Financial Ratio Analysis in Stock Price: Evidence from Indonesia

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Abstrak
Tujuan Utama - Penelitian ini bertujuan untuk menguji hubungan antara rasio keuangan (meliputi *return on assets*, *debt to equity ratio*, *cash ratio*, dan *total assets turnover ratio*) dengan harga saham perusahaan yang terdaftar di Bursa Efek Indonesia (BEI) kecuali SIC 6 selama 2015 – 2020.
Metode - Penelitian ini menggunakan *signaling theory* dan *asymmetric information* sebagai dasar teori untuk menguji hubungan ini. Penelitian ini menggunakan sampel sebanyak 1603 *firms-years* yang diuji menggunakan analisis regresi untuk menjawab pertanyaan penelitian. Pengujian dilakukan menggunakan *software* STATA 17.0.
Temuan Utama - Hasil penelitian menunjukkan bahwa *return on assets* dan *cash ratio* memiliki hubungan positif dan signifikan dengan harga saham. Sementara itu, *debt to equity ratio* berhubungan negatif dan signifikan dengan harga saham. Penelitian ini juga menemukan bahwa *total assets turnover ratio* tidak memiliki hubungan yang signifikan dengan harga saham.
Implikasi Teori dan Kebijakan – Hasil penelitian diharapkan dapat berkontribusi baik secara literatur maupun praktik. Pertama, penelitian ini memperluas literatur tentang jenis rasio keuangan yang terkait dengan harga saham serta literatur tentang informasi asimetris. Kedua, hasil penelitian ini diharapkan dapat membantu investor melakukan analisis fundamental untuk memperkirakan nilai perusahaan target.
Kebaruan Penelitian – Penelitian sebelumnya hanya berfokus pada hubungan linear antara rasio keuangan dengan harga saham. Penelitian ini memberikan kebaruan dengan menambahkan analisis menggunakan kategori perusahaan yang *old* dan *young* terkait dengan informasi asimetris rendah atau tinggi.

Abstract
Main Purpose - *This study aims to examine the association between financial ratios (including return on assets, debt to equity ratio, cash ratio, and total assets turnover ratio) with stock prices of Indonesian listed company in Indonesia Stock Exchange (IDX) except SIC 6 during 2015 – 2020.*
Method - *This study used signaling theory and asymmetric information as a theoretical base for testing this association. In addition, this study used a sample from 1603 firms-years observation, which used regression analysis to answer the research question. Testing is done through the STATA 17.0 software.*
Main Findings - *The results show that the return on assets ratio and cash ratio positively and significantly correlate with stock price. Meanwhile, the debt to equity ratio has a negative and significant correlation with stock price. This study also found that the total assets turnover ratio has no significant correlation with stock price.*
Theory and Practical Implications – *This study's result is expected to contribute to the literature and practice. First, this study expands the literature on the types of financial ratios associated with stock prices and the literature on asymmetric information. Second, the results of this study are expected to help investors perform fundamental analysis to estimate the value of the target company.*
Novelty – *Previous study only focus on linear relationship between financial ratios with stock price. This study's novelty is that it analyses old or young company categories related to low or high asymmetric information.*

Keywords: financial ratio; stock price; signaling theory; firm age; Indonesia

INTRODUCTION

Recently, stock investment has been a favorite activity for investors (V. A. Putri & Yustisia, 2021). It is indicated that the number of investors in the capital market was 2.48 million in 2019, up 40% from 2018. The capital market unites investors and companies through long-term investments such as stocks or bonds. Investments in the capital market can provide benefits but are also full of risks of loss. Therefore, investors should carefully consider a company as a place to invest. Investors will generally choose companies with better finances and can offer attractive approaches such as dividends and capital gains. The stock price indicates company value that investors can use in valuing a stock (Sunardi & Permana, 2019). Therefore, investors should analyze stock price changes more deeply using fundamental analysis based on financial ratios. Fundamental analysis is predicting future stock prices and estimating the value of fundamental factors that affect future stock prices to obtain stock price estimates (Hanias et al., 2012).

Signaling theory by Spence (1973) suggests that managers have accurate information about the firm value that investors may not know. Managers may be interested in maximizing their profits using that information. In this study, signal theory explains the relationship between financial ratios and stock prices. Financial statements show the fundamental information related to the general condition of the company. Submission of the company's financial statements signals investors regarding the company's financial performance and prospects (Wulandari & Badjra, 2019). Therefore, financial statements can reduce asymmetric information between executives and investors. Investors can perform fundamental analysis using various financial ratios through the financial figures available in the financial statements. Financial ratios are the most common method used to analyze financial statements. In addition, financial ratios relate to various estimates in the financial statements that can interpret the conditions and results of the company's operations. Therefore, financial ratios are helpful guidelines in the company's financial position and operations and for vertically comparing the results of financial analysis (Herawati & Putra, 2018).

On the other hand, many research analyze about the relationship between financial ratio and stock prices but the results are still varied (Buigut et al., 2013; Daniel, 2015; Deitiana, 2013; Herawati & Putra, 2018; Kundiman & Hakim, 2017; Pandansari, 2012). The gap of results from previous studies motivate this study to test the relationship between financial ratio and stock price. The financial ratio used in this study includes profitability ratio, which measures by return on asset (ROA), leverage ratio, which measure by the debt-to-equity ratio (DER), liquidity ratio, which is a proxy by cash ratio (CASHRAT), and activity ratio which proxy by total asset turnover (TATO). The use of various types of financial ratios is expected to comprehensively provide empirical evidence regarding the relationship between financial ratios and stock prices. This study is different from previous research in which this study considers the firm age. Some researchers such as (Leary & Roberts, 2010); (Krasker, 1986); (Roudaki et al., 2016) used firm age to measure asymmetric information.

The results of this study are expected can contribute both to the literature and in practice. First, this study deals with the literature regarding the types of financial ratios related to prices and the literature on asymmetric information. Second, the results of this study can be used as consideration for investors/investment companies who wish to conduct fundamental analysis to assess a company. Finally, this study recommends conducting a comprehensive fundamental analysis involving more financial ratios when assessing a company, especially a young company (the level of asymmetric information is high).

METHOD

The research sample includes all companies (except SIC 6) listed on the Indonesia Stock Exchange from 2015 – 2020. Financial data and firm age are obtained from the Osiris database, while the number of boards of commissioners and directors is obtained from the annual report of the company. The availability of the annual report limits the sampling period. Many companies publish their 2021 annual reports late due to the Covid-19 pandemic. Therefore, this study excludes the 2021 period. This study finds the initial sample of 4446 firm-year observations during 2015 – 2020. Next, this paper excludes SIC 6 because the financial industry has different financial ratio calculations (Kong et al., 2022) (Kong, et al., 2023). Then, missing data for each variable were also excluded. Therefore, the final sample of this study is 1603 firm-year observations.

Stock Price

The stock price (SP) is a share value that reflects the company's resources where changes and fluctuations are determined mainly by the forces of supply and demand that occur in the stock market (L. P. Putri, 2017). Referring to the research by (Astutik et al., 2015), the stock price in this study uses the closing stock price (closing stock price).

Profitability Ratio (Return on Asset Ratio)

The profitability ratio measures the company's effectiveness in obtaining revenue. Return on Assets (ROA) measures the company's ability to earn profits by using the company's total assets after adjusting costs to finance these assets. Referring to (Herawati & Putra, 2018), ROA can be calculated mathematically using the formula:

$$ROA = \frac{Earnings\ After\ Tax}{Total\ Assets}$$

Leverage Ratio (Debt-to-Equity Ratio)

The leverage ratio is used to measure the ability of the company's assets to be financed by debt. The debt-to-equity ratio (DER) is the ratio between the total debt to the total ownership of the company's shares. Referring to (Herawati & Putra, 2018), DER is measured using the following formula:

$$DER = \frac{Total\ Liabilities}{Total\ Equity}$$

Liquidity Ratio (Cash Ratio)

The liquidity ratio measures the company's ability to meet its short-term obligations. The cash ratio (CASHRAT) is often used to measure company liquidity (Kenton, 2022). If the company is forced to pay all liabilities smoothly immediately, this ratio indicates the company's ability to do so without selling or liquidating other assets. Referring to the research of (Durrah et al., 2016), the cash ratio is measured using the following formula:

$$CASHRAT = \frac{Cash\ and\ Cash\ Equivalent}{Current\ Liability}$$

Activity Ratio (Total Asset Turnover)

The activity ratio is used to measure the effectiveness of the company in utilizing financial resources. Total asset turnover (TATO) shows the effective use of all company assets to increase sales or to describe how can obtain many net sales with money invested in company assets (V. A. Putri & Yustisia, 2021). Referring to (V. A. Putri & Yustisia, 2021), total asset turnover is measured using the following formula:

$$TATO = \frac{Net\ Sales}{Total\ Assets}$$

Firm Age

Company age is a proxy for information asymmetry (Zaigham et al., 2019). Referring to the research of (Cleary et al., 2007) and

(Zaigham et al., 2019), the age of the company in this is measured by the year since the date of its listing on the stock exchange (Indonesian Stock Exchange). In this study, the company age is divided into two: young companies (having an age less than the median) and the old company category (having a median age category and above) (Tommasetti et al., 2019).

Control Variables

Referring to (Fathinah & Setiawan, 2021); (Perdana & Adriana, 2018); and (Sarwendhi & Samekto, 2014), this study uses four control variables, namely the size of the board of commissioners (BOC), the size of the board of directors (BOD), firm size (FSIZE), and market to book ratio (MTB). All control variables are calculated for firm *i* in year *t*. In addition, this study also used industry fixed effect and year fixed effect. Table 1 shows the definitions and measurements of all the variables.

Data Analysis

This study uses regression analysis to answer the proposed hypothesis. Testing is done through the STATA 17.0 application. In addition, winsorized was done on all variables at both 1% and 99% levels to compress outlier data (Chen et al., 2022). In addition to performing regression analysis, this study uses univariate analysis consisting of descriptive statistics and Pearson correlation. The descriptive statistical analysis technique was used to determine the characteristics of the research sample. Furthermore, the Pearson correlation test is used to see the correlation between two variables.

Empirical Model

The empirical model used is as follows:

$$SP_{i,t} = \beta_0 + \beta_1\ ROA_{i,t} + \beta_{2\text{-}5}\ CONTROL_{i,t} + \beta_6\ Year\ Fe_{i,t} + \beta_6\ Industry\ Fe_{i,t} + \varepsilon\ldots\ldots\ldots\ldots(H_1)$$

$$SP_{i,t} = \beta_0 + \beta_1\ DER_{i,t} + \beta_{2\text{-}5}\ CONTROL_{i,t} + \beta_6\ Year\ Fe_{i,t} + \beta_6\ Industry\ Fe_{i,t} + \varepsilon\ldots\ldots\ldots\ldots(H_2)$$

$$SP_{i,t} = \beta_0 + \beta_1\ CASHRAT_{i,t} + \beta_{2\text{-}5}\ CONTROL_{i,t} + \beta_6\ Year\ Fe_{i,t} + \beta_6\ Industry\ Fe_{i,t} + \varepsilon\ldots\ldots\ldots(H_3)$$

$$SP_{i,t} = \beta_0 + \beta_1\ TATO_{i,t} + \beta_{2\text{-}5}\ CONTROL_{i,t} + \beta_6\ Year\ Fe_{i,t} + \beta_6\ Industry\ Fe_{i,t} + \varepsilon\ldots\ldots\ldots\ldots(H_4)$$

$$SP_{i,t} = \beta_0 + \beta_1\ ROA_{i,t} + \beta_2\ DER_{i,t} + \beta_3\ CASHRAT_{i,t} + \beta_4\ TATO_{i,t} + \beta_{5\text{-}8}\ CONTROL_{i,t} + \beta_9\ Year\ Fe_{i,t} + \beta_{10}\ Industry\ Fe_{i,t} + \varepsilon\ldots\ldots\ldots(H_5)$$

RESULTS AND DISCUSSION

This study examines the relationship between financial ratios and stock prices in all companies listed on the IDX (except SIC 6) during the 2015 – 2020 period. Table 2 presents sample distribution by industry and year. Table 2 shows that the most samples came from SIC 2, namely the food, wood, and chemical manufacturing industries, as much as 29% of the total sample. Meanwhile, based on the year, the largest sample was in 2019, which was 20% of the total sample.

Table 3 is descriptive statistics. The results show that the stock price sample has widely ranges between the minimum and maximum values. Meanwhile, the negative minimum value is only owned by the DER and MTB variables. Therefore, it indicates that the samples have companies with negative equity values.

Tabel 1. Variables Operational Definition

Variable	Definition	Measurement	Data Source
Dependent Variable			
SP	Stock price	Closing stock price	Osiris
Independent Variables			
ROA	Return on asset ratio	Earnings after tax / total assets	Osiris
DER	Debt-to-equity ratio	Total liabilities / total equity	Osiris

CASHRAT	Cash ratio	Cash and cash equivalent / current liability	Osiris
TATO	Total asset turnover	Net sales / total assets	Osiris
Control Variables			
BOC	Board of commissioner size	The number of boards of commissioner in one period	Annual report
BOD	Board of director size	The number of boards of director in one period	Annual report
FSIZE	Firm size	Natural logarithm of total assets	Osiris
MTB	Market to book ratio	Stock market price / firm's book value	Osiris
Other Variable			
AGE	Firm age	Dummy variable, scored 1 if firm age ≥ median, and scored 0 if firm age < median	Osiris

Table 2. Sample Distribution

INDUSTRY	YEAR						
	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**Total**
(SIC 0) Agriculture, Forestry, Fishing	9	11	8	10	9	12	59
(SIC 1) Mining and Construction	35	39	42	43	47	39	245
(SIC 2) Food, Wood, Chemicals Manufacturing	64	73	80	71	88	82	458
(SIC 3) Rubber, Stone, Electronic Manufacturing	39	51	37	42	51	34	254
(SIC 4) Transportation, Communication, and Utilities	38	37	40	33	52	41	241
(SIC 5) Wholesale & Retail Trade	28	27	30	29	34	31	179
(SIC 7) Hotels, Personal, and Business Services	19	17	19	15	27	25	122
(SIC 8) Health, Legal, and Related Services	6	7	7	7	8	10	45
Total	238	262	263	250	316	274	1603

Table 3. Descriptive Statistics

	Mean	**Median**	**Minimum**	**Maximum**
SP	1956.614	650.000	50.000	25750.000
ROA	0.064	0.044	0.001	0.411
DER	1.112	0.777	-1.291	7.036
CASHRAT	0.835	0.335	0.006	8.856
TATO	0.942	0.757	0.009	4.453
BOD	4.835	5.000	2.000	11.000
BOC	4.159	4.000	2.000	10.000
FSIZE	28.749	28.725	24.902	32.403
MTB	2.312	1.243	-0.116	24.449

Furthermore, Table 4 presents the results of the Pearson correlation test. The correlation test results show that ROA is positively and significantly related to stock prices at a significance level of 1%. In comparison, DER is negatively and significantly related to stock

prices at a significance level of 1%. CASHRAT has a positive but insignificant relationship with stock prices, while TATO has a negative but insignificant relation to stock prices. All control variables show a positive and significant relationship with stock prices at a significance level of 1%. However, the

Pearson correlation test is a univariate analysis that can only see the correlation of two variables. Thus, Pearson correlation cannot see the relationship between all variables used simultaneously. Therefore, to answer the research question, this study uses regression analysis.

Table 4. Pearson Correlation

		[1]	[2]	[3]	[4]	[5]
[1]	SP	1.000				
[2]	ROA	0.273***	1.000			
		(0.000)				
[3]	DER	-0.069***	-0.206***	1.000		
		(0.006)	(0.000)			
[4]	CASHRAT	0.007	0.097***	-0.282***	1.000	
		(0.776)	(0.000)	(0.000)		
[5]	TATO	-0.002	0.169***	0.068***	-0.131***	1.000
		(0.930)	(0.000)	(0.006)	(0.000)	
[6]	BOD	0.334***	0.101***	0.038	-0.086***	-0.006
		(0.000)	(0.000)	(0.132)	(0.001)	(0.816)
[7]	BOC	0.320***	0.090***	0.081***	-0.004	-0.028
		(0.000)	(0.000)	(0.001)	(0.871)	(0.256)
[8]	FSIZE	0.362***	0.021	0.228***	-0.114***	-0.182***
		(0.000)	(0.411)	(0.000)	(0.000)	(0.000)
[9]	MTB	0.252***	0.434***	0.139***	0.020	0.110***
		(0.000)	(0.000)	(0.000)	(0.418)	(0.000)

		[6]	[7]	[8]	[9]
[6]	BOD	1.000			
[7]	BOC	0.511***	1.000		
		(0.000)			
[8]	FSIZE	0.548***	0.562***	1.000	
		(0.000)	(0.000)		
[9]	MTB	0.075***	0.067***	0.013	1.000
		(0.003)	(0.007)	(0.597)	

Table 5 presents regression testing results to test the relationship between financial ratios and stock prices. The first model explicitly examines the relationship between ROA and

stock prices. The test results show that ROA is positively and significantly related to stock prices at a significance level of 1%. These results support the findings of (Kundiman &

Hakim, 2017), who found that ROA positively and significantly affects stock prices. Profitability shows the ability of a company to earn a profit or, in other words, measure the effectiveness of the firm's management (Wulandari & Badjra, 2019). Profit is the main factor in measuring the effectiveness and efficiency of all funds and company resources. One proxy used to measure profitability is the return on assets (ROA). ROA is a ratio to measure the ability of the company's assets to create profits. This ratio reflects the company's asset management efficiency in earning revenue—the more excellent the ROA value, the better the firm performance. To generate a high ROA, the company allocates its investment to more profitable assets (Wulandari & Badjra, 2019). A positive ROA reflects the efficient performance of the company's assets to generate greater profits. High profits cause the demand for stock prices to increase, followed by price increases.

Furthermore, the second Table 5 model explicitly examines the relationship between DER and stock prices. The test results show that DER has a negative and significant relationship with stock prices at a significance level of 1%. Furthermore, these results support the findings of (Daniel, 2015), which show that the debt-to-equity ratio has a negative and significant effect on stock prices. The debt-to-equity ratio is the ratio of debt to total equity. This debt arises because not all capital needs can be met using internal resources and equity (Solihin & Sulistyowati, 2021). As a result, the company seeks additional capital through credit. Thus, this ratio provides an overview of the company's capital structure that is useful in analyzing the risk of default. The more outstanding the debt-to-equity ratio reflects, the more the company's operational financing uses debt. Investors believe that the higher the debt-to-equity ratio, the higher the risk of default that the company may face (Antara & Suryantini, 2019). On the other hand, the lower

this ratio reflects the company's ability to finance its operations using resources and equity. Therefore, investors prefer to invest in companies with low DER, thereby increasing the company's stock price.

Table 5, the third model, examines the relationship between CASHRAT and stock prices. The test results show that the cash ratio is positively and significantly related to stock prices at a significance level of 1%. These results support the findings of (Kohansal et al., 2013), who found that the liquidity ratio has a positive and significant effect on stock prices. The cash ratio is an indication of the company's ability to meet market liquidity and the ability to meet creditor requirements. Investors and creditors can use the cash ratio to determine whether the company is experiencing financial problems or not. The cash ratio can be a better indicator for the short term than other liquidity ratio measurements because this ratio only uses the company's most liquid assets, namely cash and cash equivalents to assess company liquidity. A high cash ratio means that the company's cash and cash equivalents can cover all of the company's current liabilities. Conversely, a low ratio value (value less than 1) indicates that the company is experiencing financial difficulties in fulfilling its obligations, especially short-term obligations. Investors are more interested in investing in companies with high liquidity ratios than companies with low liquidity ratios. Thus, an increase in the liquidity ratio can encourage an increase in stock prices.

Furthermore, the fourth model in table 5 specifically examines the relationship between TATO and stock prices. The results show that the total asset turnover ratio is positive but not significant with stock prices. The results of this study support the findings of (Deitiana, 2013), which shows that TATO has no significant effect on stock prices.

Table 5. The Relationship between Financial Ratio and Stock Prices

	(1) SP	(2) SP	(3) SP	(4) SP
ROA	98.054***			
	(6.41)			
DER		-561.030***		
		(-9.20)		
CASHRAT			138.472***	
			(3.24)	
TATO				47.300
				(0.56)
BOD	211.181***	185.991***	238.877***	232.366***
	(3.30)	(2.88)	(3.60)	(3.50)
BOC	223.357***	223.976***	233.305***	242.905***
	(2.58)	(2.60)	(2.64)	(2.74)
FSIZE	577.733***	687.311***	568.333***	557.717***
	(5.94)	(6.70)	(5.80)	(5.74)
MTB	180.252***	294.259***	264.708***	263.822***
	(6.90)	(10.59)	(9.13)	(9.12)
_cons	-1.7e+04***	-1.9e+04***	-1.7e+04***	-1.7e+04***
	(-6.73)	(-7.25)	(-6.55)	(-6.52)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.259	0.262	0.235	0.233
R^2_ Adjusted	0.251	0.254	0.227	0.225
N	1603	1603	1603	1603

This study further divides the sample into two groups to test between financial ratios with stock price based on firm's age categories. Companies with age below the initial median become young companies, while companies with more than the median age become old companies (Tommasetti et al., 2019). The results of the regression test for the group of older companies are presented in Table 6. Meanwhile, the results of the regression test for the group of young companies are presented in Table 7.

The test results between financial ratios and stock prices in the old company group are listed in table 6. The test results show that ROA and CASHRAT are positively and significantly related to stock prices at a significance level of 1%. On the other hand, DER has a negative and significant relationship with stock prices at a significance level of 1%. Meanwhile, TATO has insignificantly related to stock prices. These results are similar to the main findings in table 5. However, R^2 in table 6 is higher than in table 5, meaning that the regression model used is better at explaining stock price variations in older companies (low asymmetric information).

These results support (Harris, 1994) argument that older firms may face less asymmetric information because they tend to be more mature, have established and time-tested policies and practices and receive more attention from the market and regulators. Meanwhile, investors tend to have less and less information about younger companies because there are still limited external assessments of companies, such as business news and information from these companies. (Gelb & Zarowin, 2002) stated that the larger disclosure has a positive and significant relationship with the informativeness of stock prices. When the stock price information is incorrect, the trading

volume decreases rapidly, and asymmetric information negatively affects the price.

Table 6. The Relationship between Financial Ratio and Stock Price at Old Company Categories

(Low Asymmetric Information)

	(1) SP	(2) SP	(3) SP	(4) SP
ROA	89.540[***]			
	(4.22)			
DER		-593.992[***]		
		(-7.69)		
CASHRAT			273.381[***]	
			(3.77)	
TATO				-214.333
				(-1.57)
BOD	273.387[***]	242.213[**]	296.388[***]	297.251[***]
	(2.68)	(2.41)	(2.90)	(2.86)
BOC	39.392	41.497	14.833	39.849
	(0.41)	(0.43)	(0.15)	(0.40)
FSIZE	806.690[***]	873.220[***]	832.559[***]	770.346[***]
	(5.30)	(5.64)	(5.39)	(5.22)
MTB	178.358[***]	322.500[***]	290.792[***]	294.593[***]
	(3.67)	(7.50)	(6.29)	(6.41)
_cons	-2.2e+04[***]	-2.3e+04[***]	-2.3e+04[***]	-2.0e+04[***]
	(-5.40)	(-5.62)	(-5.48)	(-5.32)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.293	0.305	0.285	0.279
R^2_ Adjusted	0.278	0.290	0.270	0.264
N	831	831	831	831

Table 7 shows the results of testing the relationship between financial ratios and stock prices in the group of young companies. The results show that ROA is positively related to stock prices at a significance level of 1%, while DER is negatively related to prices at a significance level of 1%. CASHRAT and TATO have a positive but insignificant relationship with stock prices. Furthermore, model 5 shows the results of testing financial ratios simultaneously with stock prices in the group of young companies. The results show that CASHRAT, initially not significantly related to stock prices (model 3), turned into a significant negative relationship with stock prices at a significance level of 5%. It means that a separate CASHRAT analysis of young companies is not enough to convince investors about the company's financial condition in making investment decisions. However, when CASHRAT analysis is combined with other financial ratio analyses, the results of CASHRAT analysis become helpful for investors. In young companies, excess cash and cash equivalents indicate a lack of efficiency in cash management. Management should use excess cash to invest in or develop the company. Thus, in young companies (high level of asymmetric information), investors prefer companies with low cash ratios. These results support (Daniel, 2015) research which found a negative relationship between liquidity ratios and stock prices.

Model 5 has a higher R^2 value than models 1-4. Thus, it can interpret that in young

companies, comprehensive and simultaneous financial ratio analysis explains better variations in stock prices than partial financial ratio analysis. Investors are more difficult to obtain information in the market about the performance of young companies than older companies. Therefore, a comprehensive analysis of financial ratios is needed for investors in making investment decisions in young companies.

Table 7. The Relationship between Financial Ratio with Stock Price in Young Company Categories (High Asymmetric Information)

	(1) SP	(2) SP	(3) SP	(4) SP	(5) SP
ROA	92.285***				83.103***
	(3.81)				(3.23)
DER		-345.223***			-250.887***
		(-5.20)			(-3.62)
CASHRAT			12.069		-100.448**
			(0.32)		(-2.25)
TATO				126.163	11.410
				(1.23)	(0.11)
BOD	117.460*	120.013*	139.963*	129.292*	94.431
	(1.85)	(1.72)	(1.94)	(1.86)	(1.48)
BOC	354.754**	350.739**	378.823**	377.058**	345.384**
	(2.47)	(2.43)	(2.58)	(2.55)	(2.38)
FSIZE	326.987***	390.959***	272.471***	288.756***	403.280***
	(3.49)	(3.97)	(2.84)	(2.84)	(3.82)
MTB	199.192***	248.923***	230.465***	229.337***	217.519***
	(6.81)	(7.55)	(6.79)	(6.77)	(7.37)
_cons	-1.1e+04***	-1.2e+04***	-9.6e+03***	-1.0e+04***	-1.3e+04***
	(-4.82)	(-5.00)	(-4.01)	(-3.94)	(-4.90)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
R^2	0.267	0.247	0.231	0.232	0.275
R^2_ Adjusted	0.251	0.230	0.213	0.214	0.256
N	772	772	772	772	772

CONCLUSION

This study examines the relationship between financial ratios (ROA, DER, CASHRAT, and TATO) and stock prices. This study was conducted by taking all samples of companies listed on the IDX (except SIC 6) from 2015 – 2020. The results showed that ROA and CASHRAT were positively and significantly related to stock price. On the other hand, DER is negatively and significantly related to stock price. Meanwhile, TATO has a positive but insignificant relationship with the stock price.

Furthermore, this study divides the sample into two categories, namely old companies and young companies. All tests in the old company category showed similar results to the overall sample test. While in the category of young companies, the relationship between CASHRAT with stock prices is not significant. However, when financial ratios are tested simultaneously in one regression model, the results show that CASHRAT is negatively and significantly associated with stock prices. These results indicate that financial ratio analysis must be carried out comprehensively to obtain sufficient information about the firm

value in companies with higher asymmetric information.

The results of this study should be used with caution due to the limitations of the study. First, this study only uses firm age as a proxy for asymmetric information. Future research can use other asymmetric information proxies such as earnings management. Second, this study uses only one proxy for each type of financial ratio. Future research can use more proxies to describe the types of financial ratios. For example, profitability can be proxied using return on assets and return on equity. Using different proxies can validate the results obtained. Further research can also invest in the context of various kinds of legal regulations and from developed countries.

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