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Stock return determinants in Indonesia

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Abstract

The purpose of this study is to provide empirical evidence regarding the effect of capital structure, company size, earnings quality on stock returns with stock liquidity as an intervening variable. The method used in this study is descriptive and verification methods. This study uses 17 listed firms in Indonesia Stock Exchange as the sample specifically for the textile and garment industry over the period of 2014 to 2018 and analyzed by path analysis. The results show that capital structure, firm size, and earnings quality have significant and positive effects directly on stock returns and indirectly through stock liquidity. These findings imply that capital structure, firm size, earnings quality, and stock liquidity shall form positive information to investors under condition high trust of investors as the impact of decreasing asymmetric information. Consistent with signaling theory, this study proves that positive information on investors will be formed if there is an increase in investor confidence as a result of reduced information asymmetry.

Introduction

Stocks are one of the most attractive capital market instruments for investors because they offer attractive returns. Shares can be defined as proof of ownership of an individual or party (business entity) participating in a company or limited liability company so that the parties involved can claim company income, claim company assets, and are entitled to participate in the General Meeting of Shareholders (Indonesia Stock Exchange, <https://www.idx.co.id/produk/saham/>).

The aim of investors to invest is to maximize stock return income (Budiarso & Pontoh, 2019). Stock returns are the benefits that investors get from investment policies with long or short term characteristics (Brigham & Ehrhardt, 2017:242). Investors generally expect a positive rate of return on shares. Empirically, the minimum standard of return on investment is 15% (Botchkarev, 2015; Sha et al., 2020). One of the industries that are of concern to investors is the textile

and garment sub-sector. Table 1 shows that 11 of the 19 textile and garment sub-sector company stock returns in the 2014 to 2018

period were below 15% so that it requires further analysis of what factors influence it.

Table 1. Stock return of the Textile and Garment Sub-Sector listed on the Indonesia Stock Exchange in 2014-2018

No.	Firm	2014	2015	2016	2017	2018	Average	Description
1	Polychem Indonesia Tbk	-18%	-42%	43%	68%	10%	12%	Not ideal
2	Argo Pantes Tbk	-4%	-22%	0%	-8%	0%	-7%	Not ideal
3	Trisula Textile Industries Tbk.	-	-	-	20%	9%	15%	Ideal
4	Century Textile Industry Tbk.	169%	-17%	3%	-46%	-7%	20%	Ideal
5	Eratex Djaja Tbk.	89%	67%	26%	-31%	4%	31%	Ideal
6	Ever Shine Tex Tbk.	-10%	-10%	-47%	-19%	-10%	-19%	Not ideal
7	Panasia Indo Resources Tbk.	24%	48%	-27%	54%	-61%	8%	Not ideal
8	Indo-Rama Synthetics Tbk.	-13%	-4%	24%	72%	359%	88%	Ideal
9	Apac Citra Centertex Tbk	-36%	-54%	13%	93%	-26%	-2%	Not ideal
10	Pan Brothers Tbk.	30%	24%	8%	20%	12%	19%	Ideal
11	Asia Pacific Fibers Tbk	-2%	-43%	10%	1%	100%	13%	Not ideal
12	Ricky Putra Globalindo Tbk	9%	-9%	-4%	-4%	14%	1%	Not ideal
13	Sri Rejeki Isman Tbk.	-45%	151%	-14%	64%	-6%	30%	Ideal
14	Sunson Textile Manufacture Tbk	29%	-49%	471%	-16%	19%	91%	Ideal
15	Star Petrochem Tbk.	0%	0%	12%	80%	8%	20%	Ideal
16	Tifico Fiber Indonesia Tbk.	50%	-14%	13%	-25%	-17%	2%	Not ideal
17	Trisula International Tbk.	-8%	-14%	7%	-7%	-27%	-10%	Not ideal
18	Nusantara Inti Corpora Tbk	8%	-27%	45%	-37%	-12%	-4%	Not ideal
19	Mega Perintis Tbk.	-	-	-	-	-8%	-8%	Not ideal

Notes: the stock returns are based on data from www.idx.co.id

Investors in general will carry out analysis as a basis for consideration for selecting shares where one of the considerations is the level of liquidity with the assumption that if the liquidity of a stock is good it tends to provide optimum profit. Stock liquidity is the level of any security that can be easily sold or liquidated without any impairment (Scott, 2015:35). In the context of financial assets, liquidity refers to securities that can be converted into cash quickly at their fair value (Brigham & Ehrhardt, 2017:225). Empirically, stock liquidity and stock returns have a strong relationship (Murhadi, 2013; Setiyanti, 2015; Anggiyanti, 2018) even though Davesta (2014) and Muslih (2018) prove an inconsistency in this relationship. In addition, empirically, the relationship between stock liquidity and stock returns tends to be influenced by other factors such as capital structure, firm size, and earnings quality. Capital structure is one of the critical factors considered by investors in obtaining stock returns (Zubaidah et al., 2018) as well as increasing stock liquidity (Wira & Santi, 2012). However, empirically, capital structure tends not to determine stock returns (Aufa, 2013) and inconsistently increases stock liquidity (Wira, 2013), thus

indicating solvency performance information does not affect investors' reactions in the capital market.

Company size is also an important factor in determining stock returns (Putra & Dana, 2016) and stock liquidity (Rhee & Wang, 2009) although there are still empirical inconsistencies with stock returns (Mar'ati, 2014) and stock liquidity (Danil & Yusra, 2019). Companies with a large size tend to be reflected by a fairly large number of assets (Reyhan et al., 2014; Putra & Dana, 2016; Alviansyah et al., 2018; Oktaviani et al., 2019). Companies with large sizes tend to be able to build investor confidence and can have an impact on increasing stock demand, share prices, and stock returns (Putra & Dana, 2016). Companies with larger sizes tend to easily get funds in the capital market because they are more attractive to investors (Alviansyah et al., 2018; Oktaviani et al., 2019). In addition, large companies indicate good prospects in a relatively stable period of time and are more able to generate profits than small companies (Oktaviani et al., 2019). Novari and Lestari (2016) prove that investors tend to be interested in investing in large companies so that it affects the demand and supply of shares in these companies.

Accounting profit is one of the basic information that investors or shareholders pay most attention to (Simbolon et al., 2019). Earnings quality is another factor that affects stock returns (Ball & Brown, 1968; Beaver, 1968; Chan et al., 2006; Hung & Van, 2020) and stock liquidity (Septia & Dwitayanti, 2012; Nasih, 2014). This indicates that accounting profit is an important factor for investors as a basis for making investment decisions. Prakash and Rappaport (1975) stated that accounting information plays an important role in increasing the efficiency of the capital market through the mechanism of demand and supply of securities. Disclosure of financial reports provided by companies to the public can reduce information asymmetry so that market players can make investment decisions effectively at a fair price level and there is an increase in stock liquidity (Sutedja, 2006). However, empirical evidence also proves that there is an inconsistency between earnings quality and stock returns (Solechan, 2009; Wijesinghe & Kehelwatenna, 2017; Kanti, 2021) and stock liquidity (Heflin et al., 2005).

Literature review

The signaling theory

Signal theory refers to the voluntary disclosure of information based on uncertain conditions in order to provide signals to investors so that it can have an impact on increasing stock market prices (Ross, 1977). Ross (1977) explains that signals from management to investors aim to reduce information asymmetry caused by management having and controlling more information on the condition and prospects of the company. Furthermore, Ross (1977) states that if there is moral hazard, the information asymmetry tends to occur because of the interest to maximize the welfare of management without the knowledge of the investor. The condition of information asymmetry between management and investors tends to result in conflicts of interest (Jensen & Meckling, 1976). Empirically, Wiyadi et al. (2015) prove that disclosing better quality

information with better governance to external parties can reduce earnings management practices.

Basic concepts

Stock returns

Stock return is the return on investment from investors in the form of profits that can be realized in the future (Scott, 2015:133; Brigham & Ehrhardt, 2017:242). According to Subramanyam (2009:16), return on investment is the right of investors to company income which can be in the form of distribution of profits or profits that are reinvested in the company. According to Subramanyam (2009:16), investors are to provide the company's operational financing funds for investment purposes and to get a return on the investment after considering the expected rate of return and investment risk.

Stock liquidity

Stock liquidity is the level where investors quickly sell or buy at a reasonable cost without affecting the stock market price (Scott, 2015:35). A liquid market will consist of liquid securities so that market liquidity will refer to the problem of liquidity levels (Scott, 2015:35). Madura (2018:66) shows that the characteristic of good asset turnover is through its liquidity which is reflected in the level of trading activity. The more buyers and sellers involved in the asset transaction, the more liquid the market price of the asset will be (Madura, 2018:66).

Capital structure

Capital structure is a combination of debt and equity (Brigham & Ehrhardt, 2017:608). The concept of capital structure refers to the company's funding sources and other economic attributes (Subramanyam (2009:544). Funding sources can relatively come from permanent equity capital to other funds that have a high level of risk or short-term sources of funds (Subramanyam, 2009:563). Subramanyam (2009:563) explains that if the funding source is long-term, the company must have the ability to create high profits (earning power) in the

sense that the company must be able to have a fairly high turnover of money from its operational results. Brigham and Ehrhardt (2017:608) explain that the decision on the capital structure of a company will consider the selection of capital structure targets, average debt maturity, and other specific funding sources that can be used at certain times. Furthermore, Brigham and Ehrhardt (2017:608) also explain that in relation to operational decisions, the management must act as a amen that the determined capital structure can maximize the intrinsic value of the company.

Firm size

The size of the company describes the size of the business field that is carried out and can be determined from total sales, total assets, average level of sales, and average total assets (Seftianne & Handayani, 2011). According to Seftianne and Handayani (2011), Putra and Dana (2016), Alviansyah et al. (2018), and Danil and Yusra (2019), company size is often measured using total assets with natural logarithmic normalization. Natural logarithmic normalization of total assets tends to be caused by a level of stability compared to other proxies and is continuous between periods (Susilo et al., 2017; Widiyati, 2020).

Earnings quality

Earnings quality reflects future sustainable earnings which is determined on the components of accruals, cash and financial performance (Wulansari, 2013). According to Scott (2015:79), the relationship between current financial statements and future company performance can be weakened by the presentation of low earnings quality in financial reports (noise). Scott (2015:79) further explains that the presentation of informative financial statements with the support of a good information system (often called transparent, valuable, and high quality) will provide good information to investors. Earnings quality can be measured by earnings persistence (Scott, 2015:164)

and accruals quality (Scott, 2015:166). Reyhan et al. (2014) empirically shows that accounting earnings with little or no perceived interference can reflect the company's actual financial performance.

Hypothesis development

Capital structure and stock liquidity

Modigliani and Miller (1958) show that companies with high levels of debt will benefit from tax protection and indicate a cheap cost of debt capital if the cost of share capital is at a high level or in the sense that investors want a high rate of return. Furthermore, Modigliani and Miller (1958) show that if debt can cause an increase in firm value then this will refer to an increase in the company's ability to create profits. Referring to the concept of Subramanyam (2009:563), and Brigham and Ehrhardt (2017:608) that if debt can create high earning power and maximize the company's intrinsic value, this study assumes that companies with large debt tend to have high stock liquidity. due to the rapid demand and supply of stocks from investors. Empirical evidence from Frieder and Martell (2006), Musfiah (2016), and Diamonidi (2019) shows that capital structure has a positive effect on stock liquidity. Based on this condition, the research hypothesis is presented below.

H1: Capital structure has a positive effect on stock liquidity

Firm size and stock liquidity

This study refers to the concept that large companies have assets that are large enough to be utilized in order to obtain higher profits (Sadewo et al., 2017). In addition, companies with large sizes are faster to gain investor confidence so that it is easier to access the market (Lukman, 2014; Himawan, 2020). This study assumes that companies with large enough assets tend to gain investor confidence in terms of profitability. Empirical evidence from Rhee and Wang (2009), Safitri (2016), and Suryanto (2019) shows that company size has a positive effect on stock liquidity.

Based on this condition, the research hypothesis is presented below.

H2: Firm size has a positive effect on stock liquidity

Earnings quality and stock liquidity

This study refers to Prakash and Rappaport (1975) with the concept that quality accounting information increases the efficiency of the capital market through the mechanism of demand and supply of securities. In addition, consistent with Sutedja (2006), quality financial information can reduce information asymmetry, thereby affecting stock liquidity. This study assumes that an increase in the quality of earnings will be accompanied by an increase in stock liquidity in the capital market. Empirical evidence from Septia and Dwitayanti (2012), and Nasih (2014) shows that earnings quality is significant and positive on stock liquidity. Based on this condition, the research hypothesis is presented below.

H3: Earnings quality has a positive effect on stock liquidity

Capital structure and stock returns

This study refers to Subramanyam (2009:563), and Brigham and Ehrhardt (2017:608) with the concept that the use of debt can create high earning power and maximize the company's intrinsic value. Modigliani and Miller (1958) show that the use of debt tends to increase firm value and the company's ability to create profits. Related to the H1, this study assumes that if the company uses a high level of debt with the aim of optimizing asset management and sales in increasing profits, investors will catch this information as a good signal so that it tends to increase stock returns. Empirical evidence from Lindayani and Dewi (2016), Anugrah and Syaichu (2017), and Zubaidah et al. (2018) show that capital structure has a positive effect on stock returns. Based on this condition, the research hypothesis is presented below.

H4: Capital structure has a positive effect on stock returns

Firm size and stock returns

This study refers to Seftianne and Handayani (2011) with the concept that firm size reflects the size of the business operations being run. Firms with a larger size tend to spend more (Verawaty et al., 2016; Putra & Dana, 2016; Basir & Hasanah, 2017). However, large firms have assets that are large enough to be utilized in order to obtain higher profits (Sadewo et al., 2017). Related to the H2, this study assumes that if a company with a large enough asset can create a high profit, this will attract investors to invest. Empirical evidence from Putra and Dana (2016), Alviansyah et al. (2018), and Susanty and Bastian (2019) which state that company size has a positive effect on stock returns. Based on this condition, the research hypothesis is presented below.

H5: Firm size has a positive effect on stock returns

Earnings quality and stock returns

This study refers to Scott (2015:79) with the concept that earnings from informative financial reports will provide positive signals to investors. Profit is a management performance measurement tool for a certain period and becomes a benchmark for future performance (Trianto, 2017; Bukhori & Ismail, 2019). Related to the H3, this study assumes that companies that are able to increase profits tend to have high stock prices, thereby increasing stock returns. Empirical evidence from Ball and Brown (1968), Beaver (1968), Chan et al. (2006), and Hung and Van (2020) show that earnings quality has a significant effect on stock returns. Based on this condition, the research hypothesis is presented below.

H6: Earnings quality has a positive effect on stock returns

Stock liquidity and stock returns

This study refers to Scott (2015:35), and Brigham and Ehrhardt (2017:225) with the concept that stock liquidity will not reduce its fair value under certain conditions. This study assumes that if a stock has high liquidity in the capital market without a decrease in its fair value, this will provide an optimum return for investors as well as

improve the issuer's reputation in the public. This study also assumes that high stock liquidity can be caused by investor confidence in the issuer's performance and the company's future growth. Empirical evidence from Murhadi (2013), Setiyanti (2015), and Anggiyanti (2018) shows that stock liquidity is significant and positive on stock returns.

H7: Stock liquidity has a positive effect on stock returns

Figure 1 illustrates the conceptual framework based on the development of this research hypothesis.

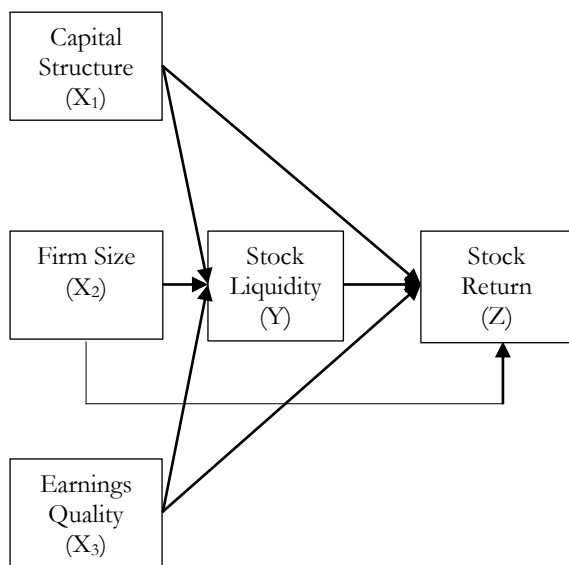


Figure 1. Conceptual framework

Research method

The method that will be used in this study is verification method and descriptive method. The sampling technique used purposive sampling with the following criteria: (1) textile and garment manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 period; and (2) textile and garment manufacturing companies that publish audited financial reports using the financial year ended December 31 for 2014-2018. Table 2 presents a sample of this study based on predetermined criteria.

Table 2. Sample

No.	Criteria	Amount
1	Textile and garment manufacturing companies listed on the IDX for the 2014-2018 period.	19
2	Textile and garment manufacturing companies that publish audited financial reports using the financial year ended December 31 for 2014-2018.	(2)
Sample		17

The variables used in this study for hypothesis testing can be described as follows.

1. Capital structure (X1), namely the ratio between the amount of debt and equity. This study follows Brigham and Ehrhardt (2017:111) to measure the capital structure using a debt ratio which is calculated by the ratio of total debt to total equity or debt to equity ratio (DER).
2. Firm size (X2) is the grouping of companies into several groups, namely large, medium and small companies (Suwito & Herawaty, 2005). This study follows Seftianne and Handayani (2011), Putra and Dana (2016), Alviansyah et al. (2018), and Danil and Yusra (2019) to calculate company size using the natural logarithm of total assets.
3. Earnings quality (X3) is earnings in financial statements that reflect the company's actual financial performance (Wulansari, 2013). This study follows Bhattacharya et al. (2003), Nasih (2014), and Nasih et al. (2016) to measure earnings quality with income smoothing and is calculated by the standard deviation (σ) of net income (NI) of total assets divided by the standard deviation (σ) of operating cash flow (CFO) of total assets.
4. Stock liquidity (Y) is the level of any security that can be easily sold or liquidated without any impairment (Scott, 2015:35). This study follows Nidia (2014), Erlinawati and Mawardi (2015), and Taslim and Wijayanto (2016)

to measure stock liquidity using Trading Volume Activity (TVA) and is calculated by the number of traded shares divided by the number of shares outstanding.

5. Stock return (Z) is the return on investment from investors in the form of profits that can be realized in the future (Scott, 2015:133; Brigham & Ehrhardt, 2017:242). This study follows Taslim and Wijayanto (2016), and Alviansyah et al. (2018) to calculate stock returns, namely the ratio of the difference between the current period's share price (P_t) and the previous period's share price (P_{t-1}) to the previous period's share price (P_{t-1}).

The method of analysis of this study uses path analysis with different variables and analysis techniques based on the following 3 sub-structures.

Sub-structures 1 : $Z = \beta ZX_1X_1 + \beta ZX_2X_2 + \beta ZX_3X_3 + \epsilon$

- where,
 $rX_1X_2X_3Z$ = Correlation between variables X_1, X_2, X_3, Z
 βZX_1 = The direct effect of X_1 to Z
 βZX_2 = The direct effect of X_2 to Z
 βZX_3 = The direct effect of X_3 to Z
 ϵ = Residual factors

Sub-structures 2 : $Y = \beta YX_1X_1 + \beta YX_2X_2 + \beta YX_3X_3 + \epsilon$

- where,
 $rX_1X_2X_3Y$ = Correlation between variables X_1, X_2, X_3, Y
 βYX_1 = The direct effect of X_1 to Y
 βYX_2 = The direct effect of X_2 to Y
 βYX_3 = The direct effect of X_3 to Y
 ϵ = Residual factors

Sub-structures 3 : $Z = \beta ZY + \epsilon$

- where,
 βYZ = The direct effect of X_4 to Y
 ϵ = Residual factors

Results and discussions

Results

Table 4 presents the results of the path analysis of the sub-structures 1, 2 and 3. The results of the analysis of sub-structure 1 show that: (1) the t_{count} value is 1.850 or greater than 1.66388 with a significance of 0.047 less than 0.05 so that H1 is accepted in meaning that capital structure has a positive and significant effect on stock liquidity; (2) the t_{count} value of 2.711 is greater than 1.66388 with a probability of

0.022 less than 0.05 so that H2 is accepted in the sense that firm size has a positive and significant effect on stock liquidity; and (3) the t_{count} value is 2.168 or greater than 1.66388 with a significance of 0.445 which is greater than 0.035 so that H3 is accepted in the sense that the earnings quality has a positive and significant effect on stock liquidity.

The result of sub-structure 2 analysis shows that: (1) the t_{count} value of 2.277 is greater than 1.66388 with a significance of 0.037 less than 0.05 so that H4 is accepted in the sense that capital structure has a positive and significant effect on stock returns; (2) the t_{count} value of 2.567 is greater than 1.66388 with a significance of 0.032 less than 0.05 so that H5 is accepted in the sense that firm size has a positive and significant effect on stock returns; and (3) t_{count} value of 1.979 or greater than 1.66388 with a significance of 0.046 greater than 0.05 so that H6 is accepted in the sense that earnings quality has a positive and significant effect on stock returns. The result of sub-structure analysis 3 shows that the t_{count} value is 2.833 or greater than 1.66388 with a significance of 0.016 less than 0.05, so that H7 is accepted in the sense that stock liquidity has a positive and significant effect on stock returns.

Table 4. Path analysis results

Variables	Sub structure 1	Sub structure 2	Sub structure 3
Capital structure	1.850**	2.277**	
Firm size	2.711**	2.557**	
Earnings Quality	2.168**	1.979**	
Stock Liquidity			2.833**
Dependent variable	Stock Liquidity	Stock Return	Stock Return
F-test	3.260***	2.960***	2.941***
R	0.481	0.522	0.312
R-square adjusted	0.231	0.272	0.097

* significant at 10%, ** significant at 5%, dan *** significant at 1%

Discussions

Capital structure and stock liquidity

This study proves that capital structure has a significant and positive effect on stock returns. A high capital structure indicates that the company's operational financing tends to be financed from debt rather than equity capital. Debt owned by the company will be managed for operational, expansion or investment activities as well as being used as a tax deduction so as to increase profits. Consistent with Modigliani and Miller (1958) and signaling theory, this study shows that investors tend to like high debt with the assumption that they will have high returns so that this causes an increase in stock supply and demand which has an impact on stock liquidity. Empirically, this study is consistent with Frieder and Martell (2006), Musfiah (2016), and Diamonidi (2019).

Firm size and stock liquidity

This study proves that the company has a significant and positive effect on stock liquidity. These results indicate that large companies reflect good performance with a high commitment to continue to develop and improve their performance so that it becomes one of the considerations for investors in determining investing in the company. Consistent with Lukman (2014) and Himawan (2020), the results of this study indicate that company size also determines the level of investor confidence where large companies tend to be better known by the public. Based on the results of the analysis, this study assumes that companies with large total assets have reached the maturity stage so that they have a stable condition and tend to have positive cash flows. Consistent with signaling theory, this study indicates that company size information tends to provide good news signals to investors so that this is sufficient to affect the liquidity of the company's shares in the capital market. Empirically, this study is consistent with Rhee and Wang (2009), Safitri (2016), and Suryanto (2019).

Earnings quality and stock liquidity

This study proves that earnings quality has a significant and positive effect on stock liquidity. Consistent with Prakash and Rappaport (1975) and Sutedja (2006), this study indicates that earnings information is an important variable for investors in making investment decisions. Consistent with signaling theory, this study assumes that good earnings quality can reduce information asymmetry so that information gaps between managers and outsiders can be minimized for the benefit of investment risk assessment. Based on these conditions, investors' reactions will determine the supply and demand cycle of shares which will impact the liquidity of shares. Empirically, this study is consistent with Septia and Dwitayanti (2012), and Nasih (2014).

Capital structure and stock returns

This study proves that capital structure has a significant and positive effect on stock returns. Regarding the proof of H1, the results of this study indicate that a high level of corporate debt has an impact on the achievement of higher profits. Consistent with signaling theory, this study assumes that the capital structure provides positive information for investors so that it has an impact on increasing share prices and stock returns received by shareholders. Empirically, this research is consistent with Lindayani and Dewi (2016), Anugrah and Syaichu (2017), and Zubaidah et al. (2018).

Firm size and stock returns

This study proves that company size has a significant and positive effect on stock returns. Consistent with Sadewo et al. (2017), this study indicates that the size of the company is a reflection of its financial strength where the total assets owned can be used to carry out larger operational activities. In relation to proving H2, the results are consistent with signaling theory where companies with a larger size inform the existence of high profitability so as to increase stock returns in the capital market. Empirically, this study is consistent with

Putra and Dana (2016), Alviansyah et al. (2018), and Susanty and Bastian (2019).

Earnings quality and stock returns

This study proves that earnings quality has a significant and positive effect on stock returns. The results of this study indicate that the quality of earnings will increase along with lower income smoothing practices, where good earnings quality is indicated by low earnings opacity, thereby conveying more transparent information to investors and reducing information asymmetry. In addition, this study shows that there is a tendency for investors to avoid companies that have low earnings quality (not transparency) regarding the investment risk portfolio which can have an impact on stock returns. Regarding the proof of H3, this study is consistent with the signaling theory where a company with good earnings quality will have a good ability to manage its investment assets to ensure financial performance, including sustainable earnings in the future. Empirically, this study is consistent with Ball and Brown (1968), Beaver (1968), Chan et al. (2006), and Hung and Van (2020).

Stock liquidity and stock returns

This study proves that stock liquidity has a significant and positive effect on stock returns. The results of this study indicate that high stock liquidity allows investors to make transactions in large quantities without reducing market prices. This condition is based on the assumption that investor confidence causes an increase in demand for shares so that it will have an impact on increasing share prices as well as stock returns. Consistent with signaling theory, this study proves that the greater the TVA, the greater the possibility to increase the return that investors will receive. Empirically, this research is consistent with Murhadi (2013), Setiyanti (2015), and Anggiyanti (2018).

Conclusion

Empirical evidence shows that capital structure, firm size, earnings quality, and

stock liquidity have a direct influence on stock returns. Empirical evidence also shows that capital structure, firm size, and earnings quality have an indirect effect on stock returns through stock liquidity. Consistent with signaling theory, this study proves that the capital structure, firm size, earnings quality, and stock liquidity are able to provide positive information to investors so that it will have an impact on stock prices in determining stock returns. Consistent with signaling theory, this study proves that positive information on investors will be formed if there is an increase in investor confidence as a result of reduced information asymmetry.

This study suggests that companies need to optimize debt management to increase operational efficiency and effectiveness so that with good debt management, companies can expand and increase profits and increase investor interest. In addition, the company is expected to be able to use its assets to gain investor confidence in investing. Companies also need to maintain the quality of the company's earnings with the aim of avoiding earning opacity practices that can cause information asymmetry between majority and minority shareholders and disrupt the confidence of potential investors. This study also suggests that investors should choose a company with a high debt ratio, but it is recommended not to exceed 1: 3 because the company's income will be burdened by debt payments. This research also suggests that small-sized companies should start expansion and make more efforts to be known in order to gain investor confidence to invest. In general, companies need to improve financial performance so that investors can highly assess the value of the company so that with an increase in trading volume, the return will be optimal. Further research needs to do a deeper study by analyzing additional variables such as Net Profit Margin (NPM), Price Earning Ratio (PER), and Price to Book Value (PBV).

Data availability

The research data can be accessed openly in the supporting document of the article (supplementary file).

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