial reports are considered important because they can provide transparency to stakeholders, where this financial performance report can increase public confidence in the company so that it can improve its performance and the company (Jonnius & Setya Marsudi, 2021)

The company's value can be seen from the investor's view of its performance in managing its resources. The more investors buy the company's shares, the stock price will rise, and the company will increase. The rise and fall of the company's stock price determine the company's value in investors' eyes. One indicator that can be used to measure a company is using Tobin's Q ratio. Tobin's Q accurately measures how effectively management utilizes its economic resources (Aldino & Nurlaila, 2021).

The factors that can affect financial performance are financial ratios. Investors use profitability ratios such as Return on Equity (ROE) and Net Profit Margin (NPM) to assess financial performance. Return On Equity (ROE) is a ratio that describes equity and the ratio of net income to the equity that measures the level of investment of common stockholders (Nasir et al., 2022) And Net Profit Margin (NPM) is the ratio between net profit and sales. As well as the Cash Ratio this ratio is the ratio used to determine whether the company can pay its short term compared to the company's total cash and cash equivalents (Alvian & Munandar, 2022)

Based on the financial statements at PT. SPINDO (Steel Pipe Industry of Indonesia), Tbk, recorded net sales of Rp. 3.77 trillion in 2020. This sales revenue decreased by 23% from sales in 2019. With this decline in sales, the profit of PT. SPINDO fell 5% to 175.83 billion as steel prices continued to increase in 2020 due to the

steel supply shortage in steel-producing countries due to Covid-19. However, sales profit fell in previous years, PT. SPINDO, in 2021, scored a net profit of Rp. 445.54 billion as of the end of the third quarter (Kontan.com). This development in financial position is important for companies to assess financial performance. Therefore, with the above phenomenon, the researchers are interested in conducting research titled "The Effect of Return on Equity, Net Profit Margin, and Cash Rasio on Tobin's Q At PT. Indonesian Steel Pipe Industry, Tbk in 2014-2021".

1.1. Literature Review and Hypothesis

1.1.1. Financial performance

Financial performance is an effort made by the company for the efficiency and effectiveness of the company's activities carried out in a particular time (Aldino & Nurlaila, 2021). The purpose of the Financial performance is to account for the tasks assigned to him by the owner of the company and to provide relevant information used by:

- a. Manager in running the company's operations.

Interested parties (donors, organizational members, creditors, and other parties who provide resources for non-profit organizations (non-profit) to find out the performance and condition of the company. Financial statements are reports containing all information that can describe a company's financial condition. Company within a certain time. The information in the financial statements is useful for management and company stakeholders in assessing the company and determining appropriate policies. Therefore, companies are expected to present financial statements accurately so that the information provided can facilitate the company's assessment.

1.1.2. Financial Report

Financial report or financial documents are information produced by the management of a company that aims to provide information relating to the financial position, performance, and changes in the company's financial position (Ulfa & Asyik, 2018)

1. Return On Equity

ROE is a ratio used to compare net income after tax with the amount of own capital. ROE can be calculated using the formula:

$$\text{ROE} = \frac{\text{Net Profit for Common Stockholders}}{\text{Common Stock Equity}} \times 100\%$$

2. Net Profit Margin

Net Profit Margin (NPM) is a ratio of the company's ability to generate net profits (Suwardjono, 2016). Net Profit Margin is the ratio between net profit and sales. The NPM formula is :

$$\text{NPM} = \frac{\text{Net Profit}}{\text{Selling}} \times 100\%$$

3. Cash Ratio

This ratio measures the company's ability to pay debts immediately filled with cash available and securities that can be immediately cashed out (Agus & Riyanto, 2015). Mathematically, the cash ratio can be formula:

$$\text{Cash Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}} \times 100\%$$

4. Tobin's Q

The company's value in this study is proxied using Tobin's Q ratio. A high company value is the desire of the company owners because a high value indicates the prosperity of shareholders is also high. Shareholders' and companies' wealth is represented by the market price of shares, which reflects investment decisions, funding, and asset management. The following formula can calculate the value of the company (Tobin's Q):

$$\text{Q Tobin} = \frac{\text{Market Capitalization Value} + \text{Total Debt}}{\text{Total Amount of debt}} \times 100\%$$

Description :

$$\text{Market Capitalization Value} = \text{Share price} \times \text{shares outstanding}$$

1.1.3. Framework of Thinking

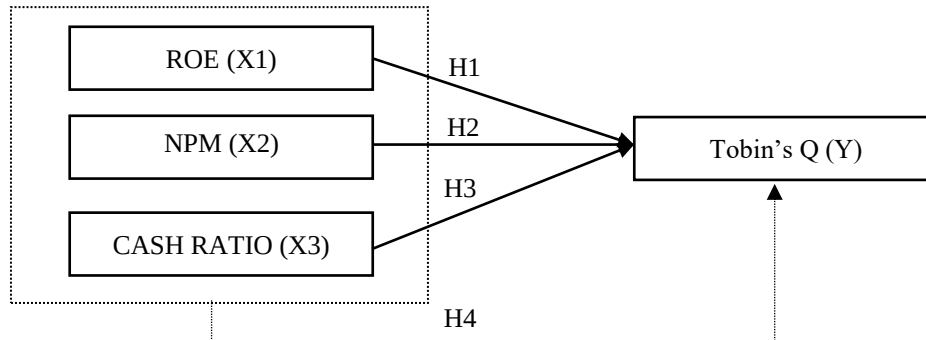
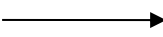
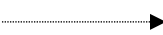


Figure 1 Framework of Thinking

Description :

Partially : 

Simultaneously : 

Hypothesis

H1: Return on Equity (ROE) partially positive and significant effect on Tobin's Q

H2: Net Profit Margin (NPM) partially positive and significant effect on Tobin's Q

H3 : Cash Ratio partially positive and significant effect on Tobin's Q

H4: Return on Equity (ROE), Net Profit Margin (NPM), and Cash Ratio simultaneously have a significant effect on Tobin's Q

2. Methodology

2.1. Object of Research

The object of concern in a study because the thing from this research is the target to be achieved to get answers and solutions to the problems that occur. The object of this research is the manufacturing industry company PT. SPINDO (Indonesian Steel Pipe Industry), Tbk from 2014 to 2021.

2.2. Data Set Technique

The data collection in this study was carried out by collecting the annual financial statements of the company PT. SPINDO (Steel Pipe Industry of Indonesia), Tbk in 2014-2021 which can be found at www.idx.co.id or on the company website PT. SPINDO.

2.3. Data Analysis Technique

In managing the data, using a statistical analysis method that is useful in describing the distribution of data in research using the statistical program (Statistical Program and Service Solution) Version 25. The data analysis used to test the variables is a descriptive test, classical assumption test, regression analysis test, and hypothesis.

3. Result and Discussion

3.1. Multiple Linear Regression Analysis

Table 1 Multiple Linear Regression Analysis
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	74,803	12,024		6,221	,003
ROE	2,194	1,561	8,178	4,345	,004
NPM	1,242	2,172	5,291	2,872	,000
Cash Ratio	-,997	1,264	-,361	-,789	,474

a. Dependent Variable: Tobin's Q

Based on the table above, the regression equation model formed is as follows:

$$Y = 74.803 + 8.178X_1 + 5.291X_2 - 0.361X_3$$

Information :

- The constant value of 74,803 means that if the regression coefficient of the Return On Equity, Net Profit Margin, and Cash Ratio regression coefficients is constant or zero. So, Tobin's Q will increase by 74,803.
- The regression coefficient of Return On Equity is 8.178, which means that if Return On Equity increases by one unit, it increases the company's Tobin's Q by 8.178 with a note that the Net Profit Margin and Cash Ratio variables are considered constants.
- Net Profit Margin regression coefficient is positive at 5.291, which means that if the Net Profit Margin increases one unit, it will increase Tobin's Q by 5.291 with a note that the Return On Equity and Cash Ratio variables are considered constants.
- Cash Ratio regression coefficient is negative at -0.361, meaning that if the Cash Ratio increases one unit, it will decrease Tobin's Q by 0.361 with a note that Return On Equity and Net Profit Margin is considered constant.
- The value of e (error) is 0.503, obtained from the magnitude of the influence of other variables outside the regression model. This means that the magnitude of the influence of other variables outside the regression model is 0.503.

3.2. T Test

Table 2 T Test
Coefficients^a

		Unstandardized	Coefficients	Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	74,803	12,024		6,221	,003
	ROE	2,194	1,561	8,178	4,345	,004
	NPM	1,242	2,172	5,291	2,872	,000
	Cash Ratio	-,997	1,264	-,361	-,789	,474

a. Dependent Variable: Tobin's Q

$$t_{table} = t(\alpha/2; n-k-1) = t(0,05/2; 8-3-1) = (0,025; 4) = 2,77645$$

Based on the results of the t-test in the table above shows that:

- Effect of Return on Equity on Tobin's Q H1
The effect of ROE on Tobin's Q is $0.04 < 0.05$, and the t count is $4.345 >$ while the t table is 2.77645, which means that there is an influence of the ROE variable of 8.178, which is indicated by the magnitude of the value of this study if ROE increases by one unit, then Tobin's Q increases by 8.178.
- Effect of Net Profit Margin on Tobin's Q H2
The effect of NPM on Tobin's Q is $0.000 < 0.05$, and the t value is $2.872 >$ while the t table is 2.77645, which means that there is an influence of the NPM variable of 5.291, which is indicated by the magnitude of the value of this study if the NPM increases by one unit then Tobin's Q increases by 5.291.
- Effect of Cash Ratio on Tobin's Q H3
The effect of the Cash Ratio on Tobin's Q is $0.474 > 0.05$, and the t value is -0.789 while the t table is 2.77645, which means that there is no influence of the Cash Ratio variable of -0.361, which is indicated by the magnitude of the value of this study if the Cash Ratio increases by one unit. Then Tobin's Q fell 0.361.

3.3. F Test

3. F test
ANOVA^a

		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	126, 386	3	42, 129	8,312	,001 ^b
	Residual	539,676	4	134,919		
	Total	666,061	7			

a. Dependent Variable: Tobin's Q

b. Predictors: (Constant), Cash Ratio, NPM, ROE

$$F_{table} = F(k; n-k) = (3; 5) = 5,41$$

Based on the results above, it is known that the value of sig. The effect of ROE, NPM, and Cash Ratio simultaneously on Tobin's Q is $0.001 < 0.05$. And the calculated F value is $8.312 >$ F table 5.4. So it can be concluded that H4 can be accepted simultaneously.

4. Conclusion

1. Return on Equity positively and significantly affects Tobin's Q at the company PT. SPINDO in 2014-2021. A positive ROE value means that the company can increase its net profit to provide a high investment level to investors. Therefore, the higher the ROE ratio, the better the company from the investor's point of view.
2. Net Profit Margin positively and significantly affects Tobin's Q at the company PT. SPINDO in 2014-2021. PT.SPINDO's NPM value in this company was high in 2014 and 2020. This shows that the net profit achieved by the company is increasing. In addition, PT. SPINDO contributed to developing the New Capital of Indonesia (IKN), affecting the company's net profit. Therefore, the development of the IKN can increase the company's profitability.
3. Cash Ratio has no significant effect on Tobin's Q at PT. SPINDO in 2014-2021. The cash ratio has no effect because the company cannot maintain and improve its ability to pay short-term obligations when they fall due, which must be fulfilled immediately. With the company's ability to fulfil these obligations, it can make the creditors of the company trust. The higher the cash ratio, the more trust the creditors have in the company in fulfilling obligations that are immediately fulfilled.

References

- Agus, & Riyanto. (2015). *Akuntansi Pemerintah Daerah Berbasis Akrua*.
- Aldino, H. P., & Nurlaila. (2021). Pengaruh Pengungkapan Corporate Social Responsibility Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Pemoderasi Pada Perusahaan Yang Terdaftar di BEI Periode 2014-2018. *Jurnal Pundi*, 5(1), 99–112. <https://doi.org/10.31575/jp.v5i1.342>
- Alvian, R., & Munandar, A. (2022). The Influence of Debt to Equity Ratio, Net Profit margin and Cash Ratio on Firm Value. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(2), 2622–2205.
- Jonnius, J., & Setya Marsudi, A. (2021). Profitability And The Firm's Value. *Dinasti International Journal of Management Science*, 3(1), 23–47. <https://doi.org/https://doi.org/10.31933/dijms.v3i1.977>
- Lestari, Ni Luh Wayan Tiya, & Ni Nyoman Sri Rahayu Trisna Dew. (2020). “Pengaruh Pemahaman Akuntansi, Pemanfaatan Sistem Informasi Akuntansi Dan Sistem Pengendalian Intern Terhadap Kualitas Laporan Keuangan.” *KRISNA: Kumpulan Riset Akuntansi*, 11(2), 170–178. <https://doi.org/10.22225/kr.11.2.1435.170-178>
- Nasir, M., Arifai, M., & Chairina, T. (2022). Hubungan Kausalitas Leverage , Return On Equity , Earning Per Share , Ukuran Perusahaan dengan Nilai Perusahaan pada Perusahaan Sektor Property , Real Estate and Building Construction yang Terdaftar di Indeks Saham Syariah Indonesia (ISSI). 9(1), 39–50.
- Suwardjono. (2016). *Teori Akuntansi: Perekayasaan Pelaporan Keuangan*. BPFE.
- Tikawati, T. (2016). Pengaruh Corporate Governance, Growth Opportunity dan Net Profit Margin (NPM) Terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan Go Public di Bursa Efek Indonesia Tahun 2008-2011). *Al-Tijary*, 1(2), 121–140. <https://doi.org/10.21093/at.v1i2.528>
- Ulfa, R., & Asyik, N. (2018). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Good Corporate Governance Sebagai Variabel Moderasi Nur Fadjrih Asyik Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya. 2–21.