



---

## MEDIATION EFFECT OF SYSTEMATIC RISK ON THE DETERMINATION OF COMPANY FINANCIAL PERFORMANCE ON LQ45 STOCK RETURNS IN 2022: A CONCEPTUAL MODEL

---

**Aprilia Putri Rahayu<sup>1</sup>, Aty Herawati<sup>2</sup>**

<sup>1,2</sup> Department of Management, Faculty of Economics and Business, Trilogi University, Jakarta, Indonesia.

### ABSTRACT

The condition of Stock Returns in LQ45 companies during the period 2018-2022 experienced a significant decline. The average Stock Return graph of LQ45 companies shows that Stock Return increased in 2020 but experienced a decline after 2020-2022 in LQ45 companies listed on the Indonesia Stock Exchange (IDX). The decrease in Stock Returns in 2022 is caused by factors such as current ratio (CR), debt to equity ratio (DER), return on equity (ROE), earnings per share (EPS), total asset turnover (TATO), market capitalization, and sales growth. Systematic risk also had a positive effect on stock returns. This quantitative study aims to examine the mediating effect of systematic risk on the determination of company financial performance on LQ45 stock returns in 2022.

### Keywords

Current Ratio, Debt to Equity Ratio, Return on Equity, Earnings per Share, Total Asset Turnover, Market Capitalization, Sales Growth, Stock Returns, Systematic Risk, Conceptual Model.

### INTRODUCTION

Investment activity involves placing a certain amount of funds in one or more assets with the aim of obtaining profits in the future. In the context of investment management, the level of investment profitability is referred to as return, and it's quite common for investors to demand a certain level of return on their invested funds. The price of a company's stock is influenced by the demand and supply levels from investors. If the stock price rises, investors will receive higher returns. Higher returns will increase the profits and income of investors in their investments (Devi & Artini, 2019).

The condition of Stock Returns in LQ45 companies during the period 2018-2022 experienced a significant decline. The average Stock Return graph of LQ45 companies shows that Stock Return increased in 2020 but experienced a decline after 2020-2022 in LQ45 companies listed on the Indonesia Stock Exchange (IDX). Based on this phenomenon, the author assesses that Stock Returns in LQ45 companies listed on the Indonesia Stock Exchange (IDX) still need to be further investigated.

The decrease in Stock Returns in 2022 is caused by factors such as current ratio (CR), debt to equity ratio (DER), return on equity (ROE), earnings per share (EPS), total asset turnover (TATO), market capitalization, and sales growth. Current Ratio (CR) explains a company's ability to settle short-term obligations through its current assets. Current Ratio (CR) is also used as a buffer for losses and current fund reserves, where the higher the value of Current Ratio (CR), the better the company's liquidity performance and the smaller the risk investors will bear. Debt to Equity Ratio (DER) can be calculated by comparing a company's total debt and total assets. Companies with good performance usually have lower debt values. Return on Equity (ROE) is used because it can explain how

shareholders can obtain profits through the company's own abilities and capital. A high Return on Equity (ROE) value will indicate that the company's performance is good. The higher the net profit after tax, the higher the Return on Equity (ROE) value, which will impact the increase in the company's stock price and stock return. Earnings Per Share (EPS) is a ratio that depicts the amount of profit earned per share and measures management's success in achieving profits for shareholders. Total Asset Turnover (TATO) is a ratio used to measure how efficiently a company manages all its assets used in the company's sales activities (Kasmir, 2014). If the TATO ratio is high, it means that the assets managed by the company can generate large sales (efficiently). Market Capitalization is a reflection of the market value of a company's stock issued by the issuer. Sales growth reflects the company's ability and is one of the important factors in determining the company's survival.

Systematic risk is a risk that cannot be avoided, such as economic and political conditions. In the context of investment, the relevant risk is considered to be the risk that cannot be eliminated (systematic risk), known as beta. The higher the beta, the higher the systematic risk (Tandelilin, 2003). In previous studies on the LQ45 index from 2014 to 2018, systematic risk had a positive effect on stock returns. (Ningrum & Hermuningsih, 2020). Previous research results show that the influence of financial performance and systematic risk on stock returns shows contradictory results. Therefore, the influence of these factors on stock returns is very interesting to be re-examined in different contexts. This study reviews the mediating effect of systematic risk on the determination of company financial performance on LQ45 stock returns in 2022.

## LITERATURE REVIEW

### A. Information Asymmetry

Information asymmetry refers to a situation where an individual or party possesses different knowledge from another individual or party (Akerlof, 1970). George Akerlof, in his paper "The Market for Lemons" in 1970, introduced the concept of asymmetric information. This concept examines the imbalance of information regarding product quality between buyers and sellers, using the used car market as an example. In his research, George illustrated information asymmetry through the trading of cars, where buyers rely on standard statistical data to evaluate products, while sellers have more in-depth knowledge about specific products. As a result, sellers can sell below-standard quality products without the buyers' knowledge. To avoid errors in investment decision-making, investors need to reduce information asymmetry and make more precise and accurate investment choices.

### B. Signaling Theory

Signaling Theory is an economic and financial framework used to explain how information conveyed by companies to shareholders and the market can influence stock returns. It focuses on how companies communicate information about their performance and prospects through actions, dividend payments, changes in the number of outstanding shares, and investment project announcements. According to Signaling Theory, managers of a company can use various signals to convey their personal information about the future prospects and performance of the company to investors, who may have less information or asymmetric information, such as dividend policies, earnings announcements, and other actions that can affect investor perceptions of the company. For example, when a company announces higher dividends than expected, it can be seen as a positive signal that the company has good performance and bright prospects, thus attracting more investors to buy its stock. Conversely, if a company reduces dividends or announces lower-than-expected earnings, this can be seen as a negative signal and can affect stock prices. Therefore, Signaling Theory helps us understand how information conveyed by companies through their actions can influence investor perceptions and ultimately affect stock returns. It emphasizes the importance of effective and transparent communication from companies to the market because the right signals can affect investor perceptions and decisions, which in turn can affect stock returns. However, it is also important to remember that these signals must be consistent with actual performance. (Spence, 1973)

### C. Stock Return

Return is the result of returns (profits) from investments made by investors. Investors are unwilling to invest if the investment does not generate profits. One of the motivations for investors to invest is stock returns, and returns are the reward for investors in their willingness to bear the risk to achieve large profits with small risks. Stock return is the result obtained from investment. Returns can be in the form of realized returns that have occurred or expected returns that have not yet occurred but are expected in the future. Stock return is the level of profit enjoyed by investors from a stock investment they make. Every investment, whether short-term or long-term, has the main goal of obtaining profits called returns, both directly and indirectly. (Putri & Diantini, 2016)

$$\square\square\square\square\square \text{ Return} = \frac{P_t - (P_{t-1})}{P_{t-1}}$$

$P_t$  = The current stock price

$P_{t-1}$  = The stock price in the previous period

#### D. Beta Stock

Beta ( $\beta$ ) is a measure of systematic risk of a stock or portfolio relative to market risk. It also serves as a measure of stock or portfolio return volatility relative to market return. Volatility is the fluctuation of a stock or portfolio return over a certain period, and if statistically, this fluctuation follows the market returns, then the beta of that security is said to be one (Jogiyanto, 2007). This fluctuation indicates the systematic risk of that stock; the greater the fluctuation of a stock's return relative to the market return, the greater its systematic risk, and vice versa. Beta value of 1 indicates that the systematic risk of a security or portfolio is equal to the market risk. The relevant risk to consider in investment is systematic risk, where the magnitude of this risk is indicated by the magnitude of beta. The size of beta indicates the sensitivity of the changes in stock returns ( $R_{it}$ ) to changes in market returns ( $R_{mt}$ ).

According to Husnan (2001), the assessment of Beta ( $\beta$ ) can be categorized into three conditions: first, if  $\beta = 1$ , it means the stock return changes proportionally with the market return. This indicates that the systematic risk of the stock is the same as the market's systematic risk. Second, if  $\beta > 1$ , it means the stock return increases more than the overall market return. This indicates that the systematic risk of the stock is greater than the market's systematic risk; these types of stocks are often referred to as aggressive stocks. And third, if  $\beta < 1$ , it means the stock return increases less than the overall market return. This indicates that the systematic risk of the stock is smaller than the market's systematic risk; these types of stocks are often referred to as defensive stocks. Knowing the beta of a security is important for analyzing that security. The beta of a security indicates its systematic risk, which cannot be eliminated through diversification. Knowing the beta of each security is also useful for considering whether to include that security in the portfolio. The formula for Beta Stock:

$$R_i = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$

#### E. Financial Ratio

Financial ratio analysis is an internal benchmark calculated based on the fundamental analysis of a company's financial statements, used for comparison purposes to draw conclusions about the company's condition and serve as the basis for investor decision-making. In this regard, the author will discuss several ratios that serve as benchmarks for the study: liquidity ratios (Current Ratio), leverage ratios (debt to equity ratio), profitability ratios (return on equity), investment ratios or market ratios (earning per share and price earning ratio), and activity ratios (total asset turnover).

##### - Liquidity Ratios

The commonly used liquidity ratio is the Current Ratio (CR), which explains a company's ability to settle short-term obligations through its current assets. CR is also used as a buffer for losses and current fund reserves, where the higher the value of CR, the better the company's liquidity performance, and the smaller the risk investors will bear. A high CR value can attract investors to own a stock, thus increasing demand for the company's stock and ultimately enhancing stock price performance, leading to increased returns. CR yields the best results in predicting stock returns (Meythi, 2007). The formula for Current Ratio (CR):

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

##### - Leverage Ratios

Leverage ratio measures the extent to which a company's assets are financed with debt. It indicates how much debt burden the company bears compared to its assets. In broad terms, leverage ratio is used to measure a company's ability to pay all its obligations, both short-term and long-term, if the company is liquidated (Kasmir, 2014). Leverage analysis is measured by the debt to equity ratio (DER), which can be calculated by comparing a company's total debt and total assets. Companies with good performance usually have lower debt values. The larger a company's debt, the smaller its profit. If a company's profit is small, the resulting stock return is low. The formula for debt to equity ratio (DER):

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Equity}}$$

##### - Profitability Ratios

Profitability ratio is used to assess a company's ability to generate profit (Kasmir, 2014). The measurement tool in this study is Return On Equity (ROE). ROE is used because it explains how shareholders can obtain profits through the company's own abilities and capital. A high ROE value indicates good company performance. The higher the net profit after tax, the higher the ROE value, which will impact on increasing the company's stock price and stock return. The formula for Return On Equity (ROE):

$$\text{Return On Equity} = \frac{\text{Earning After Interest and Tax (EAT)}}{\text{Equity}}$$

##### - Market Ratios

Earning Per Share (EPS) is a ratio that indicates how much profit (return) investors or shareholders receive per share by dividing net profit after tax by the number of common shares outstanding. According to Fahmi (2014), Earning Per Share (EPS) or income per

share is a form of profit distribution given to shareholders for each share held. EPS is a ratio that depicts the amount of profit earned per share and measures management's success in achieving profits for shareholders. The formula for Earning per Share (EPS):

$$\text{Earning Per Share} = \frac{\text{Net Income}}{\text{Number of Shares Understanding}}$$

- Activity Ratios

Activity ratio is a calculation used to indicate how effective and efficient a company is in managing all its assets. The commonly used activity ratio is Total Asset Turnover (TATO). Total Asset Turnover (TATO) is a comparison used to measure how efficiently a company manages all its assets used in the company's sales activities (Kasmir, 2014). If the TATO ratio is high, it means that the assets managed by the company can generate large sales (efficiently). In other words, it indicates that the company's management successfully manages its assets well, which can increase the chances of making a profit (Alkaditiya, 2017). The formula for Total Asset Turnover (TATO):

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Asset}}$$

**F. Market Capitalization**

Market Capitalization is a reflection of a company's stock market value issued by the issuer. Stocks with high capitalization attract investor interest to allocate their capital over the long term. This is based on information indicating that high stock capitalization reflects very positive company growth prospects, thus increasing public interest in investing and impacting stock price increases. In addition to the attractiveness of market capitalization for investors, sufficiently high stock prices also yield high returns (Taslim & Wijayanto, 2016). Investor tendency favors higher returns despite higher risks.

Market Capitalization represents the stock market value of a company's issued shares, also known as outstanding shares. It provides an overview of the scale of companies listed on the stock exchange. Companies with high market capitalization attract investor interest as investors interpret this as positive information indicating significant progress in generating optimal stock returns. Investors tend to prefer stocks with high capitalization because they indicate great growth potential. Therefore, stocks with high capitalization are highly sought after and become targets for investors due to their impressive potential and relatively low risk. This is due to high investor interest in general, ultimately leading to increased stock prices. (Fakhrudin & Wulandari, 2022)

**G. Sales Growth**

Sales growth reflects the capability of a company and is one of the crucial factors in determining a company's sustainability. By comparing sales from the previous year to the current year, companies can optimize their resources and evaluate whether sales growth is progressing well or not. (Susanti & Yuwono, 2015) The higher the sales growth, the greater the need for investment, which will be reflected in the high stock prices of the company. This can result in a positive stock return value, attracting investor interest to invest in the company's stocks. On the other hand, if sales growth is low, the stock return obtained by investors will also be low. (Sukertiansih & Suryanatha, 2017) Sales growth depicts how much a company can increase its sales compared to the total overall sales. (Kasmir, 2014)

$$\text{Sales Growth} = \frac{\text{Sales}_t - (\text{Sales}_{t-1})}{\text{Sales}_{t-1}}$$

**CONCEPTUAL MODEL**

Based on the literature study above, the conceptual model is formed as follows:

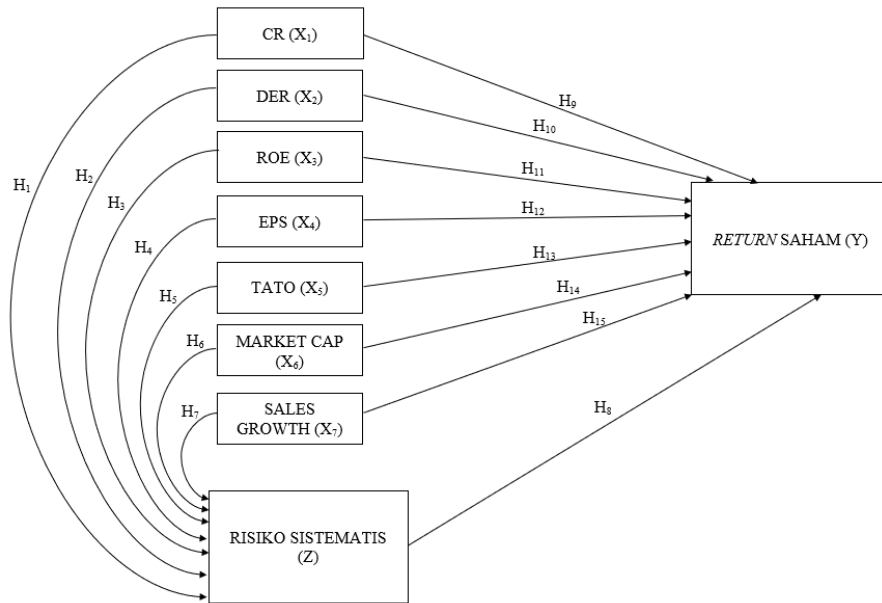


Figure 1. Conceptual Model

## HYPOTHESES

Based on the conceptual model and literature studies, the hypotheses can be formulated as follows:

- H<sub>1</sub>: CR influences Systematic Risk
- H<sub>2</sub>: DER influences Systematic Risk
- H<sub>3</sub>: ROE influences Systematic Risk
- H<sub>4</sub>: EPS influences Systematic Risk
- H<sub>5</sub>: TATO influences Systematic Risk
- H<sub>6</sub>: Market Cap influences Systematic Risk
- H<sub>7</sub>: Sales growth influences Systematic Risk
- H<sub>8</sub>: Systematic Risk influences Stock Return
- H<sub>9</sub>: CR influences Stock Return
- H<sub>10</sub>: DER influences Stock Return
- H<sub>11</sub>: ROE influences Stock Return
- H<sub>12</sub>: EPS influences Stock Return
- H<sub>13</sub>: TATO directly influences Stock Return
- H<sub>14</sub>: Market Cap influences Stock Return
- H<sub>15</sub>: Sales growth influences Stock Return

## METHODOLOGY

This is a quantitative study using secondary data, which are available in the financial reports of LQ45 companies on the Indonesia Stock Exchange. For the variable "stock return," data were obtained from the Close Price in 2021 and 2022 in the Trading Summary. For the variable "Sales Growth," data were obtained from the Income Statements, while the "TATO" variable was obtained from both the Income Statement and Balance Sheets. The variables "CR," "DER," "ROE," and "EPS" were obtained from Ratios, "Market Capitalization" from Miscellaneous, and "Stock Beta" from adjusted beta Pefindo. The data source used is the LQ45 company data for the year 2022 published by the Indonesia Stock Exchange through its official website [www.idx.co.id](http://www.idx.co.id), and the stock beta data for the year 2022 was obtained from the official website of Pefindo. The population in this study is all LQ45 companies listed on the Indonesia Stock Exchange (IDX) in 2022, taken directly from the website [www.idx.co.id](http://www.idx.co.id). The sampling technique used in this study is purpose sampling with the sample criteria being LQ45 companies listed on the Indonesia Stock Exchange in 2022 and having complete financial ratio data related to the variables used in the study, namely CR, DER, ROE, EPS, TATO, MARKET CAP, SALES GROWTH, and stock return, totaling 38 companies. In this study, data processing and analysis were conducted using the path analysis method with SPSS software version 13.

## CONCLUSION

This study aims to develop a conceptual model regarding the influence of the determination of financial performance, such as current ratio (CR), debt to equity ratio (DER), return on equity (ROE), earnings per share (EPS), total asset turnover (TATO), market capitalization, and sales growth on LQ45 stock returns mediated by systematic risk. The research includes background research, literature review, hypotheses, and research methodology. The status of the influence of determination of financial performance on stock return, through the mediation of systematic risk, can be determined by applying the conceptual model of this study.

## REFERENCES

- [1] Akerlof, G. A. (1970). The market for Lemons: Quality, Uncertainty and The Market Mechanism", *Quarterly Journal of Economics*, vol. 84.
- [2] Devi, N. N. S. J. P., & Artini, L. G. S. (2019). Pengaruh ROE, DER, PER, Dan Nilai Tukar Terhadap Return Saham. *E-Jurnal Manajemen*, Vol.8, No.7. DOI: <https://doi.org/10.24843/EJMUNUD.2019.v08.i07.p07>.
- [3] Fahmi, I. (2014). *Analisis Laporan Keuangan*. Bandung: Affabeta
- [4] Fakhruddin, A. N., & Wulandari, R. (2022). Pengaruh Laba Akuntansi, Pertumbuhan Penjualan, Dan Kapitalisasi Pasar Terhadap Return Saham Pada Idx Perindustrian Tahun 2016-2020. *Going Concern : Jurnal Riset Akuntansi*, 17 (2), 77-90.
- [5] Husnan, S. (2001). *Dasar-Dasar Teori Portofolio dan Analisis Sekuritas*. Yogyakarta: UPP AMP YKPN.
- [6] Jogiyanto, H. (2007). *Teori Portofolio dan Analisis Investasi*, Edisi IV, Yogyakarta: BPFE.
- [7] Kasmir. (2014). *Analisis Laporan Keuangan*. Jakarta: Rajawali pers.
- [8] Meythi. (2007). Rasio Keuangan yang Paling Baik untuk Memprediksi Return Saham: Suatu Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Jakarta. *Jurnal Bisnis dan Akuntansi*, Vol. 9: 47-65.
- [9] Ningrum, I. N., & Hermuningsih, S. (2020). Pengaruh Faktor Fundamental dan Risiko Sistematis terhadap Return Saham. *Journal of Management & Business*, Vol. 3, No. 1, ISSN: 2621-850X.
- [10] Putri, N. L., & Diantini, N. N. (2016). Analisis Penilaian Pasar Terhadap Return Saham Pada Industri Barang Konsumsi. *E-Jurnal Manajemen Unud*, Vol.5 No.8, 5070-5097.
- [11] Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, Vol. 87, No. 3, pp. 355-374.
- [12] Sukertiasih, N. W. L., & Suryanatha, I. G. N. P. (2017). Pengaruh Debt to Equity Ratio, Return on Asset, dan Growth Terhadap Firm Value dan Stock Return pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia. *Jurnal Ilmiah Akuntansi & Bisnis*, 2(2), 287–296.
- [13] Susanti & Yuwono, W. (2015). Analisis Pengaruh Kebijakan Cadangan Wajib , Inflasi , Firm Size , Sales growth dan Leverage terhadap Stock return pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis*, 3(1), 80–85.
- [14] Tandililin, E. (2003). *Risiko Sistematis (BETA): berbagai isu pengestimasi dan ketertarapannya dalam penelitian dan praktik*. Yogyakarta: Univesitas Gajah Mada.
- [15] Taslim, A., & Wijayanto, A. (2016). Pengaruh Frekuensi Perdagangan Saham, Volume Perdagangan Saham, Kapitalisasi Pasar dan Jumlah Hari Petdagangan Terhadap Return Saham. *Management Analysis Journal* 5 (1), ISSN: 2252-6552.