View of institutional ownership and value relevance in Indonesia: the nexus of accounting conservatism

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Abstract

Purpose – Our study aims to explore the ownership structure and accounting conservatism in influencing the value relevance that we analyse through the paradigm of open innovation and socio-emotional wealth (SEW). We also extended the test to identify how firm size could affect value relevance.

Design/methodology/approach – Through panel data testing, we collected all issuers on the stock exchange for the 2016–2018 period. The total collected observations are 735 observations from various industries.

Findings – The results of the study provide empirical evidence that institutional ownership is more pronounce, especially in companies with high asset levels. We also conducted other tests to see it from the perspective of SEW. We divide companies into family and non-family companies. The results of this study indicate that institutional ownership has an effect on increasing value relevance, especially in family companies compared with non-family companies. The results of the study also indicate that accounting conservatism plays a more important role in increasing value relevance in non-family firms. **Originality/value** – This study advances in two main ways. First, we use a SEW approach and an open

innovation perspective. Second, we conducted tests for family and non-family firms.

Keywords Institutional ownership, Accounting conservatism, Value relevance, Indonesia Paper type Research paper

1. Introduction

Our study seeks to explore institutional ownership and accounting conservatism in influencing the value relevance of public companies in Indonesia. Then, we analyse the data through the perspective of open innovation and Socio-emotional Wealth (SEW). The open innovation perspective has been widely discussed by researchers, for e.g. in a study conducted by Moretti and Biancardi (2020). Their study links innovation with company performance. Then, in a study conducted by Dana *et al.* (2021), in which they relate how the "Grassroot" project is a solution to social, economic, and even environmental problems. Based on these previous studies, we use the open innovation paradigm to discuss the issue of value relevance of financial statements in companies listed on the Indonesian Stock Exchange. We chose the local Indonesian context for the reason to see how far the governance mechanism works, especially in the local context, as suggested in Setiawan and Phua's (2013) study.

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Received 25 May 2023 Revised 1 November 2023 16 January 2024 Accepted 26 March 2024



Rajagiri Management Journal Emerald Publishing Limited e-ISSN: 2633-0091 p-ISSN: 0972-9968 DOI 10.1108/RAMJ-05-2023-0137

Value relevance is one of the dimensions of the quality of accounting information that is very useful for investors to make important investment decisions (Callao *et al.*, 2016). Therefore, this study is very important to do. Previous studies on governance and value relevance in the context of Indonesia have been carried out by Krismiaji *et al.* (2019). Their study was conducted in the manufacturing industry from 2011 to 2015, but has not explored all industries in Indonesia. Our study attempts to fill this gap by involving all industries on the Indonesia Stock Exchange for the period 2016 to 2018 and involving more complex company characteristics, i.e. monthly stock return volatility, in the hope of providing a more comprehensive conclusion.

Our study is motivated by inconsistent results from previous studies. For example, studies conducted by Jung and Kwon (2002), Kwak and Armitage (2009), Sarikhani and Ebrahimi (2011), and Moumen *et al.* (2013). The results of their studies found a positive relationship between institutional ownership and value relevance. These findings are in contrast to the results of the current study. A study conducted by Othman Hakim *et al.* (2012) actually found a negative relationship between the informativeness of accounting information and the current level of earnings in the context of Middle Eastern and North African countries. Studies conducted by Bandyopadhyay *et al.* (2017) found positive results between accounting conservatism and value relevance. In contrast to these results, the study conducted by Thijssen and Iatridis (2016) found a negative relationship between accounting conservatism and value relevance of ownership structure in Indonesia and accounting conservatism in influencing the relevance of firm value.

We collected all issuers on the Indonesia Stock Exchange from 2016 to 2018. We limited it to 2018 on the grounds that in 2019 there was a COVID-19 pandemic, which certainly affected the company's condition, especially in Indonesia. Financial companies and companies that submit financial statements in dollars are excluded from our analysis. This is done because financial companies have their own specific regulations. From all companies on the Indonesia Stock Exchange in 2018 and based on the filtering, we managed to collect 735 observations. We analysed these observations through multiple regression using Moderate Regression Analysis (MRA). The results of the study provide empirical evidence that institutional ownership and accounting conservatism have a significant effect in increasing the relevance of firm value. To extend the test, we conducted another test to see how far institutional ownership and accounting conservatism affect firms with large and small assets. The results of the study provide empirical evidence that institutional ownership more pronounce especially on companies with high asset levels. We also conducted other tests to see from the perspective of socio emotional wealth (SEW). We divide companies by family-owned and non-family-owned companies. The results of the study provide empirical evidence that institutional ownership has an effect on increasing value relevance, especially in family companies compared with nonfamily companies. The results of the study also provide empirical evidence that accounting conservatism plays a greater role in increasing value relevance in non-family firms than in family firms. This research is interesting because we attempt to draw conclusions for two different entity properties, namely family and non-family companies.

We hope to be able to contribute to the development of value relevance and governance literature, especially in developing countries such as Indonesia. This study also provides clarification and empirical evidence related to institutional ownership structure, accounting conservatism, and value relevance in Indonesia. Finally, we expect to provide important information for the capital market and all companies to improve their corporate governance.

2. Literature review and hypotheses development

We look at the problem of this study through two theories, i.e. Agency theory and Interest Alignment Theory. Agency theory is put forward by Jensen and Meckling (1976). This theory

assumes that there is an agency problem between the principal and the agent, when both parties maximise their interests and one party has better information compared to the other party. The agency problem leads to information asymmetry and ineffectiveness in the capital market. Reliable and relevant accounting information is expected to reduce the arising information asymmetry and align the interests between the agent and the principal. Therefore, accounting information becomes one of the most important factors in the capital market (Botosan and Botosan, 2006).

Institutional ownership and value relevance

2.1 Institutional ownership and value relevance

Jung and Kwon's (2002) study in the context of public companies in Korea found that earnings informativeness increases with increasing institutional ownership. The study conducted by Kwak and Armitage (2009) was similar in the context of companies in Japan. The results of their study found that institutional ownership has a pronounce effect on increasing the relevance of earnings. The results of both studies are strengthened by the studies conducted by Sarikhani and Ebrahimi (2011) and Moumen *et al.* (2013). The study of Moumen *et al.* (2013) involved institutional ownership structure and leverage in predicting future earnings. Referring to the agency theory above, institutional ownership is an effective monitoring mechanism for increasing company value. Apart from that, referring to alignment theory, institutional ownership is a mechanism for maintaining the balance of interests of both majority and minority entities We believe that institutional ownership is an external control mechanism that is able to encourage and provide confidence to investors in relation to increasing the value relevance of financial statements. Here fist hypothesis:

H1. Institutional ownership can increase the value relevance of accounting information.

2.2 Accounting conservatism and value relevance

Several studies emphasise the importance of accounting conservatism for valuation purposes. These studies began from Bliss (1924) and then continued by Sterling (1967) and Watts (2003). Sterling (1967) and Watts (2003) argue that accounting conservatism provides more reliable information for contracts and valuations by applying high reliability and verifiability thresholds. Other empirical evidence was put forward by Bandyopadhyay *et al.* (2017). According to them, fair value adjustments for companies that apply conservatism are able to better predict cash flows in the future. Thus, the accounting information submitted is more reliable than companies that apply less accounting conservatism. Accounting conservatism is an entity's effort to provide balanced information and expectations for both majority and minority shareholders. Thus, it is hoped that it will provide more informative accounting information. We believe that companies that apply accounting conservatism have higher relevance to accounting information than companies that optimistically convey accounting information. Investors will judge optimistic information to be riskier than conservative information. Here second hypothesis:

H2. Accounting conservatism will increase the value relevance of the company's financial statements

3. Methodology

3.1 Sample

We use all issuers on the Indonesia Stock Exchange for the period 2016 to 2018. We limit it to 2018 on the grounds that in 2019 there was a COVID-19 pandemic, which certainly affected a company's condition. We suspect that the COVID-19 pandemic could affect the validity and analysis of the data, so we only took research data up to 2018. Financial companies and

companies that submit financial statements in dollars are excluded from our analysis. This is done because financial companies have specific regulations. From all companies on the Indonesia Stock Exchange in 2018 and based on the filtering, we managed to collect 735 observations. We analysed these observations through multiple regression using Moderate Regression Analysis (MRA). Moderated Regression Analysis (MRA) is a special application of linear multiple regression where the regression equation contains elements of interaction (multiplication of two or more independent variables). The use of this method is appropriate considering that the data we obtained was in the form of a time series and cross-sectional.

3.2 Research model

We formulate the following research model:

$$VALRE_{it+1} = \alpha + \alpha_1 BV_{it} + \alpha_2 EPS_{it} + \beta_3 InstOwn_{it} + \beta_4 Conserv_{it} + \beta_5 Conserv*InstOwn_{it} + \beta_6 Size_{it} + \beta_7 Lev_{it} + \beta_8 ROA_{it} + \beta_9 RTVOL_{it} + \varepsilon$$
(1)

VALRE represents the value relevance of company i in year t+1. BV represents the book value of company i in year t. EPS represents earnings per share of company i in year t. INSTOWN represents institutional ownership above 5% in the form of institutions, individuals and companies. CONSERV represents accounting conservatism that we measure using CSCORE. SIZE, LEV, ROA, and VOL represent company-specific control variables as we discuss in the measurement of the variables below. We measure for VALRE_{t+1} because the effects of institutional ownership and conservatism will be felt in the following year. So we regress the equation onto the following year. Regression on t+1 company value is needed with the assumption that company value is formed over a long period of time, for example more than 1 financial year. Thus, we regress institutional ownership and accounting conservatism on year t to provide future influences on firm value.

3.3 Variable measurement

There are two approaches to measuring value relevance. The first is the price model approach and the second is the return model (Krismiaji *et al.*, 2019). Following previous studies (Kalantonis *et al.*, 2020; Callao *et al.*, 2016; ur Rehman *et al.*, 2020), we use the Price Model (James, 1995) as a value relevance proxy. The Price Model is a model with exact specifications regardless of the type of scale used (Barth and Clinch, 2009). Two factors related to the relevance of firm value are the firm's book value and contemporary earnings (Bettman, 2007). Ohlson's model is represented in the following equation:

$$P_{it+1} = \alpha_0 + \alpha_1 B V_{it} + \alpha_2 E P S_{it} + \varepsilon$$
⁽²⁾

Pit+1 is the stock price of company i in year t+1, and BVit is the book value of company i in year t and EPS is earnings per share of company i in year t. Then, from the regression results we will see the magnitude of the relationship between variables through the number R^2 .

Our study focuses on measuring institutional and family ownership structures. This ownership is the percentage of shares owned by institutional or private investors. Institutions can be in the forms of financial institutions, trading or service companies, and other forms of companies.

Basu's (1997) model is a widely used model in accounting conservatism research. However, this model has not been able to describe accounting conservatism at the company level (Khalifa *et al.*, 2019). Therefore, we use another approach, i.e. the approach proposed by Khan and Watts (2009). This model has been used in the study of Khalifa *et al.* (2019) to measure accounting conservatism at the company level. To use the Khan and Watts model's, we first substitute equations (4) and (5) into equation (3), so that equation (6):

$$EPS_{it/P_{t-1}} = \beta_0 + \beta_1 D_t + \beta_2 R_{it} + \beta_3 D R_{it} + \varepsilon_{it}$$
(3) value relevance

$$\beta_2 = \theta_1 + \theta_2 SIZE_i + \theta_3 MTB_i + \theta_4 LEV_i \tag{4}$$

$$\beta_3 = \mu_1 + \mu_2 SIZE_i + \mu_3 MTB_i + \mu_4 LEV_i \tag{5}$$

$$\begin{split} EPS_{it}/P_{t-1} &= \beta_0 + \beta_1 D_t + (\theta_1 + \theta_2 SIZE_i + \theta_3 MTB_i + \theta_4 LEV_i)R_{it} \\ &+ (\mu_1 + \mu_2 SIZE_i + \mu_3 MTB_i + \mu_4 LEV_i)DR_{it} + \delta_1 SIZE_i + \delta_2 MTB_i + \delta_3 LEV_i \\ &+ \delta_4 D_i SIZE_i + \delta_5 D_i MTB_i + \delta_6 D_i LEV_i + \varepsilon_{it} \end{split}$$

$$(6)$$

NI is the net income or loss divided by the share price at the beginning of the year. Rt is the annual stock return. D is a dummy variable equal to 1 if R is negative (bad news), and 0 if R is positive (good news). The coefficient β 3 is a coefficient that shows conditional conservatism. CSCORE as a proxy for conservatism is obtained by adding up the coefficients μ (1,2,3,4).

In our research, we include the leverage, volatility and return on asset variables in the equation. Gana and Krichen (2013) argue that leverage reflects the level of company financial risk. Volatility is the monthly stock return volatility of each issuer. We measure volatility through the standard deviation of each issuer's monthly stock return. Finally, the return on assets represents the comparison between the year's profit and total assets. Our variable measurements are summarised in the following table:

4. Results and discussion

4.1 Univariate analysis

First, we present descriptive statistics on the variables we use through mean, maximum, minimum and correlational values. Table 1 represents the results of the descriptive statistical tests. This analysis is important to see how far the data is scattered. Second, we selected the panel data model, through the Chow test, Hausman test, and LM test. Then, we chose the right model for this analysis. Table 2 represents the results of the selection of the model used in this study.

We obtain information that the mean value relevance is 2,039, the maximum value is 80,845 and the minimum is 49. The mean for Conservatism is 1.19, the maximum value is 5.82 and the minimum value is 10.43. Based on this information, we can conclude that the large number of conservatism above 1 indicates that companies in Indonesia apply the concept of conservatism or prudence in conveying accounting information, especially when recognising the potential for income or gain. Then, related to institutional leadership, the average company in Indonesia is owned by institutions or individuals whose ownership is above 5%, e.g. the Mayora company. The company is owned by institutions such as PT. Unita Branindo and Jogi Hendra Atmaja. We also obtain information regarding our control variables. Leverage has a mean value of 48%. This means that the average public company in Indonesia uses a high capital structure in terms of debt. Then, ROA has a mean of 4.2%. Thus, the average company in Indonesia is still low in performance. Next, we also looked at the size of the company. The average company in Indonesia has assets of more than 9 billion or the equivalent of 6.45 on a logarithmic scale.

RAMJ	Variable	Measurement	Reference
	Value Relevance	Price Model	James (1995), Krismiaji <i>et al.</i> (2019),
		$P_{it+1} = \alpha_0 + \alpha_1 B V_{it} + \alpha_2 E P S_{it} + \varepsilon$	Kalantonis <i>et al.</i> (2020), Callao <i>et al.</i> (2016), ur Rehman <i>et al.</i> (2020)
	Institutional Ownership	Share ownership above 5% in the form of institutions, individuals and companies	Krismiaji <i>et al.</i> (2019), Basu (1997)
	Accounting	Basu Model	Khan and Watts (2009)
	Conservatism		
	Size	Natural logarithm of total assets	Almujamed and Alfraih (2019)
	Leverage	Debt to Equity Ratio	Lean <i>et al.</i> (2015)
	Return on Assets	Return to Total Assets	Gana and Krichen (2013)
	Volatility	Standard deviation of each issuer's monthly	Rego and Wilson (2012)
Table 1.		stock return	
Variable measurement	Source(s): Table	by authors	

		VALRELE	CONSERV	INSTOWN	LEV	ROA	VOL	SIZE
	Mean Med Max Min Std. Dev	2039.516 570.0000 80845.00 49.00000 5736.288	$\begin{array}{c} 1.191755\\ 1.100000\\ 5.820000\\ -0.020000\\ 0.457822 \end{array}$	68.68137 70.28000 100.0000 10.43000 18.51936	0.486916 0.471000 4.540000 0.013000 0.327262	$\begin{array}{c} 0.042652\\ 0.035000\\ 0.921000\\ -1.216000\\ 0.114304 \end{array}$	0.143403 0.089000 5.750000 0.000000 0.341816	6.456152 6.481000 8.093000 4.129000 0.716036
able 2. escriptive statistics	Observ	735 : Processed data	735	735	735	735	735	735

4.2 Multivariate analysis

Further, to analyse the effect of the main variables, we tested panel data. This test begins with choosing the right model, through the Chow, Hausman, and LM Lagrange tests. The test results show that the fixed model is the right model to analyse institutional ownership and accounting conservatism on the relevance of firm value. Table 3 below represents the results of regression testing based on the selected model, i.e. the fixed effect model.

We obtain information that institutional ownership has a significant effect at the 5% level. with a positive coefficient of 52.38. Thus, institutional ownership, which consists of individual, institutional, and company ownership above 5% ownership, can be used as an indicator of increasing value relevance. Our study differs from the results of a study conducted by Ben Othman *et al.* (2011), and supports the findings of Jung and Kwon (2002). Kwak and Armitage (2009), Sarikhani and Ebrahimi (2011), and Moumen et al. (2013). The presence of outside ownership as a representation of the control mechanism and the company seeks to provide positive performance to outside owners. In addition, the company also strives to provide reliable information related to its financial statements. Our study also confirms the theories we propose, i.e. agency theory and interest alignment theory. Reliable accounting information and institutional ownership will align interests and reduce information asymmetry in the capital market. Thus, the results of this study confirm our proposed H1 hypothesis. We also found that earnings per share is a factor that is closely related to increasing the value relevance of financial information. Investors in the capital market have a very high tendency to pay attention to earnings per share. This is quite reasonable because investors are interested in the increase in share prices and their contribution to profits in the hope that the dividends distributed will increase.

Fixed Effect Model	Coeff	Sig	Institutional ownership and value relevance
Dependent: Value Relevance			value relevance
Intercept	3256.426	0.4327	
BV	16.01080	0.2473	
EPS	9.622809	0.0000***	
Instown	52.38235	0.0453**	
Conserv	2897.587	0.0522**	
Instown * Conserv	-33.80165	0.1009*	
Size	-699.6383	0.2424	
Lev	-1622.491	0.2460	
ROA	-14845.71	0.0000***	
Vol	-466.5252	0.3040	
F-Stat	22.31928	0.0000***	
Adj. R^2	0.894711		
Note(s): *significant at 0.1, **signif	ficant at 0.05 ***significant at 0.01		Table 3.
Source(s): Processed data		Regression result	

In addition, from Table 3, we also obtain information that our main variable, i.e. accounting conservatism, has a significant effect on the relevance of firm value (shown by the coefficient value of 2897 and sig 0.05). Our results are in line with the findings of Bliss (1924), Sterling (1967), Watts (2003), and Bandyopadhyay et al. (2017). As we stated earlier, we suspect that overly optimistic accounting information actually carries a high information risk. Therefore, prudence in conveying accounting information is preferred by investors. Our study also confirms our proposed agency theory. Accounting conservatism as an effort to harmonize principal and agent interests in producing reliable accounting information so as to reduce information asymmetry. Thus, we accept our proposed H2 hypothesis. Then, we also look at our main variable, i.e. the interaction between information asymmetry and institutional ownership in influencing value relevance. We do this interaction through the Moderate Regression Analysis (MRA) method. The results provide empirical evidence of the relationship between accounting conservatism in influencing institutional ownership and value relevance (shown by coefficients -33.801 and sig 0.1009). We believe that the relationship between institutional ownership and value relevance is negative under accounting conservatism. Thus, we accept our third hypothesis.

We analyse the relationship between variables through the open innovation paradigm as research conducted by Dana *et al.* (2021). Innovation projects are very important in this era of digitalisation and information disclosure. An increasingly open innovation involving various parties is able to encourage increasing the reliability and relevance of the accounting information produced. The open innovation paradigm approach does not only involve the company's internal parties, but also involves external parties. Therefore, the resulting ideas are integrated.

4.3 Additional test

We conducted additional tests to see the extent to which institutional ownership structure affects value relevance in several ways. First, we divide the companies that have large and small assets. Krismiaji *et al.* (2019) argue that the size of the company indicates high relevance compared to small companies. We suspect that companies with a high level of assets have a high level of activity complexity and a high level of disclosure. Based on that, we formulate the second hypothesis as follows:

Table 4. Additional test (firm with high asset and low asset)

- *H4a.* Ceteris paribus, accounting conservatism affects value relevance in companies with high asset levels
- *H4b.* Ceteris paribus, institutional ownership has an effect on value relevance in companies with high asset levels.
- H4c. Ceteris paribus, high (low) assets affect value relevance

Table 4 below represents the results of testing the effect of accounting conservatism and institutional ownership on value relevance in companies with large and small assets.

We obtain information that in companies with high asset levels, institutional ownership has a significant effect on value relevance at the level of 10% (shown by coefficient 42.11 and sig 0.1). This indicates that institutional ownership in large companies plays an important role as an external control mechanism that can affect the relevance of accounting information. Unlike the case for small companies, we did not obtain information on the effect of institutional ownership on the relevance of accounting information. Through this test, we can accept the hypothesis that we propose that institutional ownership has an effect on value relevance in companies with high assets.

In addition to the three analyses, we also see a performance coefficient that affects value relevance, i.e. earnings per share (indicated by a coefficient of 8.6 with sig 0.000 for companies with large assets and a coefficient of 6.6 with sig 0.000 for companies with small assets). This indicates that earnings per share are important information for investors in both small and large companies. Investors are very interested in the earnings per share information submitted by the company in determining its investment policy. Then, we also analyse the coefficient of volatility of stock returns in small companies (shown by the coefficient -1566 and sig 0.000). This indicates that in small companies, the level of stock volatility has a significant effect on the relevance of firm value. The higher the volatility of the stock, the lower is the level of relevance of the firm's value. Thus, this will be important information for investors, that in addition to stock performance, the level of volatility also needs to be considered, especially in companies with small assets.

Furthermore, we also analyse how institutional ownership and accounting conservatism affect value relevance, especially in family-owned and non-family-owned firms. We analyse these through socioemotional wealth (SEW) theory popularised by Gómez-Mejía *et al.* (2007).

Var Dependent: Value Relevance Intercept -42871.21 0.000^{***} -2725.607 0.317 BV 579.6965 0.0134^{***} 2.366971 0.000 EPS 8.687238 0.000^{***} 6.676842 0.000 Instown 42.11173 0.100^* -1.59370 0.949 Conserv 1359.863 0.7704 -298.3422 0.849 Instown * Conserv -13.94769 0.8330 7.251083 0.736 Size 6428.510 0.0000^{***} 626.8634 0.064 Lev -7392.477 0.034 -474.8137 0.505 ROA -5265.660 0.5751 -1457.785 0.452 Vol -7852.572 0.1609 -1566.628 0.000 F-Stat_ 8.219573 0.0000^{***} 20.97923 0.000		Firm with l	nigh assets	Firm with low asset		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Coeff	Sig	Coeff	Sig	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Var Dependent: Value Re	levance				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Intercept	-42871.21	0.000***	-2725.607	0.3170	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	BV	579.6965	0.0134***	2.366971	0.000***	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	EPS	8.687238	0.000***	6.676842	0.000***	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Instown	42.11173	0.100*	-1.59370	0.9493	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Conserv	1359.863	0.7704	-298.3422	0.8496	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Instown * Conserv	-13.94769	0.8330	7.251083	0.7361	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Size	6428.510	0.0000***	626.8634	0.0647*	
Vol -7852.572 0.1609 -1566.628 0.000 F-Stat 8.219573 0.0000*** 20.97923 0.000	Lev	-7392.477	0.0034	-474.8137	0.5051	
F-Stat 8.219573 0.0000*** 20.97923 0.000	ROA	-5265.660	0.5751	-1457.785	0.4520	
	Vol	-7852.572	0.1609	-1566.628	0.0000***	
	F-Stat	8.219573	0.0000***	20.97923	0.0000***	
Adj. R^2 0.180501 0.397981	$\operatorname{Adj} R^2$	0.180501		0.397981		

According to them, Socio Emotional Wealth (SEW) in family companies comes in various forms, for example in the form of the ability to exercise authority, preservation of family values through business, sense of belonging, preservation of dynasties, preservation of family social capital, and fulfilment of family obligations. Gómez-Mejía et al. (2007) emphasised that family companies are unique and different from non-family companies. This is evidenced by various empirical evidences in the field, for example, in the studies of Reid et al. (2001) and Zellweger et al. (2012). One of the unique characteristics of family companies is the emotional bond between family members who run the business (Gómez-Mejía et al., 2007). Furthermore, a study by Suprianto et al. (2019) found that family companies tend to maintain the good name of the family and focus on achieving company performance. Therefore, we believe that in non-family firms, accounting conservatism tends to affect the value relevance of the firm compared with family firms. In addition, according to Gómez-Meija et al. (2007), family companies have a concentration of ownership centred on the family. so the good and bad performance of the company will be reflected in the family name. When outside ownership is present in a family company, for example institutional ownership, the good and bad performance of the company is not only judged by the family name, but also from the involvement of other owners in the company. Other institutional ownership will be a positive signal for investors, so we believe that in family companies, institutional ownership will increase the relevance of accounting information. Based on this description, we formulate the following hypotheses:

- H5a. Ceteris paribus, accounting conservatism affects value relevance in non-family firms compared to family firms
- H5b. Ceteris paribus, institutional ownership affects the value relevance of family firms compared to non-family firms

Table 5 below represents the results of testing the effect of accounting conservatism and institutional ownership on value relevance in family and non-family firms.

We obtain information that in non-family firms accounting conservatism affects the relevance of accounting information (shown by coefficients 1856 and sig 0.0532). For nonfamily companies, as we stated in the main test, that accounting conservatism affects the relevance of accounting information. Accounting conservatism will provide reliable

	Family firm		Nonfam	Nonfamily firm	
	Coeff	Sig	Coeff	Sig	
Var Dependent: Value Re	elevance				
Intercept	-32730.78	0.000***	-1527.855	0.1408	
BV	4.640812	0.1006*	561.8763	0.0000***	
EPS	6.669791	0.0146***	9.535970	0.0000***	
nstown	63.71500	0.0718*	1.200491	0.8323	
Conserv	2330.784	0.7482	1856.888	0.0532**	
nstown * Conserv	-14.53142	0.8827	-20.33012	0.1315	
bize	4877.600	0.0000	513.5096	0.0004***	
ev	-5396.226	0.0964*	-2735.802	0.0000***	
OA	14153.61	0.2394	-14985.11	0.0000***	
Vol	-568.7386	0.8138	-1250.860	0.0001***	
`-Stat	6.983869	0.0000***	72.80596	0.0000***	
Adj. R ²	0.187090		0.659945		
Note(s): *significant at 0.1, **significant at 0.05 ***significant at 0.01 Source(s): Processed data				Additional te and non-fai	

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information as research conducted by Watts (2003), Sterling (1967) and Bandyopadhyay *et al.* (2017). The results of this test provide empirical evidence as well as accept the hypothesis H5a that we propose. Other variables that have an effect on value relevance in non-family firms are the firm's book value, earnings per share, and all of the control variables we use. The effect of the conservatism test on company value is different from our main test, if our company is split into two categories, namely family and non-family companies. We suspect that, in accordance with socio emotional wealth theory, family companies will maintain family wealth, so that whether there is conservatism in family companies is not a concern for investors in terms of its impact on company value.

We also obtain information that in family firms, institutional ownership has a significant effect on increasing the relevance of firm value (shown by coefficients 63,715 and sig 0.0718). Our results provide empirical evidence and support for the theory of Socio Emotional Wealth (SEW) developed by Gómez-Mejía *et al.* (2007). The results of our study also accepted our proposed H5b. We also look at other variables in family firms, including earnings per share and leverage. We see that in family companies, earnings per share is one of the factors that can affect the relevance of firm value (shown by coefficient 6.66 and sig 6.66). Performance per share becomes a positive signal for investors and provides reliability in the accounting information produced. Leverage in family companies also has a significant effect on value relevance (indicated by the coefficient of -5396 with sig 0.0964). Family companies focus on funding from internal families, so they will avoid external financing in the form of debt.

5. Conclusion

Our study seeks to explore how institutional ownership affects firm value relevance and how accounting conservatism plays a role in influencing these two variables. Then, we also expanded the test by dividing the companies by family and non-family companies and the size of the company. For the purpose of testing, we collected all issuers on the Indonesia Stock Exchange for the 2016–2018 period.

Our study succeeded in confirming some of the hypotheses and theories we used. The results of the study indicate that institutional ownership has a significant effect, especially on companies with high asset levels. We also conducted other tests to see from the perspective of socio emotional wealth (SEW). We divided companies into family and non-family companies. The results of the study indicate that institutional ownership has an effect on increasing value relevance, especially in family companies compared with non-family companies. The results of the study also indicate that accounting conservatism plays a more important role in increasing value relevance in non-family firms compared with family firms.

Our research contributes to the managerial implications in four respects, especially for family companies on the Indonesia Stock Exchange. First, our results empirically prove that institutional ownership has a positive effect on increasing value relevance. The presence of institutional ownership either individually, institutionally, or in other forms of company, balances the dominance of family ownership and effective control. Second, in determining the capital structure, family companies should prioritise funding from internal family members. Our research proves that leverage has a significant effect on value relevance. A significant increase in leverage, especially external funding in the form of debt, will reduce the value relevance of the family company. Third, our study also has implications for management to act conservatively. Our research provides empirical evidence that accounting conservatism carried out both in the context of family and non-family companies is proven to provide more relevant information. In other words, companies must prioritise the presentation of information more carefully if it is found the possibility of significant revenue gains. Fourth, the amount of assets for investors is the basis for assessing the value relevance of a company. Our research provides empirical evidence that the size of assets in both family and non-family

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firms has a positive effect on value relevance. Therefore, companies must maintain a positive trend of increasing assets from year to year.

This research has many limitations. First, the time dimension is still limited, which involves only 2016 to 2018 and 218 public companies. For further research, we suggest extending the time dimension and cross-section. Second, from the testing point of view, we have not explored the stability of the institutional ownership structure. Future research is expected to examine not only the composition of the institutional ownership structure, but also the stability and duration of ownership in an ownership structure. We also suggest using a variety of measurements to provide consistency of research results. Research findings also prove the relationship between family companies and company value. However, this research is limited to quantitative aspects that can be studied, such as family ownership and family involvement. Future research is expected to explore other qualitative dimensions that can influence company value.

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