Corporate Earnings Persistence and Stock Returns

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This study aims to identify and analyse corporate earnings persistence and stock returns with firm size, return on assets and dividend payout ratio as control variables. The population in this study comprises manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2012–16. The research sample was determined using the purposive sampling method. The sample chosen is 34 companies. The data analysis method used is logistic regression analysis using SPSS25. Based on the results of hypothesis, it can be concluded that earnings persistence, return on assets and dividend payout ratio have a positive relationship with stock returns, whereas the size of the company does not have a relationship with the practice of income smoothing. The results of this study indicate that the level of persistence of earnings is related to the rate of return on the stock returns of a company.

Keywords: Dividend payout ratio, Earning persistence, Firm size, Return on assets.

Introduction

In this era of globalization, the capital market or stock exchange is one of the important funding methods for every company. The capital market can be likened to a shopping centre, with the only difference being the type of goods traded. If a public shopping centre provides a variety of necessities, the capital market trades capital market products, such as bonds and securities. So capital markets are activities related to capital trading, such as bonds and securities. This market serves to connect investors, companies and government institutions through the trading of long-term financial instruments. The capital market is seen as an effective means of accelerating the development of a country. This is possible because the capital market is a vehicle that can achieve the long-term mobilization of funds from the community to be channelled to the productive sectors (Anoraga & Widiyanti, 1995: 2).

The capital market is also an alternative for investors. Through the capital market, investors can invest in several companies through the purchase of new securities offered or traded on
The capital market. Meanwhile, companies can obtain the funds needed by offering long-term financial instruments. The existence of a capital market allows investors to have a healthy company and good earnings persistence.

The encouraging development of the capital market consists of several groups of companies. The one that dominates the capital market is the manufacturing company group, a group of companies producing semi-finished and finished goods from raw materials. The manufacturing company group mostly divided into three categories: the consumer goods industry, the basic chemicals industry and various other industries.

The manufacturing sector has the highest average share price growth when compared with other companies listed on the Indonesia Stock Exchange (IDX). Manufacturing companies are growing rapidly in business activities with a very large transaction value that is realized by the level of stock prices. In addition, manufacturing companies are more frequently listed and active on the Indonesia Stock Exchange (IDX) than non-manufacturing companies. Manufacturing companies have a high level of corporate value and high stock prices. During the period 2012–16, stock returns for manufacturing companies showed a significant increase. The significant stock return response shows that investors are interested in buying shares in the manufacturing company group.

Investors’ interest in the manufacturing company group is a result of both fundamental and technical factors. To invest in these manufacturing companies in the form of shares, an fundamental and technical analysis is needed to measure the value of shares. Fundamental analysis determines the condition of the company, with the analysis studies relating to the fundamental basic conditions of a company, both quantitatively and qualitatively. The purpose of fundamental analysis is to determine whether the value of a stock is in an undervalued or overvalued position. The stock is said to be undervalued when the share price on the stock market is smaller than the fair price or value, and vice versa.

Fundamental analysis is concerned with evaluating company performance – that is, the effectiveness and efficiency achieved by a company. To analyse company performance, financial ratios can be used; these are divided into four groups – liquidity ratios, activities, debt and profitability (Gitman, 2003). This analysis tries to estimate future stock prices by estimating the value of fundamental factors that will affect future stock prices and applying the relationship of these factors to obtain an estimated share price. One factor that is often used as a basis for valuation by investors is earnings. Therefore, many previous studies have discussed earnings (Agustia, Prasetio & Permatasari, 2019; Bukit & Iskandar, 2009; Harymawan & Nowland, 2016; Kapoor & Goel, 2019; Lo, Ramos & Logo; Meyer & Mok, 2019; Nasution & Jonnergard, 2017; Putra, Pagalung, & Habbe, 2018; Savor & Wilson, 2015; Siregar, Maksum, Bukit & Badaruddin, 2019; Young, Maulana, Siregar & Indra, 2018.
According to Fanani (2010), persistent earnings reflect the sustainability of earnings in the future. Earnings persistence relates to the overall performance of the company as reflected in the company’s profit and its reflection on earnings that will be able to continue for a long period. Profit is said to be persistent if the current year’s earnings can be a good indicator of company profits in the future.

Earnings persistence is the centre of attention for users of financial statements, especially for those who expect high earnings persistence. Penman (2001) explains that persistent earnings are earnings that can reflect the sustainability of earnings (sustainable earnings) in the future. Understanding earnings persistence in principle can be seen from two perspectives. The first states that earnings persistence is related to the overall performance of the company, which is reflected in the company’s profit. This view states that persistently high profits can be sustained for a long period. According to Schipper (2004), this view is closely related to the company’s performance, which is realized in the company’s profits earned in the current year. Persistent earnings can be a good indicator of company profits in the future and are strongly associated with operating cash flows in the future.

The second view states that earnings persistence is related to the performance of the stock market price of capital, which is realized in the form of returns, so a stronger relationship between corporate profits and returns for investors in the form of stock returns shows a high profit persistence (Ayres, 1994). This view also states that earnings persistence is related to the company’s stock performance in the capital market. The stronger relationship between earnings and market rewards shows the higher earnings persistence (Chan et al. 2004; Lev & Thiagarajan 1993).

However, according to research conducted by Romasari (2013), earnings persistence has no effect on earnings quality. Earnings persistence is used as an indicator of expected accounting profit correction in the future, which is implemented in terms of earnings for the year. Persistent earnings do not often experience fluctuations in each period and tend to be more stable. In this case, earnings persistence is used as a measure of earnings quality because quality earnings will demonstrate the sustainability of earnings.

Based on the previous description, there is an empirical phenomenon that is a discrepancy between theory and empirical data found from the variables studied. For this reason, further research is needed to explore the factors related to this phenomenon. Based on the independent variables related to the dependent variable, this study was compiled to determine the effect of earnings persistence on stock returns in manufacturing companies. The research period is 2012–16, the most recent period of financial statements listed on the Indonesia Stock Exchange (IDX).
The results of this study indicate that earnings persistence, asset returns and dividend payout ratios have a positive relationship with stock returns, while the size of the company has no relationship with the practice of income smoothing. The results of this study also indicate that the level of earnings persistence is related to the rate of return on a company’s stock returns. This result can be used as a reference for investors to choose a company that will be a place to invest in the future so it can be used as a reference when making decisions and considering investment decisions in order to obtain the expected return through company earnings.

The next section of the article presents a literature review and develops the hypotheses. The next section provides a description of the study sample and research variable. This is followed by a discussion of the results before the final section outlines the conclusions of the research.

**Literature Review**

**Theoretical Framework**

Brigham and Hauston (2001) suggest that a sign or signal is an action taken by a company to give instructions to investors about how management views the company’s prospects. This signal is in the form of information about what has been done by management to realize the wishes of the owner. Information released by the company is important because it affects the investment decisions of parties outside the company. The information is important for investors and business people because the information essentially presents information, notes or pictures, both for past, present and future conditions for the survival of the company and in terms of how it affects the company.

Signalling theory is developed in economics and finance to take account of the fact that company insiders generally have better and faster information relating to company conditions and prospects compared with people outside the company – for example, investors. The main assumption in this theory is that management has accurate information about the value of the company that is unknown to outside investors and that management is always trying to maximize the expected incentives. The desire of management to maximize these incentives means it is not always possible to fully convey all the information they have because this might affect the value of the company. This will cause asymmetric information.

Asymmetric information can make it difficult for investors to assess the quality of the company. As a result, investors will on average give poor evaluations to all companies. This tendency is called equilibrium pooling because good-quality and poor-quality companies are included in the same pool of assessments (Arifin, in Muwardi, 2010).
Pooling equilibrium will certainly be very detrimental for good-quality companies. To overcome this problem of asymmetric information, the company provides information to the market to which the market can generally respond as a signal. According to Butarbutar (2011), one type of information issued by companies that can be a signal to parties outside the company – especially for investors – is an annual report.

According to Jogiyanto (2000), information that is disclosed in annual reports can be in the form of accounting information relating to financial statements and non-accounting information not related to financial statements. Information published as an announcement will signal investors to make investment decisions. After receiving this information, investors first interpret and analyse the information as good news or bad news. The results of the analysis will then form a basis for investors to make investment decisions.

The announcement of accounting information sends a signal that the company has good prospects in the future (good news) so investors are interested in trading shares, thus the market will react as reflected in changes in stock trading volume. The relationship between the publication of information – financial statements, financial conditions, or political and social fluctuations in the volume of stock trading – can be seen in the form of market efficiency. An efficient capital market is defined as a market whose securities prices reflect all relevant information (Jogiyanto, 2000).

Agus (2001) outlines signalling theory in close relationship with the availability of information. Financial statements can be used to make decisions for investors; they are the most important part of the company’s fundamental analysis. Ranking companies that have gone public are usually based on this financial ratio analysis. This analysis is carried out to facilitate the interpretation of financial statements that have been presented by management.

The use of signalling theory involves information in the form of rate of return on assets (ROA), or how much profit is obtained from the assets used. Thus, if ROA is high, then it will be a good signal for investors because high ROA shows good company performance. Investors will then be interested in investing their funds in the form of securities or shares. High stock demand will cause stock prices to increase. High profitability indicates good company prospects, so investors will respond positively to these signals and the value of the company will increase (Muhamad, 2013).
Development of Hypotheses

**Earnings Persistence and Price of Stock Returns**

Earnings persistence affects investors’ valuation of stock prices (Dechow et al., 2010). Changes in earnings persistence are likely to affect equity valuations through pricing of some income. Ohlson (1995) shows that the determination of the price of income multiplies with income persistence. Income persistence also helps users of financial statements to evaluate and understand the components of sustainable or recurring income (Penman & Zhang 2002; Hanlon 2005; Dechow et al., 2010). In the valuation model, using residual future income or future income as input, a more persistent income will increase estimated future income, thereby increasing the value of the company’s current income.

Stock returns are the benefits of having shares by investors of their investment, which consists of dividends and capital gains/losses (Bachtiar, Profit & Darmono, 2015). Testing the relationship of earnings persistence with price or stock returns begins with research by Ball and Brown (1996) testing the content of earnings information that is useful for predicting returns. In general, it can be concluded that an increase or decrease in the annual earnings persistence of a company is followed by an increase or decrease in its share price. Kormendi and Lipe (1990) examine the relationship between earnings innovation and earnings persistence with stock returns. The results of his study indicate that the earnings response coefficient is positively correlated with earnings persistence, and does not show excessive sensitivity, so the magnitude of the company’s stock return reaction on earnings must be related to the effect of earnings innovation on expectations of future benefits gained by shareholders.

Furthermore, it can be concluded that the magnitude of the relationship between stock returns and earnings depends on earnings persistence. Meythi (2006) examined the nature of the information content of the accrual component and the cash flow component, and found that information reflected in the stock price. The results show that the earnings performance attributable to the accrual component represents a lower persistence than the earnings performance attributed to the cash flow component. Sloan (1996) also points out that stock prices react if investors ‘fixate’ on (believe in) in earnings persistence. As a result, companies with relatively high (or low) accrual levels experience negative (or positive) future abnormal returns around the announcement of future earnings persistence. Sloan argues that the results of this study are consistent with earnings fixation by a small proportion of market participants to the total reported earnings, regardless of the magnitude of the accruals component and the cash flow component. Based on this explanation, the hypothesis proposed is:

**H1:** Earnings persistence positively affects stock return prices.
**Dividend Payout Ratio and Price of Stock Returns**

Gwilym et al. (2009) examined the impact of dividend yields on the momentum of stock effects on the UK market. It is known that companies without payment dividends tend to have greater profit momentum. On the other hand, Asem (2009) discusses the impact of the amount of dividend payments on stock price momentum gains in the US market. The study also found that the momentum of the stock generated greater profits for companies that did not make dividend payments.

The dividend payout ratio is the proportion of company income paid by shareholders as dividends. Thus, the higher the dividend payout ratio, the greater the proportion of income paid as dividends, and the smaller proportion of income saved by companies to take investment in future growth options. This investment in future growth options certainly affects the risk of the company’s assets and future cash flows. As a result, the ratio of dividend payments can have a significant impact on stock returns (Li, 2016).

Amarjit’s research (2010) in Carlo (2014) states that the dividend policy that is proxied by the dividend payout ratio (DPR) can also be related to the company’s stock returns. This is because companies with a high DPR will increase their share prices, so demand for shares increases, and this will impact positive returns. Based on this explanation, the hypothesis proposed is:

**H2:** Dividend payout ratio positively affects stock return prices.

**Return on Asset and Price of Stock Returns**

This ratio uses the net profit derived from the company’s operations with the amount of investment or assets used to generate operating profits. The higher the level of corporate financial profitability, the stronger the company’s ability to earn profits so the higher the level of investor confidence that affects the high demand for the company’s shares in the capital market, which directly affects the high stock returns (Prastyo, 2012).

Kurniawan (2013) states that ROA has the highest effect on stock returns. This will further increase the attractiveness of the company to investors because the rate of return will be even greater. Based on this explanation, the hypothesis proposed is:

**H3:** Return on assets (ROA) affects stock returns.
Firm Size and Price of Stock Returns

Firm size can also act as a variable, having a relationship with earnings volatility (Frankel & Litof, 2009). In relation to earnings volatility, firm size already has some empirical evidence (Alexander, 1949; Francis et al., 2004), as company size is known to be negatively related to earnings variability. This might be because large companies are more diversified than small companies. Watts and Zimmerman (1978) propose that larger companies will choose investments that are less risky to avoid the potential for government intervention that will accompany higher returns.

Fama and French (1995) found that firm size is related to profitability. They state that firm size has a partial but significant effect on return. Shares of small companies have a tendency to earnings that is lower than for the shares of large companies. The size effect in income is due to the high likelihood of low profits from small company stocks, especially after the recession in the United States in 1980. In the 1980s, large cap companies had greater annual returns compared with small cap companies.

This result led to debate about whether this difference was only temporary or would occur in the long run. Some researchers have also examined the relationship between annual returns and the number of analysts and institutional holding. They found that returns tend to increase, along with decreasing number of analysts in a stock (Damodaran, 2002). Apart from the differences of opinion above, it can be concluded that the size of the company’s market capitalization is a risk factor that should be taken into account in calculating the rate of return of shares. In general, it can be stated that there is a negative relationship between the rate of return of shares and firm size. Based on this explanation, the hypothesis proposed is:

H4: There is a negative relationship between firm size and the price of stock returns.

Research Design

Sample and Source of Data

The data used in this study are the financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2012–16. The research data were obtained from the Indonesia Stock Exchange website, http://www.idx.co.id. There were a total of 136 observations.
Operational Definition and Variable Measurement

The dependent variable used in this study is stock returns. On a larger scale, information can affect the price of an asset or even all assets in the capital market. Hartono (2000) states that changes in the value of these assets allow for a shift to the new equilibrium price. The price of this equilibrium will continue until another new piece of information changes it back to the new equilibrium price. How a market reacts to information to reach the price of this new equilibrium is the basic concept of market efficiency. The speed and accuracy of the market in reacting to fully reflect the available information is the basis for assessing the efficiency of a market. To obtain company stock return data, one must first look for daily stock returns and daily market returns (Gschwandtner & Hauser, 2005).

The independent variables used in this study are ROA, company size and dividend payout ratio. Profitability is used to measure the level of profit generated by the company (Oviani, Wijaya & Sjahruddin 2014). In this research, ROA is used to measure profitability ratios. ROA is calculated by comparing the net income contained in the income statement with the total assets contained in the statement of financial position. Company size (UP) can generally be interpreted as an indicator of the size of a company (Kharisma & Agustina, 2015). In this study, company size is assessed from the total assets owned by the company. Dividend payout ratio describes what percentage of cash is issued by companies to pay dividends (Martono & Harjito, 2007). Dividend payout ratio (DPR) can be calculated by dividing dividend per share (DPS) by earnings per share (EPS). DPS is calculated by dividing the number of dividends by the number of shares outstanding, while EPS is calculated by dividing net income by the number of shares outstanding.

Methodology

The data that have been collected was processed using SPSS25. Data analysis methods used in this study include descriptive statistical analysis, model suitability test, overall model test, logistic regression analysis, coefficient of determination test and hypothesis test using partial test. This study uses multiple linear regression analysis techniques.

\[ ICQ = \alpha + \beta_1 \ AC + \beta_2 \ ROA + \beta_3 \ DPR + \beta_4 \ SIZE + e \]
Result and Discussion

Descriptive Statistics

Based on the results of the study the minimum, maximum and average values of each variable from the company that was sampled during the years 2012–16 are presented in Table 1.

Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings persistence</td>
<td>136</td>
<td>.0001000</td>
<td>.4424000</td>
<td>.009531618</td>
<td>.0519814193</td>
</tr>
<tr>
<td>Stock returns</td>
<td>136</td>
<td>-.619000</td>
<td>1.131930</td>
<td>.1424206</td>
<td>.34875205</td>
</tr>
<tr>
<td>SIZE</td>
<td>136</td>
<td>24.51280</td>
<td>33.19880</td>
<td>28.7668382</td>
<td>1.84507230</td>
</tr>
<tr>
<td>DPR</td>
<td>136</td>
<td>.00350</td>
<td>1.10120</td>
<td>.426160</td>
<td>.24471450</td>
</tr>
<tr>
<td>ROA</td>
<td>136</td>
<td>.00660</td>
<td>.42140</td>
<td>.1442309</td>
<td>.09565959</td>
</tr>
</tbody>
</table>

Earnings Persistence and Stock Returns

The results show that earnings persistence has a significant positive relationship with stock returns, which are measured using the formula of Gschwandtner and Hauser (2016). The results of this study are also consistent with research conducted by Aan Rahmawan (2015), David McMillan (2018) and Bustamante (2014), who found that earnings persistence had a significant positive effect on stock returns. In contrast, research conducted by Hou and Robinson (2006) provided evidence that earnings persistence had no effect on stock returns.

The most interesting finding from Adelina and Michael (2016) is that a positive relationship has been found between long-term profitability and a company’s stock return, and a negative relationship between long-term profitability and the volatility of stock returns. In addition, the research data show that earnings persistence has changed significantly from year to year, while stock returns as the dependent variable have changed from time to time. Based on these conditions, it is very possible that earnings persistence affects the company’s stock returns.
Table 2: Multiple linear regression analysis results

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Regression model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coff.</td>
</tr>
<tr>
<td>(constant)</td>
<td>0.164</td>
</tr>
<tr>
<td>Earnings persistence</td>
<td>−1.124</td>
</tr>
<tr>
<td>SIZE</td>
<td>−.001</td>
</tr>
<tr>
<td>DPR</td>
<td>−.276</td>
</tr>
<tr>
<td>ROA</td>
<td>.963</td>
</tr>
<tr>
<td>R square</td>
<td>0.078</td>
</tr>
<tr>
<td>F statistic</td>
<td>2.775</td>
</tr>
<tr>
<td>F Sig</td>
<td>0.030^b</td>
</tr>
</tbody>
</table>

**Firm Size and Stock Returns**

Based on the results of this study it can be seen that the size of the company has an insignificant negative relationship with stock returns. The size of the company in this study is proxied by using natural log total assets. The size of the company is not related to the company having a good stock return.

The size of the company is measured by assets, not by the level of company operations or the ability of company management. It is probable that small companies are far better in terms of management and operations when it comes to producing a maximum stock return, while large companies that are experienced will have good management but not always sufficiently effective management and operations to improve profit quality. Larger and smaller companies still have the same possibility of producing good stock returns, depending on the ability of management to carry out operational activities effectively and efficiently.

This is contrary to research conducted by Sugiarto (2010), with the results of the study indicating that company size has an effect on stock returns. According to Sugiarto (2013), this shows that the size of the company has a positive influence on stock returns in research that uses a population sample of all companies listed on the Main Board Exchange and the Development Board Index on the Exchange Indonesian Securities for the period 2003–05.

**Dividend Payout Ratio and Stock Returns**

Based on the results of the t statistical test presented in Table 2, dividend payout ratio has a t value smaller than the t table (−1.998) with a significance value (0.048) that is smaller than 0.005. These results indicate that the DPR has a significant relationship with stock returns. The DPR is related to stock returns because a company that has a high DPR value will have an impact on increasing the value of shares; in this regard, investors will gain certainty about
the existence of a better dividend distribution of their investments. This is able to increase demand for these shares, so it has an impact on increasing share prices, as well as an impact on positive returns.

**Return on Assets and Stock Returns**

Based on the results of this study, it can be seen that ROA has a positive and significant relationship with stock returns. The results of the study showed a regression coefficient for the variable ROA of .264 with a significance value of .007, where this value is significant at the 0.05 significance level because it is smaller than 0.05. Thus Hypothesis 3, which predicts that ROA is positively and significantly related to stock returns, is acceptable. This shows that the increasing ROA shows a better company performance and that shareholders will benefit from the increasing dividends received.

The increasing dividends received by shareholders make it more attractive for investors and/or potential investors to invest their funds in the company. If the demand for a company’s shares increases, the price of its shares will also increase. With the increase in stock prices, the returns obtained by investors from these shares also increase. These findings support the results of research from Natarsyah (2000), Hardiningsih et al. (2002) and Ratnasari (2003), which state that ROA has a positive and significant effect on stock returns.

**Conclusion**

Based on this study, several things can be concluded. First, the results of testing and analysis show that earnings persistence has a significant positive relationship with company stock returns. Second, the results of testing and analysis show that return on assets (ROA) has a positive relationship with stock returns while the dividend payout ratio (DPR) has a negative relationship with stock returns. Finally, the results of testing and analysis show that company size does not have a significant relationship with company stock returns.

The results of this study can contribute to the literature, especially relating to financial accounting regarding the assessment of a company’s earnings persistence and stock returns provided. This research can be used as a reference for investors to choose a company that will be somewhere to invest in the future so it can be used as a reference when making decisions and considering investment decisions in order to obtain the expected returns.

This study has several limitations. First, the research period is limited to only five years and the sample is limited to the manufacturing industry. Second, the coefficient of determination test results was 0.339 or 33.9%. This shows that many other factors exist in relation to the practice of returning stock returns in addition to earnings persistence, return on assets,
dividend payout ratio and company size. Based on the limitations of the study, further research should add to the research period and also add research samples from other types of companies. Further research can also add other independent variables, such as sales volatility, cash flow volatility, accrual rates, debt levels and operating cycles.

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