The Effect of Accounting Information and Tax Information on Trading Value Moderated by Competitive Strategy

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Abstract

This article is a research about the influence of accounting information and tax information on trading values with competitive strategies as a moderating variable in the Indonesia Stock Exchange. Accounting information was measured from the current ratio, tax information was measured from VAT, the trading value was measured by the logarithm of natural total trading value, and competitive strategy was measured by premium price capability (PPC). The sample in this research trading value stock company that was consistent in the last five years listed on the Stock Exchange during 2013-2017 as many as 15 companies. Data collection method used purposive sampling technique. Data analysis technique was multiple panel data regression analysis using Stata software. The results show that accounting information does not have a significant effect on value trading. Tax information has a significant negative effect on trading value. Competitive strategies have a significant positive effect on trading value. Competitive strategy is not able to significantly moderate the influence of accounting information on trading value. Meanwhile, competitive strategy can moderate positively and significantly negative impact on the effect of tax information on trading value.

Keywords: Accounting information, Tax information, Trading value, Competitive strategy.

JEL Classification: M41; H2; P5

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Publisher: Scientific Publishing Institute
Accepted: 8 May 2019
Published: 21 May 2019

1. Introduction

Stock trading in Indonesia has progressed very rapidly. This happened because of the advancement of information technology. The progress of information technology has helped process transactions in the capital market so that the capital market is growing rapidly. The capital market is a means for investors to invest their capital, with the hope that capital will continue to grow. The capital market also functions as a facility to facilitate investors to invest. With the existence of information technology, investors will get information faster and more complete. Among them are financial statement information issued by the Indonesia Stock Exchange, namely Fact Book IDX. Quality of financial reporting in this case is used as a basis for consideration by investors in determining the right investment decisions, so that the investments made will be efficient (Sitorus and Murwaningsih, 2019). This fact book serves to provide shareholders and the public with information on activities that occur in the Capital Market. The usefulness of the fact book provides information on various types of data needed in economic research, such as trading value. The existence of trading value, investors can assess market conditions, whether the market is efficient or not. The capital market is not always efficient and it is possible that the price of a company's stock is below their value.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Therefore, investors must be keen to see the potential benefits that can be achieved at every opportunity. The most commonly used strategy is to buy shares that have a high dividend value. Information about trading value based on the 50 most active companies on the Indonesia Stock Exchange in the period 2013 to 2017 is presented as follows:

![Figure 1](image-url)

**Figure 1.** Total Market 50 Issuers with the Most Active Stocks Based on 2013-2017 Trading Value on IDX.


Figure 1 above shows that the value of stock trading increased from 2013 amounting to Rp. 1,522,122 billion to Rp. 1,844,588 billion in 2016, then dropped in 2017 to Rp. 1,809,592 billion. This data shows that investments in stocks on the Indonesia Stock Exchange are still attractive to investors. In assessing stock prices, there are indicators that must be considered by investors such as stock prices and stock trading values. Stock prices can be found on the stock exchange. Information on stock prices and the value of stock trading aims to take advantage of the difference in stock prices. In addition to assessing stock prices, accounting information and tax information also need to be known by an investor in choosing the right stock to invest. Accounting information needed in this context is the current ratio. While the tax information needed in this context is the difference between VAT Input and VAT Output. Furthermore, the current era of globalization expects every company to have a competitive strategy to win the business competition and achieve the best performance. Singh and Agarwal (2002) introduce competitive strategies that can be seen from the intensity of research and development, asset use efficiency and premium price capability.

Research related to this topic has been carried out by Zhu and Niu (2016) explaining that accounting information has a significant effect on stock prices because accounting information is more reliable for accurately predicting stock prices and profits. Chiang and Zheng (2015) explain that liquidity risk has a significant effect on stock returns because market-level liquidity risk has a stronger effect on excess stock returns for large stocks, stock growth, and liquid stocks. Accounting information has a significant positive effect on stock price fluctuations is a change in revenue (Tambun et al., 2018). Wang et al. (2013) show that there is a positive relationship between accounting information and stock prices. Kurnia (2013) explains that the accounting profit information variable has a simultaneous effect on stock returns of mining companies. According to Yatmi et al. (2016) revealed that the effect of accounting income was positively significant on stock returns. Furthermore, there are results of research regarding the relationship of tax information to stock prices. Research conducted by Fischer and Gallmeyer (2016) explains that the stock trading strategy has a significant effect on tax information such as capital gain taxes. According to Wagner et al. (2018) explains that expectations about tax rates greatly affect the value of stock trading. Then Pranata et al. (2015) revealed that tax rates have a positive effect on stock prices. The quality of accounting information and intellectual capital affects the effective tax rate (Tambun, 2018). But Manoppo et al. (2017) states that accounting information in the form of current ratio and debt equity ratio does not significantly influence stock prices simultaneously. Furthermore, the research of Kuo and Lee (2013) proves that controlling share ownership has a positive impact on market reaction and on the announcement of stock dividends. While the weighted average tax rate and the difference between controlling shareholder ownership and control rights, have a negative impact. With the differences in the results of this study, it will be very interesting to re-examine whether accounting information and taxes influence the trading value. Then there is the placement of moderating variables, namely competitive strategy which aims to strengthen the influence of the independent variables on the dependent variable. So the purpose of this study is to prove the effect of accounting information and tax information on trading value, which is moderated by competitive strategies in companies listed on the Indonesia Stock Exchange.
2. Literature Review and Hypothesis

Signaling theory begins with Akerlof (1970) "The Market for Lemons", which introduces the term asymmetric information. He studied the phenomenon of imbalance of information about product quality between buyers and sellers, by testing the used car market. According to Akerlof (1970) when buyers do not have information regarding product specifications and only have a general perception of the product, the buyer will assess all products at the same price, both high-quality and low-quality products, thus harming the seller of high-quality products. This idea was developed by Spence (1973) in the signal equilibrium model (basic equilibrium signaling model). According to Spence (1973) provides an illustration of the labor market (job market) and suggests that companies that have good performance (superior performance) use financial information to send signals to the market. From his research, also found that the cost of signal on bad news is higher than good news and companies that have bad news send signals that are not credible. This motivates managers to disclose private information to reduce information asymmetry in hopes of sending good news about the company's performance to the market.

Signal Theory explains how investors have the same information about the company's prospects. If the information received by stakeholders is not the same, this is called asymmetric information. Asymmetric information on this signal theory lies between management and those with an interest in the information. This theory explains how companies should provide signals to users of financial statements. The relationship of signal theory with accounting information is information issued by the company, can be a signal for external parties, especially for investors, namely the annual report. Information in the annual report contains accounting information including financial statements. This information must be relevant, both for internal and external parties. All investors need that information so they can take decisions when investing. Then, the relationship of signal theory with tax information, namely tax is an important factor for investor decision making. By knowing the tax information in the form of the tax base, the amount of the costs and profits obtained by investors can be estimated, so that investors can make decisions. Furthermore, the relationship between signal theory and trading value, namely trading value, provides information on the trading value of shares listed on the Indonesia Stock Exchange, so that information can be used as a signal and information for investors to analyze and make the right decisions. Finally, the relationship with competitive strategy signal theory is if the company has a good and measurable strategy, then the strategy information is a positive signal for investors. Investors must be convinced that the company will be able to increase competition, credibility and success in accordance with the wishes of the owner. Information published as an announcement will give a signal to investors in making investment decisions. If the information published has an impact on added value, then the investment will be made by investors and this will also have an impact on the value of stock trading.

2.1. The Effect of Accounting Information on Trading Value

According to Francis, et al. (2004) accounting is a process of counting, identifying, reporting and measuring financial transaction data of an organization. The results of the data are then used as information for decision making regarding economic problems. That information can be used as a decision for some parties, one of which is an external party or can be called an investor by analyzing the current ratio of the company. Trading Value is information about the total value of money in trading shares in a company. If the quality of information is getting better, it will increase the value of trading in the company's shares. Research conducted by Ma et al. (2018) explains that the effect of liquidity on the relationship between volatility and market returns is stronger in the market which shows a higher level of market volatility, and at a lower volume of stock trading. Anderson (2017) revealed that an increase in bond liquidity can have a positive impact on stock returns, by reducing funding costs and increasing profitability. Zhu and Niu (2016) explain that accounting information has a significant effect on stock prices. Yatni et al. (2016) revealed that the effect of accounting income was positively significant on stock returns. Then Chiang and Zheng (2015) explained that liquidity risk has a significant effect on stock returns, because the level of market liquidity risk has a stronger effect on excess stock returns, for large stocks, growth stocks, and more liquid stocks. Based on the understanding and several previous studies, it was concluded by formulating the first hypothesis, namely: H1: Accounting information will have an impact on trading value.

2.2. The Effect of Tax Information on Trading Value

Tax is a contribution to the state that is owned by an individual or entity that is compelling based on the Law, by not getting compensation directly and used for the state's needs for the greatest prosperity of the people. Tax is an important factor for investors in determining the decision to invest in a country. Then it can be concluded that taxes affect investment decisions if the imposition of taxes affects the number of costs and profits obtained by investors. Research conducted by Wagner et al. (2018) explains that expectations about tax rates greatly influence the trading value of companies. Then Muñoz and Rodriguez (2017) find that tax deductions have a significant influence on stock prices. Furthermore, research in Japan, which was examined by Hayashida and Ono (2016) revealed that tax reform in Japan in 2003 also reduced the volatility of stock returns through tax cuts, and the results showed that tax deductions had a significant negative effect on the volatility of stock returns. Pranata et al. (2015) revealed that tax rates have a positive effect on stock prices.
Furthermore, research in Taiwan investigated by Chen (2015) revealed that stock market pressure has a significant influence on the choice of companies between the benefits of corporate taxes and shareholders and that the tax incentive choices have an effect on the quality of future earnings. Based on the understanding and several previous studies above can be concluded by formulating the second hypothesis, namely; H2: Tax information will have an impact on trading value.

2.3. The Effect of Competitive Strategy on Trading Value

Strategy is a competitive tool that needs to be owned by a company where in its implementation requires planning, coordination, supervision and evaluation that is strong and accurate, so as to create competitive advantage for the company. Strategy implementation, especially in business, is a job that requires a big challenge because often the implementation of this business strategy is not able to keep up with the achievement of the expected goals. Investors must have a competitive strategy because they will determine and make decisions in assessing current stock trading. In a study by Liu and Mantecon (2017) explaining that investing in stocks with competitive strategic advantage is sustainable, these companies tend to have large financial firms that are strong and have a share of growth in shares. By controlling it, this competitive strategy is a factor that has a positive impact on stock returns. Companies with sustainable competitive advantage seem to be protected from higher and better returns on average profitability. Based on the previous understanding and research above it can be concluded that by formulating the third hypothesis namely; H3: Competitive strategy will have an impact on trading value.

2.4. Moderation of Competitive Strategy among the Effects of Accounting information on Trading Value

Singh and Agarwal (2002) introduced a competitive strategy of three measurements, namely the intensity of research and development, asset efficiency and premium price capability. The intensity of conducting research and development illustrates the efforts of an organization to excel in producing products sold. The more often the intensity is done, the specialization of a product is expected to be achieved well and it will become a competitive strategy in competing with competitors. The efficiency of asset use is more focused on a low cost strategy, meaning that achieving high efficiency will get a cheaper price, and this can also be used as a strategy to compete. While premium price capability explains the comparison of gross profit with total revenue which means emphasizing the importance of obtaining a high gross profit ratio so that when compared with competitors, companies will be able to survive in a competition. Company performance is a form of accounting information if the better the accounting information is given, the more binding the investor’s interest to invest. In the study of Wang et al. (2013) and Kurnia (2013) show that there is a positive relationship between accounting information and stock prices. Furthermore, Ramli and Iskandar (2014) reveal that formal information, one of which is accounting information, has a significant positive effect on business strategy, the strategy has a very dominant effect on that information. Based on the previous understanding and research above, it can be concluded by formulating the fourth hypothesis, namely; H4: Competitive strategy will be able to moderate the influence of accounting information on trading value.

2.5. Moderation of Competitive Strategy among the Effects of Tax Information on Trading Value

Tax is defined as the demand for compulsory fees or costs that must be paid by the company to the state as a result of the economic process of the company that stands in that country. The tax revenue is collected from local taxes and central taxes (Sitorus, 2018). If the tax paid is in accordance with the stipulated conditions and the payment is also timely, the company will experience rapid economic growth. So that the impact on the company’s shares will also increase, if the tax is stable then the stock increases. With increased stocks, it can affect investors in capital market competition. Based on the research of Fischer and Gallmeyer (2016) explained that the stock trading strategy has a significant effect on tax information such as capital gain taxes. Furthermore, Ruo and Lee (2013) share ownership in controlling shareholders has a significant positive impact on the market reaction in the announcement of tax information. According to Ruo et al. (2016) show that the right tax rate can encourage companies to change their production processes as part of a long-term business strategy. Based on the previous understanding and research above it can be concluded that by formulating the fifth hypothesis, namely; H5: Competitive strategy will be able to moderate the influence of tax information on trading value.

3. Methodology

This research was conducted at the Most Active by Trading Value Stock Company which was listed on the Indonesian Stock Exchange Fact Book. This study uses secondary data. The sample in this study was 15 Most Active by Trading Value Stock Companies that were consistent in the last 5 years. The criteria specified in the sampling in this study are companies whose annual financial report data is available on the website (IDX). The method of data collection in this study is the library study method and the documentation method that can be obtained from the IDX website (www.idx.co.id). The method used in sampling is the purposive sampling method. Methods Analysis of the data used is multiple regression, and moderation using interaction
methods. All data is processed using Stata software. The criteria specified in the sampling in this study are provided in Table 1 as below:

<table>
<thead>
<tr>
<th>No</th>
<th>Sampling Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total Companies included in the calculation for 2013-2017</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>Total Company that is inconsistent for 5 years</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>The number of companies that is consistent in 5 years</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Year of Research</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Number of Study Samples</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 2 shows the Operational Variables that consist of an indicator and measurement of each variable. the table also shows the indicator reference for each variable.

### 3.1. Analysis Method

This research was processed using Stata Software and used two models. The regression equation in this study is described as follows:

#### First model

\[
\ln Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 Z_{it} + \varepsilon_{it}
\]

#### Second model

\[
\ln Y_{it} = \alpha + \beta_1 X_{1it} \ast Z_{it} + \beta_2 X_{2it} \ast Z_{it} + \varepsilon_{it}
\]

### 4. Result

The results of the study began with descriptive statistics that described information about the amount of data observed, average, standard deviation, minimum score and maximum score. Then proceed with the regression analyst, according to the first model and the second model in this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>75</td>
<td>10.01105</td>
<td>0.6584094</td>
<td>9.126741</td>
<td>11.66604</td>
</tr>
<tr>
<td>X1</td>
<td>75</td>
<td>5.818519</td>
<td>0.62624</td>
<td>0.3027747</td>
<td>3.87152</td>
</tr>
<tr>
<td>X2</td>
<td>75</td>
<td>0.5049145</td>
<td>0.0615004</td>
<td>0.0615004</td>
<td>0.9898988</td>
</tr>
</tbody>
</table>

Note: \( \ln \ Y \) is the natural logarithm of total trading value. \( X_1 \) is accounting information, measured by the current ratio. \( X_2 \) is tax information, which measured VAT Output minus VAT Input. \( Z \) is competitive strategy, which is measured by the ratio of premium price capability using the ratio between gross profit and total income.

Source: Data processed with Stata, 2019

The processed obs data in this study were 75 samples as shown in Table 3. The trading value variable has an average of 10.01105 which means that the data indicates 10 most active stock companies. Accounting information in each company has an average of 5.818519. The average value of each company's tax information is 50%. The competitive strategy average value of the distribution of gross profit and income of each company is 405148.
4.1. The Effect of Accounting information, Tax information and Competitive Strategy on Trading Value Testing

<table>
<thead>
<tr>
<th>Trading Value (Y)</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>Prob t-Stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Information (X1)</td>
<td>+/-</td>
<td>-0.123</td>
<td>0.229</td>
</tr>
<tr>
<td>Tax Information (X2)</td>
<td>+/-</td>
<td>-4.900</td>
<td>0.006***</td>
</tr>
<tr>
<td>Competitive Strategy (Z)</td>
<td>+/-</td>
<td>1.662</td>
<td>0.006***</td>
</tr>
</tbody>
</table>

**Random Effect with GLS**

| N | : 75 |
| Wald chi2 (3) | : 36.62 |
| Prob > chi | : 0.0000 |

**Note:** *** Significant at the level of 1%

The first experiment obtained the results of normality test data has normality due to combined K-S> 5% which is equal to 16.6%. Table 4. Then the multicollinearity test with a VIF value of 1.10 <10 so this data states no multicollinearity. On heteroscedasticity testing, the value of prob> chi2 was 0.0572, so this data showed that there was no heteroscedasticity. Prob> F on the results of the autocorrelation test is 0.1029, it can be concluded that there is no indication of autocorrelation or no- autocorrelation. After the classic assumption test is done, then followed by Chow test, LM, Hausman and GLS to ensure the most suitable test model. The results prove that the most suitable model is a random effect model with GLS.

4.2. The Effect of Accounting Information and Tax Information Moderated by Competitive Strategy Testing

**Table-5. Test Results Effect of Accounting information and Tax information on Trading Value which is moderated by the Competitive Strategy.**

<table>
<thead>
<tr>
<th>Trading Value (Y)</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>Prob t-Stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1*Z</td>
<td>+/-</td>
<td>0.320</td>
<td>0.296</td>
</tr>
<tr>
<td>X2*Z</td>
<td>+/-</td>
<td>-6.950</td>
<td>0.012***</td>
</tr>
</tbody>
</table>

**Random Effect with GLS**

| N | : 75 |
| Wald chi2 (3) | : 7.23 |
| Prob > chi | : 0.0269 |

**Note:** *** Significant at the level of 1%

In this testing model, the best fits model are the common effect model, the fixed effect model, and the random effect model. The Chow test in model 2 results the best fit model is a fixed effect model because the rho value generated is 0.8472 > 0.5. The LM test in model 2 results the best fit model is random effect model, because the value of prob > chibar2 that is resulted 0.000 < 0.05. While the Hausman test in model 2 results the best fit model is random effect model, because the resulting value is 0.6075 > 0.05. Due to the best fit model was random effect model, it is retested with GLS. From the results of the three testing models concluded that the best fits model is the random effect model by GLS. Then the classical assumption test in model 2 is conducted and obtained the result of this data normality test is normal because combined K- S> 5% is 36.7%. Furthermore, by the multicollinearity test with a VIF value of 1.01 <10, obtained that this data states non-multicollinearity. On the autocorrelation test, Prob > F is 0.1349, so it can be concluded that there is no indication of autocorrelation or non- autocorrelation. On heteroscedasticity testing, the value of prob > chi2 was 0.0087, indicating the presence of heteroscedasticity. The solution is using the GLS test model, because the
method of this model does not require heterosdasitisas and autocoleration tests. Then the Chow, LM and Hausman tests were performed again to ensure the most suitable test model. The results prove that the most suitable model is random effect model by GLS.

4.3. Hypotheses Discussion of Effects of Accounting Information on Trading Value

The results of the hypothesis can be seen in Table 5. The results of the first hypothesis testing of the effect of accounting information on the trading value show a coefficient value of 0.1239811 with t-stat Prob at 0.229 was not significant. This means that the first hypothesis is rejected. With a negative coefficient of 0.1239811, shows that the effect of accounting information measured by the current ratio cannot guarantee trading value stocks in a company.

4.4. Hypotheses Discussion of Effects of Tax Information on Trading Value

The results of the hypothesis can be seen in Table 5. The results of the second hypothesis testing about the effect of tax information on the trading value show a coefficient value 4.90e-07 with t-stat probability of 0.000 was significant. This means that the second hypothesis is accepted. The negative effect coefficient of 4.90e-07 proves that the higher tax information, the worse trading value. This shows that tax information has a negative effect on trading value stock in a company.

4.5. Hypotheses Discussion of Effect of Accounting Competitive Strategy on Trading Value

In Table 5, the results of the third hypothesis testing about the effect of competitive strategy on the trading value show a coefficient value of 1.662829 with t-stat probability of 0.000 was significant. This means that the third hypothesis is accepted. The positive effect coefficient of 1.662829 proves that the higher the competitive strategy, the better the trading value. This shows that competitive strategy has a positive effect on trading value stock in a company.

4.6. Hypotheses Discussion of Effects of Accounting information on Trading Value that Moderated by Competitive Strategy

The results of the fourth hypothesis testing about the effect of accounting information on trading values that was moderated by competitive strategy show a coefficient value of 0.3204793 with t-stat probability of 0.296 was not significant. This means that the fourth hypothesis is rejected. This shows that the competitive strategy does not moderate the effect of accounting information on trading value stock in a company.

4.7. Hypotheses Discussion of Effects of Tax information on Trading Value that Moderated by Competitive Strategy

The result of the fifth hypothesis testing about the effect of tax information on the trading value moderated by competitive strategy shows the coefficient value of 6.95e-07 with t-stat probability at 0.0129 was significant. This means that the fifth hypothesis is accepted. The negative effect coefficient of 6.95e-07 proves that the higher the tax information moderated by competitive strategy, the worse the value trading. This shows that the effect of tax information moderated by competitive strategy has a negative effect on trading value stock in a company.

5. Conclusion and Recommendations

First, the result of the hypothesis testing was found empirical evidence that accounting information does not have a significant effect on trading value. Second, the result of the hypothesis testing was found empirical evidence that tax information has a significant negative effect on trading value. Third, the result of the hypothesis testing was found empirically that competitive strategy has a significant positive effect on value trading. Fourth, the result of the hypothesis testing was found empirical evidence that competitive strategy does not moderate the effect of accounting information on trading value. Fifth, the results of the hypothesis testing were found empirical evidence that competitive strategy can moderate the effect of tax information on trading value.

This research can be used as a reference and consideration for future researchers using the measurement of other independent variables to test the dependent variables, for example, solvency ratios, activities and other financial ratios. This research can also use data or samples besides Fact Book Data on the Indonesia Stock Exchange such as CSPI, Sectoral Index, LO45 Index, JII (Jakarta Islamic Index), Business-27 Index, PEFINDO25 Index, Sri-Kehati Index, Main Board Stock Index & Development Board Index and Individual Index or adding new years and the number of samples in next studies to get more accurate research results.

References