



## **The effect of current ratio, price to book value, net profit margin, debt to equity ratio, and return on assets on stock prices moderated by earning pershare**

**Hasanudin**

Universitas Nasional Jakarta

*Hasanudinsadikin910@gmail.com*

---

### **Info Artikel**

#### **Sejarah artikel:**

Diterima 20 Januari 2022

Disetujui 2 Februari 2022

Diterbitkan 16 Februari 2022

---

#### **Keywords:**

Current Ratio (CR),

Price to Book Value (PBV),

Net Profit Margin (NPM),

Debt to Equity Ratio (DER),

Return on Assets (ROA),

Stock Price, and Earning per Share

(EPS).

---

### **ABSTRACT**

Using the IDX30 corporation as a control, this research sought to find out how the current ratio, price to book value, net profit margin, debt-to-equity ratio, and return on assets influenced stock prices. Secondary data was gathered from IDX and the annual report of the company for this investigation. This study uses a sample of 15 IDX30-listed firms from 2014 to 2018, and observes data from 30 other companies. Smart PLS is the analysis method employed. It has been found that stock prices are affected by the factors PBV, ROA, and CR, but NPM has no meaningful effect on stock prices. The link between CR and NPM on stock prices is unaffected by EPS, whereas EPS moderates PBV, DER, and ROA.



©2022 Penulis. Diterbitkan oleh Program Studi Akuntansi, Institut Koperasi Indonesia. Ini adalah artikel akses terbuka di bawah lisensi CC BY (<https://creativecommons.org/licenses/by/4.0/>)

---

## **INTRODUCTION**

Investment is a term that is closely related to finance and economics. It can be understood that investment is a commitment to money or other resources to gain profits in the future (Eka, 2015). According to Abdul Halim (2005) investment is essentially the placement of several funds at this time with the hope of obtaining profits in the future. According to Paul R. Krugman & Maurice Obstfeld (2009) investment is the output used by companies to produce output in the future. Investments in the form of financial assets are carried out through various instruments such as money market instruments, stocks, bonds, and mutual funds

In investment activities in the capital market, one of the instruments used is shares. Shares are evidence that shows capital participation in a company or is proof of ownership of an investment company invested in shares by investors, of course, the goal of investors investing is to get the maximum return in the form of capital gains and dividends (Siregar, 2019). However, some fund managers feel that the number of 45 shares is too large. The number of constituents of the IDX30 Index which consists of 30 stocks has the advantage that it is easier to replicate as a portfolio reference (Yunita & Rahyuda, 2019). In addition, according to portfolio theory, the number 30 is the ideal number of asset diversification in a portfolio. The basis of consideration for the selection of IDX30 Index constituents is quantitative factors related to the value, frequency, and days of transactions as well as market capitalization (Pardosi & Wijayanto, 2015). In addition to these quantitative factors, the IDX also considers information on ongoing concerns, financial reports, and other considerations, such as whether a suspension is being imposed or not. This index contains 30 types of leading stocks on the IDX, similar to the Dow Jones Industrial Average index which also contains 30 types of stocks listed on the New York Stock Exchange (Wibowo, 2012).

When it comes to stock selection, however, investors aren't limited to relying just on an index that is currently available in the market. In addition, we must examine the financial statements of the company we select. Fundamental aspects and technical aspects are two often employed techniques (Natarsyah, 2000). Fundamental analysis, which is based on an examination of an issuer's financial statements, is commonly used by investors when making investment decisions. The term "fundamental analysis" refers to facts about a company's past financial performance (Amanda & Pratomo, 2013). Inventory turnover, average collection time, fixed asset turnover, and total assets turnover are all examples of activity ratios.

Profitability ratio to assess a company's profitability. Basic earning power, return on assets and return on equity are all profitability ratios (Achmad, 2017). The growth ratio describes a company's capacity to sustain its economic position during periods of economic expansion. Growth ratios include revenue, net profit, dividend per share, and share income growth (Deitiana, 2011). The stock ratio shows each share's part of corporate income, dividends, and capital. Profit margin, dividend yield, payout ratio, price to book value, and book value per share are all stock ratios. The larger the company's dividend, the higher the stock price (Sari & Santoso, 2017). The change in a company's financial parameters can alter the demand and supply of its shares, affecting stock prices (Rahayu & Dana, 2016).

Of course, the condition of the company's financial ratios has a large contribution to the movement of stock prices, although it cannot be denied that external and macroeconomic factors also have an effect. According to investment experts, fundamental analysis is better used for long-term investment, so the fundamental factors to be examined in this study consist of Current Ratio, Price to Book Value, Net Profit Margin, Debt to Equity Ratio, Return on Assets, and Earnings per Share. In addition to theoretically the six variables above are related to stock prices, it is also based on several previous researchers who have confirmed the relationship between these factors and stock prices.

## **LITERATURE REVIEW**

### **Stock Price**

The amount of demand and supply of shares affects the value of shares on the capital market. By economic law, stock prices will rise as the demand for shares increases because of an increase in trading volume and trading frequency (Subiyantoro & Andreani, 2003). It is easiest to calculate a stock's market price, which is the price currently being paid for the stock on the open market. A stock's ups and downs are reflected in its market price when the stock exchange is closed, so this closing price serves as a benchmark.

### **Current Ratio**

It is the ratio of current assets divided by current liabilities that is known as the current ratio. This ratio is to show the company's operational capabilities in the smooth production process. A large ratio indicates that the company is liquid, that is, the production process will be smooth. Under these conditions, the company can pay all its short-term bills properly (Desmon, 2011).

### **Price to Book Value Ratio**

P/BV Ratio measures how much the market values a stock's book value, according to Darmadji & Fakhruddin (2012). The higher this ratio is, the better the company is doing. Investment returns are measured by the Price to Book Value Ratio, which compares the price of a company's stock to its book value.

### **Net Profit Margin**

Murhadi (2013) defines Net Profit Margin as "the ability of a business to create net profit from each sale." The greater the NPM value, the more advantageous it is.

### **Return On Assets**

According to Yuli Haryanti & Sri Murtiasih (2019), return on assets measures how well a company and its management use assets to produce profits. The higher the ROA, the more profitable the company, and hence the more appealing to investors. The more investors care about a company, the greater the stock price.

### **Debt to Equity Ratio**

The Debt to Equity Ratio (DER) compares the company's total debt to its entire equity. DER quantifies how much of a company's capital is borrowed. Investors will penalize a company with high debt. (Zulvia, 2019).

## Earnings per Share

The book value ratio, often known as earnings per share (EPS), is a statistic used to assess whether management has been successful in maximizing profits for shareholders. In contrast to a low ratio, a high ratio indicates that management has been successful in satisfying shareholders.

## Framework

Based on the description above, it is found that the author makes a research framework as follows::

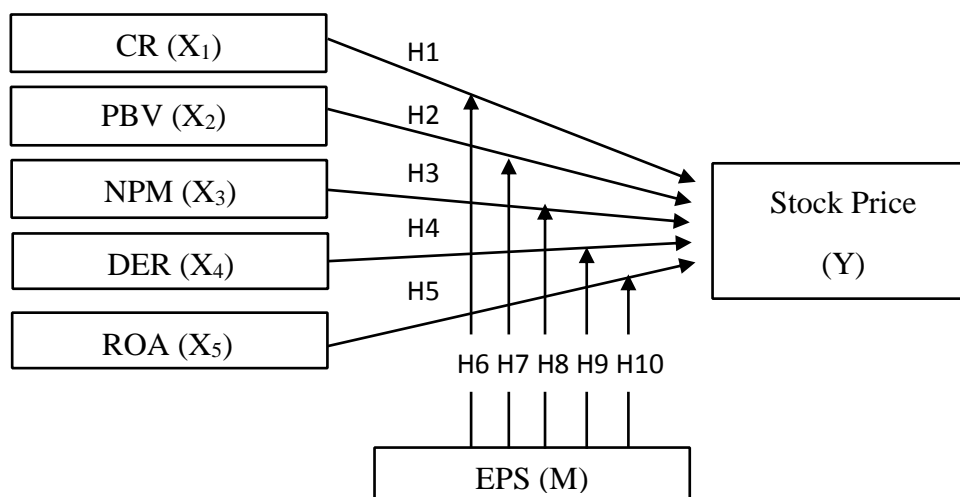


Figure 1. Framework

## Hypothesis

- H1: CR has a positive and significant effect on stock prices.
- H2: PBV has a positive and significant effect on stock prices.
- H3: NPM has a positive and significant effect on stock prices.
- H4: DER harms stock prices.
- H5: ROA has a positive and significant effect on stock prices.
- H6: EPS moderates the CR relationship on stock prices.
- H7: EPS moderates the PBV relationship on stock prices.
- H8: EPS moderates the relationship between NPM and stock prices.
- H9: EPS moderates the DER relationship on stock prices.
- H10: EPS moderates ROA relationship on stock prices.

## RESEARCH METHODS

The data acquired in this study was analyzed using quantitative methods, specifically formula numbers or mathematical models, in order to evaluate whether or not the variables employed in this case include CR, PBV, NPM, DER, and ROA on pricing are true or not. equities having a calming effect on earnings per share Smart PLS 3.0 (Partial Least Squares) is being used to analyze the data. For this study, the IDX30 calculating stock list from 2014 to 2019 was utilized as a sampling criterion, which meant that the firm must be listed on the Indonesia Stock Exchange (IDX).

## RESULT AND DISCUSSION

### Descriptive Analysis Results

In this study, the independent and dependent variables have different units. The variables CR, NPM, and ROA have units of a percent (%). Meanwhile, PBV and DER have units of times (x). and the stock price variable has units of rupiah, so econometrically it becomes problematic or causes errors in its use, to avoid problems when entering data into the analysis and there is no measurement error of the variable, normalization of the size is carried out to LogN. The following is the result of the tabulation of descriptive data for each variable presented in Table 1 as follows:

**Table 1.** Descriptive Statistics

<b>Variables</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>Std Deviation</b>
CR	5.10	4.10	6.49	0.56
PBV	1.46	-0.17	5.51	1.14
NPM	2.75	1.58	4.04	0.57
DER	0.24	-1.87	2.9	1.23
ROA	2.01	-4.34	3.84	1.25
STOCK PRICE	9.22	7.19	11.45	1.10
EPS	6.22	3.76	8.31	1.11

Source: SmartPLS data processing results

- Since 2014-2018, an average of 5.10 Current Ratio with a standard deviation of 0.56 was found in the descriptive statistical test results table above. Between 4.10 to 6.49 is the range of values.
- The average Price to Book Value for the 2014-2018 research period was 1.46, with a standard deviation of 1.14, according to the table of descriptive statistical test findings above. -0.17 is the least value, while 5.51 is the greatest.
- The average Net Profit Margin for 2014-2018 was 2.75, with a standard deviation of 0.57, according to the table of descriptive statistical test findings above. 1.58 to 4.04 is the range of values that fall inside this range.
- The average value of the Debt to Equity Ratio over the research period was 0.24, with a standard deviation of 1.23, according to the table of descriptive statistical test findings above. -1.87 to 2.90 are the extremes of this variable's range.
- The average value of Return on Assets over the 2014-2018 study period was 2.01 with a standard deviation of 1.25, with a minimum value of -4.34 and a maximum value of 3.84, according to the table of descriptive statistical test findings.
- Descriptive statistics show that between 2014 and 2018, earnings per share averaged \$6.22 with a standard deviation of \$1.11, as shown above in the table. Between 3.76 and 8.31, its value ranges from extreme to extreme.
- The average stock price in 2014-2018 was 9.22, with a standard deviation of 1.10, and a low value of 7.19 and a maximum value of 11.45, according to the table of descriptive statistical test findings.

### Reliability Test

The data in Table 2 below is the result of the processed reliability test data using SmartPLS.

**Tabel 2.** Cronbach's Alpha

	<b>Cronbach's Alpha</b>
<b>CR</b>	1.000
<b>PBV</b>	1.000
<b>NPM</b>	1.000
<b>DER</b>	1.000
<b>ROA</b>	1.000
<b>CR * EPS</b>	1.000
<b>PBV * EPS</b>	1.000
<b>NPM * EPS</b>	1.000
<b>DER * EPS</b>	1.000
<b>ROA * EPS</b>	1.000
<b>EPS</b>	1.000
<b>STOCK PRICE</b>	1.000

Source: SmartPLS data processing results

A trustworthy indicator has a Cronbach alpha  $>0.6$ . As shown in Table 2, the variables utilized in this study are reliable (Cronbach's alpha  $>0.6$ ) (remain consistent).

### Coefficient of Determination Test

The data in Table 3 below is the result of processing R square data for the Stock Price variable using SmartPLS.

**Table 3. Coefficient of Determination Test ( $R^2$ )**

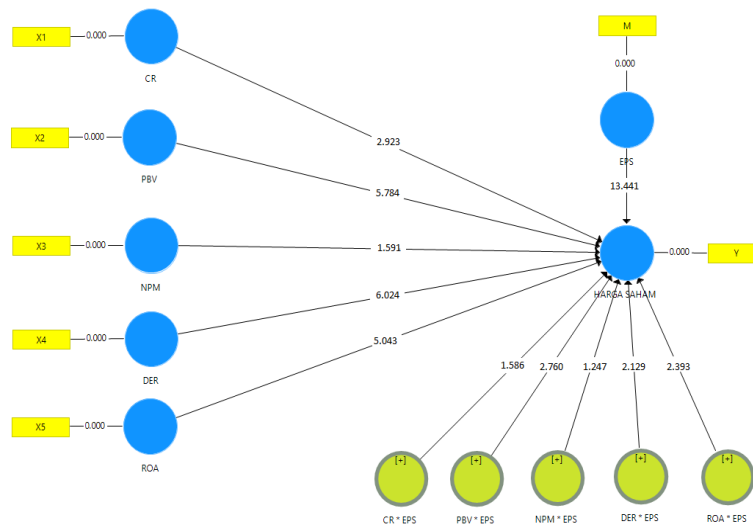
	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Stock Price</b>	0.983	0.980

Source: SmartPLS data processing results

A reliable indicator has a Cronbach alpha of more than 0.6. A high Cronbach's alpha ( $>0.6$ ) demonstrates the reliability of the study's variables (Table 2). (stay the course).

### PLS Data Processing Diagram

The following is a path diagram formed based on the formulation of the problem:



**Figure 2. PLS Path Chart**

In Figure 2 it can be explained that the round shape is reflected as a variable and the square shape is reflected as an indicator. The inner model shows the relationship between the constructs and the significance value.

### Multicollinearity Test

The data in Table 4.11 below is the result of multicollinearity data processing using SmartPLS.

**Table 4. Multicollinearity Test**

	<b>VIF</b>
<b>CR</b>	1.000
<b>PBV</b>	1.000
<b>NPM</b>	1.000
<b>DER</b>	1.000
<b>ROA</b>	1.000
<b>CR * EPS</b>	1.000
<b>PBV * EPS</b>	1.000
<b>NPM * EPS</b>	1.000

	VIF
<b>DER * EPS</b>	1.000
<b>ROA * EPS</b>	1.000
<b>EPS</b>	1.000
<b>STOCK PRICE</b>	1.000

*Source: SmartPLS data processing results*

According to the table above, the VIF value in this study was either 1.0 or 10, which means there was no multicollinearity between the variables in this investigation..

### Hypothesis Test

Exogenous and moderating variables are tested for their effects on endogenous variables using hypothesis testing. T-Statistics can tell you about hypothesis testing. In each hypothesis, if the T-Statistics value is greater than 1.96, or if the P-value is less than 0.05, it can be concluded that the exogenous factors have a substantial influence on the endogenous variables in each hypothesis. The following table summarizes the findings of the experiment described above:

**Table 5.** Summary of Hypothesis Testing Results

Hypothesis	Coefficient	t count	P Values	Description	Decision
<b>H1: CR affects stock prices.</b>	-0.157	2.923	<b>0.004</b>	Significant	Received
<b>H2: PBV affects stock prices.</b>	0.749	5.784	<b>0.000</b>	Significant	Received
<b>H3: NPM affects stock prices.</b>	-0.056	1.591	0.112	Not significant	Rejected
<b>H4: DER affects stock prices.</b>	-0.608	6.024	<b>0.000</b>	Significant	Received
<b>H5: ROA affects stock prices.</b>	-0.756	5.043	<b>0.000</b>	Significant	Received
<b>H6: EPS moderates the CR relationship on stock prices.</b>	-0.124	1.586	0.113	Not significant	Rejected
<b>H7: EPS moderates the PBV relationship on stock prices.</b>	0.375	2.760	<b>0.006</b>	Significant	Received
<b>H8: EPS moderates the relationship of NPM on stock prices.</b>	0.054	1.247	0.213	Not significant	Rejected
<b>H9: EPS moderates the DER relationship on stock prices.</b>	-0.318	2.129	<b>0.034</b>	Significant	Received
<b>H10: EPS moderates the ROA relationship on stock prices.</b>	-0.602	2.393	<b>0.017</b>	Significant	Received

### Discussion

#### Hypothesis Testing The effect of CR on stock prices.

In the study, CR had a negative and significant impact on stock values, according to the findings. Since "CR has a large impact on stock prices," the first hypothesis is accepted. CR was shown to have a negative and significant impact on stock prices, which is in line with the findings of Indriawati and Mursidah Nurfadilah (2019).

### **Hypothesis Testing The effect of PBV on stock prices.**

Stock prices are positively influenced by PBV, according to the study. As a result, the second hypothesis, which claims that "PBV has a positive and significant effect on stock prices," is accepted. A similar conclusion was reached by Yustina Cahyaningrum and Tiara Antikasari (2017), who found that PBV has an impact on stock prices that is statistically significant.

### **Hypothesis Testing The effect of NPM on stock prices.**

No significant impact on stock prices was found as a result of the investigation. As a result, NPM's impact on stock prices is both negative and small. As a result, the idea that "NPM has a positive and considerable effect on stock prices" has been ruled out. We found that NPM has no meaningful impact on stock prices, just like Astri Wulan Dini and Iin Indarti (2011) found.

### **Hypothesis Testing The effect of DER on stock prices.**

The investigation revealed no evidence of a major impact on stock prices. Consequently, NPM's impact on the stock market is both negative and limited. NPM's positive and significant impact on stock prices is therefore disproved. No major impact on stock prices was found by us, as was found by Astri Wulan Dini and Iin Indarti in 2011.

### **Hypothesis Testing The effect of ROA on stock prices.**

Stock prices are negatively impacted by ROA according to the study's findings. We can therefore adopt the second theory, according to which "ROA has a major effect on stock prices." According to the findings, ROA has a considerable impact on stock prices, which is in line with those of Siti Solihah (2017).

### **EPS Hypothesis Testing moderates the CR relationship on stock prices**

Study results show that EPS has a negative impact on the correlation between CR and stock prices. It is reasonable to conclude, given the P-Values of greater than 0.05 or 5 percent and the smaller tcount value than the larger ttable value, that earnings per share has no meaningful influence on the CR-to-stock price relationship. Thus, the theory that "EPS moderates the CR relationship on stock prices" has been ruled out. Hikmah Endrawati (2015) discovered that EPS did not mitigate the effect of CR on stock prices, as this study found.

### **EPS Hypothesis Testing moderates the PBV relationship on stock prices**

PBV and stock prices are positively correlated with EPS, according to the findings of the study. It is safe to conclude from the t-test results, which show that earnings per share (EPS) has a significant moderating effect on the relationship between book value (PBV) and stock prices (P-Values value less than 0.05 or 5 percent). As a result, it may be said that EPS helps to control stock prices by enhancing the impact of PBV. Accepted as evidence is the seventh hypothesis: that "EPS moderates the relationship between PBV and stock prices." According to the findings of Irma Herliza Rizki (2011), earnings per share (EPS) has a moderating effect on the price-to-book ratio (PBV).

### **EPS Hypothesis Testing moderates the relationship between NPM and stock prices**

NPM and stock prices have a favorable link, according to the findings of the research. NPM and stock prices' relationship is not significantly affected by EPS, according to the results of the t-test, which found that the tcount value was smaller than the table value and that the P-Values value was more than 0.05 or 5%. So the ninth hypothesis, which claims that "EPS moderates the relationship between NPM and stock prices," is deemed invalid. When NPM is high, EPS cannot boost stock prices, and when NPM is low, EPS cannot depress stock prices.

### **EPS Hypothesis Testing moderates the DER relationship on stock prices**

In the study, EPS was found to have a negative effect on the link between stock prices and DER. The t-test results show that EPS has a significant moderating influence on the DER relationship to stock prices, with a tcount value more than a ttable value and a P-Values value less than 0.05 or 5%. In this way, DER's impact on stock prices is lessened as a result of the EPS. Investors will have a negative impression of a company with a high DER. PBV's impact on stock prices is amplified when earnings per share (EPS) rises above a certain threshold. As a result, the hypothesis that "EPS moderates the

DER relationship on stock prices" is accepted as the eighth hypothesis. Susanti (2017) observed that EPS mitigated the impact of DER on stock prices, which is consistent with the findings of this study.

### **EPS Hypothesis Testing moderates the ROA relationship on stock prices**

Find out if ROA and stock prices are inversely related when looking at the impact of EPS. According to the findings of the t-test, the t-count is larger than the t-table value, and the P-Values value is less than 0.05 or 5 percent, it can be concluded that EPS moderates the ROA link to stock prices. Because ROA's influence on stock prices diminishes, it can be stated that EPS is moderated. It is so acknowledged that "EPS moderates the ROA relationship on stock prices," the tenth hypothesis. EPS attenuated ROA's impact on stock prices, according to Yuli Haryanti and Sri Murtiasih (2019)'s findings.

### **CONCLUSION**

Based on research that has been conducted on 15 IDX30 companies listed on the Indonesia Stock Exchange, regarding the Effect of Current Ratio (X1), Price to Book Value (X2), Net Profit Margin (X3), Debt to Equity Ratio (X4), Return on Assets (X5) Against Stock Price (Y) with Earning per Share (M) and the results of hypothesis testing, the research on this hypothesis concludes that the variables CR, PBV, DER, and ROA have a significant effect on stock prices, while NPM has no significant effect on stock prices. Then EPS moderates PBV, DER, and ROA on stock prices while EPS does not affect the relationship between CR and NPM on stock prices.

### **REFERENCES**

- Achmad, V. (2017). Analisis Pengaruh Economic Value Added (Eva) Momentum, Net Profit Margin (NPM), Basic Earning Power (BEP), Return On Total Assets (ROA), Dan Return On Equity (ROE) Terhadap Return Saham (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di PT Bur. *Jurnal Akuntansi dan Keuangan*, 1(2).
- Amanda, W. B. B. A., & Pratomo, W. A. (2013). Analisis Fundamental dan Resiko Sistemik Terhadap Harga Saham Perbankan yang Terdaftar Pada Indeks LQ 45. *Jurnal Ekonomi dan Keuangan*, 1(3), 14728.
- Darmadji, T., & Fakhruddin, H. M. (2012). *Pasar Modal di Indonesia: Pendekatan Tanya Jawab*. Jakarta: Salemba Empat.
- Deitiana, T. (2011). Pengaruh rasio keuangan, pertumbuhan penjualan dan dividen terhadap harga saham. *Jurnal bisnis dan akuntansi*, 13(1), 57-66.
- Desmond W. (2011). *Analisis Fundamental Saham*. Jakarta: Exceed.
- Eka, H. (2015). Investment Opportunity Set (IOS) Berbasis Pertumbuhan Perusahaan Dan Kaitannya dengan Upaya Peningkatan Nilai Perusahaan. *Jurnal Ekonomi dan Bisnis*, 18(1), 83-99.
- Halim, A. (2005). *Analisis Investasi*. Jakarta: Salemba Empat.
- Haryanti, Y., & Murtiasih, S. (2019). The Effects of DER, ROA, and DPR on Stock Price with EPS as the Moderating Variable in SOE. *Journal of Business and Management*, 21(7).
- Khairani, I. (2016). Pengaruh Earning Per Share (EPS) dan Deviden Per Share terhadap Harga Saham Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2011-2013. *Jurnal Manajemen dan Keuangan*, 5(2), 566-572.
- Krugman, P. R., & Obstfeld, M. (2009). *International Economics: Theory and Policy*. Pearson Education.
- Murhadi, W. R. (2013). *Analisis Laporan Keuangan: Proyeksi dan Valuasi Saham*. Jakarta: Salemba Empat.
- Nataryah, S. (2000). Analisis Pengaruh Beberapa Faktor Fundamental dan Risiko Sistemik Terhadap Harga Saham Kasus Industri Barang Konsumsi yang Go-Publik di Pasar Modal Indonesia. *Journal of Indonesian Economy and Business (JIEB)*, 15(3), 294-312.



- Natarsyah, S. (2000). Analisis Pengaruh Beberapa Faktor Fundamental dan Risiko Sistematis Terhadap Harga Saham Kasus Industri Barang Konsumsi yang Go-Publik di Pasar Modal Indonesia. *Journal of Indonesian Economy and Business (JIEB)*, 15(3), 294-312.
- Pardosi, B., & Wijayanto, A. (2015). Analisis perbedaan return dan risiko saham portofolio optimal dengan bukan portofolio optimal. *Management Analysis Journal*, 4(1).
- Rahayu, N. M. P. S., & Dana, I. M. (2016). Pengaruh Eva, Mva Dan Likuiditas Terhadap Harga Saham Pada Perusahaan Food and Beverages. *E-Jurnal Manajemen Unud*, 5(1), 443-469.
- Sari, L. A., & Santoso, B. H. (2017). Pengaruh EPS, DER, PBV dan NPM terhadap harga saham perusahaan properti. *Jurnal Ilmu dan Riset Manajemen (JIRM)*, 6(8).
- Siregar, O. K. (2019). Pengaruh Deviden Yield Dan Price Earning Ratio Terhadap Return Saham Di Bursa Efek Indonesia Tahun 2016 Sub Sektor Industri Otomotif. *Jurnal Akuntansi Bisnis dan Publik*, 9(2), 60-77.
- Subiyantoro, E., & Andreani, F. (2003). Analisis faktor-faktor yang mempengaruhi harga saham (Kasus perusahaan jasa perhotelan yang terdaftar di pasar modal Indonesia). *Jurnal Manajemen dan Kewirausahaan (Journal of Management and Entrepreneurship)*, 5(2), 171-180.
- Wibowo, S. (2012). Pengaruh Nilai Tukar, Suku Bunga Sertifikat Bank Indonesia dan Indeks Saham Dow Jones Terhadap Indeks Harga Saham Gabungan Indonesia. *Jurnal Bisnis dan Akuntansi*, 14(2), 117-130.
- Yunita, N. K. E., & Rahyuda, H. (2019). Pengujian Anomali Pasar (January Effect) di Bursa Efek Indonesia. *Jurnal Manajemen Unud*, 6(7), 3514-3523.
- Zulvia, Y. (2019). Pengaruh Debt to Equity Ratio (DER) dan Debt to Total Asset Ratio (DAR) Terhadap Profitability Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2014-2017. *Jurnal Economac*, 3(2), 3.