DIPONEGORO JOURNAL OF ACCOUNTING *Volume 10, Nomor 1, Tahun 2021, Halaman 1-12*
http://ejournal-s1.undip.ac.id/index.php/accounting *ISSN (Online): 2337-3806*

THE EFFECT OF FINANCIAL REPORTING QUALITY AND FAMILY OWNERSHIP ON INVESTMENT EFFICIENCY WITH AUDIT QUALITY AS MODERATING VARIABLE (Empirical Study on Manufacture Firms Listed on Indonesia Stock Exchange in the Year of 2015-2019)

Joseph Herbert, Puji Harto[1]
Undergraduate Accounting Program, Faculty of Economics and Business
Diponegoro University

ABSTRACT

This study aims to examine the effect of financial reporting quality and family ownership on investment efficiency, moderated by audit quality. Size, leverage, firm age, and tangibility serve as control variables. Population used in this study is manufacture firms listed on Indonesia Stock Exchange (IDX) in the period of 2015-2019 and sample is selected with purposive sampling method, resulting in 251 firms. Statistical analysis in this study is using Structural Equation Model with Partial Least Square (PLS) and Multigroup Analysis (MGA). The results show that family ownership has positive significant effect on investment efficiency, while higher audit quality has positive significant effect on moderating the relationship of family ownership on investment efficiency. Financial reporting quality has negative significant effect on investment efficiency and higher audit quality does not moderate significantly on the relationship of financial reporting quality on investment efficiency.

Key Words: financial reporting quality, family ownership, audit quality, investment efficiency, agency theory

RESEARCH BACKGROUND

Phenomenon in Indonesia explains that Indonesia is experiencing investment inefficiencies based on the website aa.com.tr. Darmin Nasution as the Coordinating Minister of Economic says that the level of Icremental Capital to Output Ratio (ICOR) is still very high at 6,3% in the year of 2018 with economic growth at 5,17% compared with other states's ICOR (i.e. Malaysia 4,6%; Phillippine 3,7%; Thailand 4,5%; and Vietnam 5,2%). ICOR itself is a ratio between investment done in the last year and regional output growth (PDRB). ICOR could be one of the parameters to describe investment efficiency degree in any states. Higher value of ICOR indicates states are experiencing inefficiency investment (IPOTNEWS, 2019).

Over-investment is a circumstance where investment made by the firms are higher than expected, whereas underinvestment is a circumstance when investment made by the firms are lower than expected. Overinvestment generally faced when management decides to invest in negative NPV projects while underinvestment appears when management avoid investing in positive NPV projects.

Based on the agency theory, either overinvestment or underinvestment conditions rise to the surface due to the market imperfections by the existence of asymmetry information among managers, shareholders, and outside suppliers of capital (stockholder, etc.). This circumstance led to moral hazard and adverse selection problems (Myers & Majluf, 1984).

[1] *Corresponding author*

Firms can deviate from their investment target which is optimum investment by investing in over-and-under investment NPV.

On the other hand, firms in Indonesia that owned by family-controlled have a considerable existence where many of them have already been listed in the Indonesia Stock Exchange (IDX). Indonesia Institute for Corporate and Directorship (IICD) 2010 Data finds out that more than 95% business in Indonesia are firms owned and executed by family-controlled (Soerjonodibroto, 2010).

Due to the alignment effect, several agency problems will be less to happen in FCs rather than NFCs due to the family have rights to control firms and management. The involvement of some family members in firm management make it easier to monitor all activities within firms. This conclusion is strengthened with agency type I, which states that due to the alignment of interest between shareholders and managers, the informational gap can be reduced to minimum; thereby, the level of asymmetry information would be lower in family firms rather than non-family firms. This circumstance will lead moral hazard and adverse selection reduced to lower level, given the low level of asymmetry information in FC.

This study is also tests the effect of audit quality as moderating variable on the relationship between financial reporting quality and family ownership on investment efficiency. Audit quality proxied by Big 4 audit firms consist of Ernst & Young (EY), Price Waterhouse Cooper (PWC), Deloitte, and KPMG. The big 4 audit firms provide higher quality of audit due to they have more experience and competence than smaller competitors as they usually deal with larger clients from different industries which can improve the level of auditor's skills (O'Keefe & Westort, 1992). Therefore, it is expected that financial report audited by big 4 have higher quality than non- big 4. Family firms will appoint higher quality auditors to provide their firm with higher audit quality, as higher audit quality will strengthen the reputation of family firms. The appointment of a high-profile auditor resulting in increasing the credibility of the published accounts, the reliability of the firm's operations and management, thus will reduce agency costs (Piot, 2005). Higher audit quality reducing the risk premium requested by the investors, hereby, enabling firms to get extra money for invest in positive NPV projects and reduce the issues of underinvestment (Al-Thuneibat, Baker, & Issa, 2011).

RESEARCH FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Prior research found out that increasing the quality of financial reporting as a solution to solve overinvestment and underinvestment challenges as higher financial reporting quality will reduce the asymmetry information. Hence, higher quality of financial reporting restricts managers to pursuit personal goals from over- and under-investment circumstances at the cost of the shareholders, thus forcing managers to act for the interest of shareholders. Therefore, financial reporting quality become monitoring mechanism for shareholders.

The agency theory does not contemplate the existence of non-economic goals in family-controlled firms, thereby, prior literatures suggest preserving Socio-Emotional Wealth (SEW) is an important determinant for family firms by acts as references in decision-making processes. SEW is used as family firm's goal to establish long-lasting reputational survival business and passing it to the future generation, which is likely to promote trust in other shareholders. They will not hesitate to invest in positive NPV projects and avoid to invest in negative NPV projects. Hence, family ownership will act as a monitoring mechanism to ensure companies are not in the over- and-under investment conditions.

The author predicts that the influence of financial reporting quality and family ownership on investment efficiency will be greater with higher quality audit as it could improve financial reporting quality within a firm by making published accounts more credible and as an efficient monitoring tool, higher audit quality and financial reporting

quality provide specific and credible information for investors about the firms, allowing them to supervise the activities within the firms. This circumstance provide advantage for investors as it reduces the informational gap and increase supervision between management and investors, hence the managers will act in the interest of investors and avoid under-and over-investment.

Family controlled-firms will appoint specialist auditor to provide their firm with higher audit quality, as higher audit quality will strengthen the reputation of family firms and increase the credibility of published accounts, the reliability of the firm's operations and management, thus reducing agency costs (Piot, 2005). Thereby, with family controlled-firms audited by higher quality auditor, it will reduce the risk premium as demanded by the investors. Hence, this setting will attract investors to invest on FCs firms which they could get extra money for investing in positive NPV projects thus reducing the issues of underinvestment. The author predicts that higher audit quality will produce positive outcomes and enhance the investment efficiency at the firm level, including family firms, as the main purpose of private family firm owners implies a long-term view of the owners and greater reputation concerns.

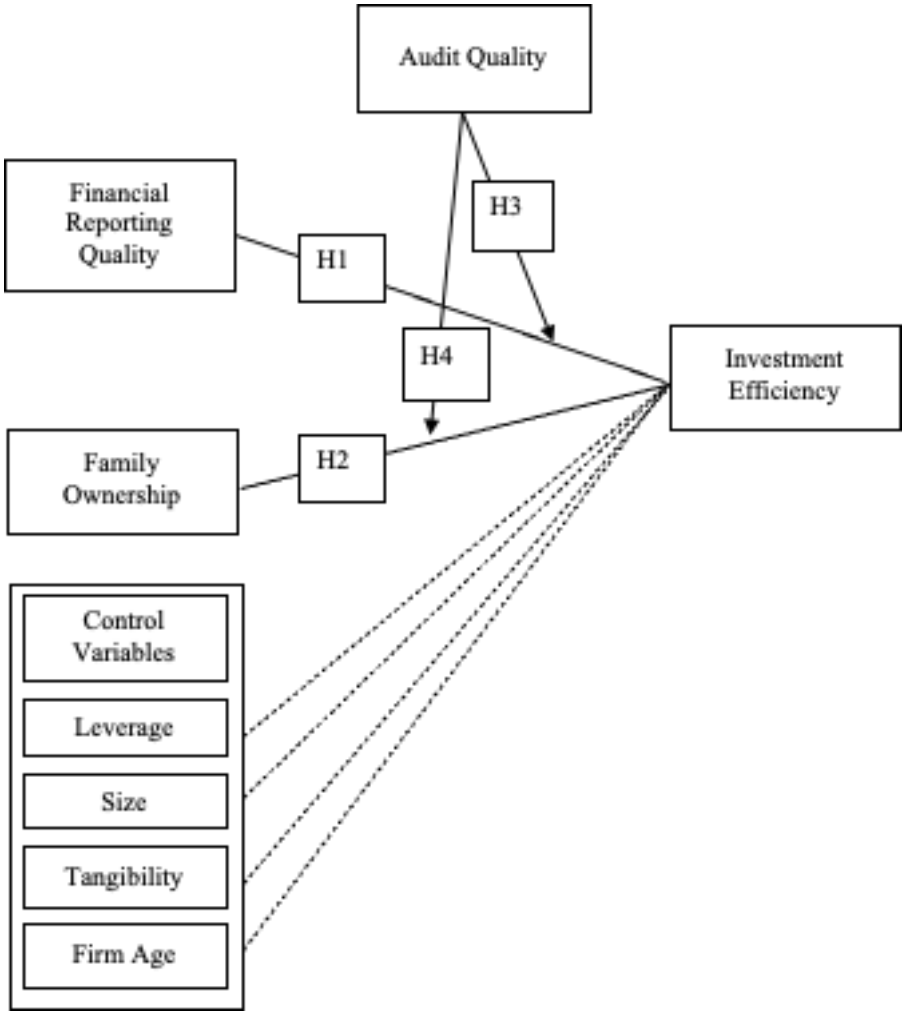

Figure 1 Research Framework Development

Financial Reporting Quality (FRQ) and Investment Efficiency

Study conducted by Liou and Yang (2008) finds out that with financial reporting, investors can get the highlights about the firm performance accurately. According to the studies, financial reporting quality contributes as a monitoring mechanism for shareholders with providing any information relating capital to the supplier. If these reports deliver a true overview of the firms, they can mitigate the asymmetry information problem, and managers

cannot sell their shares at higher prices nor will get the extra money to fund negative NPV projects. (Gomariz & Ballesta, 2013). Therefore, the quality of accounting information reduces the problem of overinvestment and underinvestment by resolving the moral hazard due to the higher quality of financial reporting enables principals to sign efficient contracts with agents and effective monitoring at lower cost would be facilitated.

H1: Financial reporting quality positively affects investment efficiency

Family Ownership (FO) and Investment Efficiency

Investment in positive NPV projects is required to ensure the sustainability of the firms for future generations. Socioemotional wealth model suggests family firms to use its preservation as reference in making strategic options. Thus, SEW is used due to the family firm goals are establishing long-lasting reputational business and passing it to the future generation. They will not hesitate to invest in positive NPV projects and avoid invest in negative NPV projects. Therefore, family firms will contribute as monitoring mechanism to ensure companies are not in the over- and-under investment conditions.

H2: Family ownership positively affects investment efficiency

The Moderating Effect of Audit Quality on The Relationship Between Financial Reporting Quality and Investment Efficiency

Study by Park et al., (2017) shows that big 4 accounting firms can use their expertise and resources efficiently to perform audit which produce higher quality of accounting information in financial reporting, therefore could increase the investment efficiency. Agency theory of the firm considers higher quality of financial reporting as a solution to reduce the challenge of over-and under-investment by mitigating asymmetry information. Many positive economic consequences come from higher quality of audit. To assure firm' financial reporting quality, management and investors would assign higher quality of auditor to provide them with audited financial report. Audit quality is a continuous construct that assures financial reporting quality (DeFond & Zhang, 2014), hence make it an efficient monitoring tool, as audit quality can prevent the opportunistic behavior of the management and conflict of interest between the principal and agent arise from informational gap situations (Biddle, Hilary, & Verdi, 2009). Audit quality is also reducing the inadequate accounting information in financial reporting.

H3: The effect of financial reporting quality on investment efficiency will be greater with higher audit quality

The Moderating Effect of Audit Quality on The Relationship Between Family Ownership and Investment Efficiency

Socioemotional wealth is used as family firm goals are to establish long-lasting reputational business and shifting the business to the future generation, thus making dynastic succession is one of the key dimensions of socioemotional wealth that become the consideration of family firms in decision making process. (Berrone, Cruz, & Gomez-Mejia, 2012). Hence, family firms will appoint higher quality auditors to provide their firm with higher audit quality, as higher audit quality will strengthen the reputation of family firms. The appointment of a high-profile auditor resulting in increasing the credibility of the published accounts, the reliability of the firm's operations and management, thus will reduce agency costs (Piot, 2005). Higher audit quality reducing the risk premium requested by the investors, hereby, enabling firms to get extra money for invest in positive NPV projects and reduce the issues of underinvestment (Al-Thuneibat, Baker, & Issa, 2011), leading to prediction that higher audit quality will produce positive outcomes and enhance the investment efficiency at the firm level, including family firms.

H4: The effect of family ownership on investment efficiency will be greater with higher audit quality

RESEARCH METHOD

Research Variables

The dependent variable used in this research is investment efficiency (IE). This research follows prior literature conducted by Shahzad et al., (2019) to measure investment efficiency. Investment efficiency is measured with the deviation of the optimal investment level by regressing the difference of sales from current and previous years over the total investment cross-sectionally for each industry. Therefore, the model to measure investment efficiency:

$$\boldsymbol{I_{i,t} = \alpha_{i,t} + \beta_1 SG_{i,t-1} + \varepsilon_{i,t}}$$

Where:

$I_{i,t}$ = The sum of investment from firm i in year t. $I_{i,t}$ is calculated with net increase of tangible fixed assets and intangible fixed assets divided with lagged total assets.

$SG_{i,t-1}$ = Sales difference of the firms between year t and t-1

The regression produces a residual which reflecting deviation from the expected investment degree. The residual is used as proxy to determine whether firm is in overinvestment or underinvestment problems. When a residual is positive, it represents that firms are doing investment higher than expected by the firms in accordance with the sales growth (over-investment), whereas when a residual is negative, it represents that firm are investing lower than expected by the firms in accordance with the sales growth (under-investment). Furthermore, the absolute of residual is considered and multiplied by -1. Higher values represent greater investment efficiency and vice versa.

The first independent variables used in this study is financial reporting quality. To measure financial reporting quality, the author use earnings management as an inverse measure of financial reporting quality as it responds to the incentives of company information (Burgstahler, Hail, & Leuz, 2006). The discretionary accrual (DA) is adopted as a proxy for earning management. Its estimated by the modified Jones Model and later modified by Dechow et al., (1995). Recently, this measurement was used by (Purwanti & Utama, 2018).

First of all, the value of total accruals is calculated using the formula:

$$\boldsymbol{TA_{i,t} = NI_{i,t} - CFO_{i,t}}$$

TA is the total accruals from firm I at year t, NI is net income from firm I at year t, and CFO is the operating cash flows from firm I at year t. Next, regressing another equation to determine the value of the coefficient α_1, α_2, α_3 using the following equation:

$$\frac{\boldsymbol{TA_{i,t}}}{\boldsymbol{A_{i,t-1}}} = \boldsymbol{\alpha_1}\left(\frac{\boldsymbol{1}}{\boldsymbol{A_{i,t-1}}}\right) + \boldsymbol{\alpha_2}\left[\frac{\boldsymbol{\Delta REV_{i,t} - \Delta REC_{i,t}}}{\boldsymbol{A_{i,t-1}}}\right] + \boldsymbol{\alpha_3}\left(\frac{\boldsymbol{PPE_{i,t}}}{\boldsymbol{A_{i,t-1}}}\right) + \boldsymbol{\varepsilon_{i,t}}$$

Where $A_{i,t-1}$ is the lag of total assets from firm I at time t, $\Delta REV_{i,t}$ is changes in revenue from firm I at time t, $\Delta REC_{i,t}$ is changes in receivables from firm I at time t, $PPE_{i,t}$ is property, plant, and equipment from firm I at time t.

Next, the value of non-discretionary accruals (NDA) is obtained by multiplying the coefficient values of certain factors as seen in the formula below:

$$\boldsymbol{NDA_{i,t} = \alpha_1}\left(\frac{\boldsymbol{1}}{\boldsymbol{A_{i,t-1}}}\right) + \boldsymbol{\alpha_2}\left[\frac{\boldsymbol{\Delta REV_{i,t} - \Delta REC_{i,t}}}{\boldsymbol{A_{i,t-1}}}\right] + \boldsymbol{\alpha_3}\left(\frac{\boldsymbol{PPE_{i,t}}}{\boldsymbol{A_{i,t-1}}}\right)$$

Finally, the value of discretionary accruals is calculated using the following formula:

$$\boldsymbol{DA} = \frac{\boldsymbol{TA_{i,t}}}{\boldsymbol{A_{i,t-1}}} - \boldsymbol{NDA_{i,t}}$$

Where NDA is non-discretionary accruals from firm I at time t, and DA is discretionary accruals. Furthermore, the absolute value of discretionary accruals is considered. Higher value represent firm is conducting earning management which will lowered the quality of financial reporting, as discretionary accruals is the inverse measure of financial reporting quality. The second independent variables used in this study is family

ownership. The author measures percentage of family ownership using equation based on prior research conducted by Rosharlianti (2018). The following equation:

$$\textbf{\textit{Family Ownership Percentage}} = \frac{\textbf{\textit{Total of Family Shares}}}{\textbf{\textit{Total Shares}}} \times \mathbf{100}\%$$

The moderate variable, audit quality as a dummy variable. As prior literature (Wahedi, Tuhardjo, & Imam Mukhlis, 2019), the Big 4 accounting firms in Indonesia are Deloitte, Ernst & Young (EY), Price Waterhouse Coopers (PWC), and KPMG, therefore, if the firms are audited by one of these accounting firms, it is coded 1; otherwise, coded 0.

Several control variables are used in this research. They are leverage, size, firm age, and tangibility. Leverage is the ratio of total debt to total assets, size is the natural logarithm of total assets, tangibility, is the tangible fixed assets divided by the total assets, and firm age, the number of years when a firm started its business until presents.

Population and Sample

The population from this research are firms that listed in the Indonesia Stock Exchange. The research samples are manufacture firms listed in the Indonesia Stock Exchange. Samples are determined with purposive sampling method where samples determination are based on criteria.

Analysis Method

This study uses Partial Least Square and Multigroup Analysis. Multiple regression analysis is used in this study to measure the strength of correlation between 2 variables or more and points the direction of correlation between dependent variable with independent variable. Multiple regression model used in this research is:

$$\boldsymbol{IE_{i,t} = \beta_0 + \beta_1 FRQ_{i,t} + \beta_2 FO_{i,t} + \beta_3 Size_{i,t} + \beta_4 Lev_{i,t} + \beta_5 Tang_{i,t} + \beta_6 FA_{i,t} + e}$$

Description:

FRQ : financial reporting quality proxied with discretionary accrual which is measured by modified Jones Model and later modified by Dechow et al. (1995). Recently, this model is used by (Purwanti & Utama, 2018)

FO : family ownership measured by equation based on prior literature conducted by Rosharlianti (2018)

Size : natural logarithm of total assets

Lev : ratio of total debt to total assets

Tang : the tangible fixed assets divided by the total assets

FA : the number of years when a firm started its business until presents

$\boldsymbol{\beta_0}$: constant

e : error

RESULT AND DISCUSSION

In this study, manufacture firms listed on Indonesia Stock Exchange (IDX) in the year of 2015 - 2019 are used for this research. Method used for sample selection is purposive sampling method, where the author determine sampling by setting specific criteria relating to the purpose of the study and it is expected to solve research problems. The criteria of sample for this study is manufacture firms listed in the Indonesia Stock Exchange in the year of 2015-2019 and have family ownership. The rest will be explained in Table 1 below.

Table 1
Purposive Sampling

No	Description	Total
1	Manufacture firms listed on Indonesia Stock Exchange (IDX) in the year of 2015 - 2019	182
2	Manufacture firms that aren't listed consecutively on Indonesia Stock Exchange (IDX) in the year of 2015 – 2019	(42)
3	Manufacture firms that don't have available information for study	(11)

4	Non-family ownership	(67)
5	Manufacture firms that don't use Indonesia currency on their financial statement	(9)
6	Manufacture firms that eligible as sample for this study	53
7	Number of observation points = 53x5	265
8	Outlier	(14)
9	Final observation points	251

Variable Description

Table 2
Descriptive Statistics (N=251)

Variables	Minimum	Maximum	Mean	Standard Deviation
DA	.00	.22	.0616	.05427
FO	.02	.98	.6262	.20930
IE	-.31	.00	-.0501	.04562
FA	2.83	4.37	3.6309	.28013
SIZE	11.80	18.39	14.5483	1.44918
LEV	.07	.96	.4457	.19718
TANGIBLE	.04	.90	.4046	.17380

Source: processed data

Based on Table 2, it can be interpreted that this study uses 251 samples of family firms listed in Indonesia Stock Exchange (IDX) in the year of 2015-2019. In this study, financial reporting quality variable is proxied with Discretionary Accrual (DA). The minimum value of DA is 0,00 and the maximum value of DA is 0,22. Discretionary Accrual showing mean for 0,0616 and standard deviation value of 0,05427. Therefore, the data of DA less to be variance due to the standard deviation is lower than mean and distributed evenly.

For family ownership (FO) variable, the lowest value shown from Table 4.2 is 2% from Betonjaya Manunggal Tbk. (BTON) in 2015, while the highest value is 98% from Gunawan Dianjaya Steel Tbk. (GDST) in 2016 and 2017. Family ownership has an average value of 62,62% and a standard deviation of 20,930%, which is lower from average value. This circumstance means that data distribution related to family ownership is evenly distributed and less to be variance due to the standard deviation is lower than mean.

In the case of investment efficiency (IE) variable, the minimum value shown from the Table 4.2 is -0,31, while the maximum value is 0,00. It is seen that investment efficiency variable showing the mean for -0,0501 and standard deviation for 0,04562. The standard deviation is higher than mean, indicating data distribution has not been distributed evenly.

Table 3
Frequency Analysis of Audit Quality

	Firms Audited	%
Big - 4	76	30.3
Non-Big-4	175	69.7
Total	**251**	**100.0**

Source: processed data

In this study, the author uses moderating variable, namely audit quality to moderating the connection between financial report quality and family ownership on investment efficiency. Audit quality is a dummy variable. If firms audited by Big-4 Audit Firms (E&Y, PwC, KPMG, and Deloitte), it is coded 1, otherwise, 0. Based on Table 3, the sample of firms used in this study is 251. It showing that the number of firms audited by Non-Big 4

Audit Firms is 175 and firms audited by Big-4 Audit Firms is 76. Therefore, the percentage of firms audited by Non-Big 4 is 69,7%, higher than firms audited by Big 4, which is 30,3%.

Result Description

Table 4
Multigroup Analysis

	Path Coefficients Original (BIG-4)	Path Coefficients Original (Non-BIG 4)	T Value (BIG-4)	T Value (NON BIG-4)	P Value (BIG 4)	P Value (NON BIG-4)
DA -> IE	0,072	0,182	0,788	3,304	0,215	0,000
FA -> IE	-0,399	-0,003	1,904	0,044	0,029	0,482
FO -> IE	0,332	0,174	1,733	2,064	0,042	0,020
LEV -> IE	-0,352	-0,085	1,642	1,243	0,050	0,107
SIZE -> IE	0,263	0,211	2,297	3,525	0,011	0,000
TANGIBLE -> IE	-0,056	-0,173	0,335	2,235	0,369	0,013

From table 4, audit done by Non-Big 4 slightly strengthen the effect of financial reporting quality proxied by discretionary accrual on investment efficiency rather than Big 4 as the value of path coefficients original Non-Big 4 on the effect of discretionary accrual on investment efficiency is -0,182 (absolute value is 0,182) higher than Big 4 which is 0,072 (absolute value is 0,072). It also indicates from the table 4.9 that audit done by Big 4 slightly strengthen the effect of family ownership on investment efficiency rather than Non-Big 4 as the value of path coefficients original Big-4 is 0,332 higher than non-big 4 which is 0,174.

Table 5
Hypothesis Test Result

	Original Sample (O)	T Statistics ((|O/STDEV|)	P Values
DA -> IE	0,158	3,339	**0,000***
FA -> IE	-0,066	1,156	0,124
FO -> IE	0,186	2,511	**0,006***
LEV -> IE	-0,090	1,548	0,061
SIZE -> IE	0,233	4,896	**0,000***
TANGIBLE -> IE	-0,162	2,584	**0,005***

*Relationship significant if T - statistic > 1,67 (1-tailed) and P values < 0,05

Hypothesis 1 states that financial reporting quality positively affects investment efficiency. Based on Table 5, the test result shows financial reporting quality proxied by discretionary accruals have positive and significance effect on investment efficiency. Discretionary Accrual (DA) has P value of 0,000 < 0,05 and positive original sample of 0,158. Therefore, H1 is rejected and discretionary accrual affects investment efficiency positively, while financial reporting quality affects investment efficiency negatively due to discretionary accruals is the inverse measure.

. The result of this study is different from prior literatures. Financial report drafted based on accounting standard, therefore any manipulations on financial report is inevitable for pursuing some goals for the firms (Setyawati, 2015). Firm also performs earning management, which in this study is proxied by discretionary accruals. The positive effect given from discretionary accruals on investment efficiency is explained as firms can use discretionary accruals to signal its positive prospects and raise its stock price in for the short run. Hence, signaling enables the firm to raise capital to fund its projects (Linck, Netter, & Shu, 2013). Some firms use discretionary accruals to reduce information asymmetry, signal positive prospects, and ease financial constraints, which allows them to raise the capital necessary for invest in positive NPV projects.

Hypothesis 2 states that family ownership positively affects investment efficiency. Based on Table 5, it can be concluded that the test result shows family ownership have positive significance effect on investment efficiency. Family ownership has P values of 0,006 < 0,05 and positive original sample of 0,186. Therefore, H2 is accepted and proven. This result study is in line with prior research conducted by Shahzad et al., (2018) as they found out that higher family ownership could reduce the informational asymmetry between shareholder and management, enabling the monitoring activity towards management actions and reduce the opportunity of expropriation of shareholder wealth for their personal interest. Having company owned by family members indicate the tendency to elect company's management from family members, thus will reduce the agency conflict between stakeholder and management.

This study result circumstance is in line with the SEW theory. As in SEW theory, FCs are more involved in accrual-based earnings management due to their agenda are establishing a successful and long-lasting company to be passed on to the future generation. Therefore, family ownership would act as a monitoring mechanism to ensure companies are not in the over- and-under investment conditions, by having the board of management investing more in NPV projects and avoiding in negative NPV projects.

Hypothesis 3 states that the effect of financial reporting quality on investment efficiency will be greater with higher audit quality. Based on Table 4, it can be concluded that the test result shows higher audit quality do not have significance effect on moderating financial reporting quality with investment efficiency. Higher audit quality moderating financial reporting quality, which is proxied by discretionary accrual on investment efficiency have the value of path coefficients original Big-4 of 0,072, lower than Non-Big 4 which is -0,182 and P Value of 0,215 > 0,05 and T Value of 0,788 < 1,67. It represents that higher audit quality does not moderate significantly on the relationship of financial reporting quality on investment efficiency. Therefore, H3 is rejected.

Financial report audited by big-4 accounting firms does not give guarantee that it will increase the credibility and assurance of audited financial report, as there are many factors to consider. Financial reporting is drafted based on accounting standard, therefore any manipulations on financial report is inevitable with the purpose to reach goals for the firms. Hence, financial report is not the main indicators for decision-making by investors. Audit only provide assurance and it depend on the quality of the financial report in the beginning. Due to there are many manipulations on financial report and its inevitable, management can conceal some specific information from auditors and this can be a risk in auditing for auditors as they can't find the evidence. The circumstance explained in agency theory I as agent (management) are well known about firm specific information and can conceal it from principal (stockholders, investors, etc.) to pursue personal goals, thus enabling them to invest in under-and-over investment.

Hypothesis 4 states that the effect of family ownership on investment efficiency will be greater with higher audit quality. Based on Table 4, it can be concluded that the test result shows higher audit quality have positive and significance effect on moderating family

ownership with investment efficiency. Family ownership moderated by audit quality have the value of path coefficients original Big-4 is 0,332, higher than non-big 4 which is 0,174 and P Value of 0,042 < 0,05 and T Value of 1,733 > 1,67. It represents that higher audit quality have positive significant effect on moderating the relationship of family ownership on investment efficiency. Therefore, H4 is accepted.

Dynastic succession is one of the key dimensions of SEW that is taken into consideration by FCs in decision making (Berrone, Cruz, & Gomez-Mejia, 2012). The appointment of higher quality auditors to provide firms with higher audit quality, as higher audit quality will strengthen the reputation of family firms in the eye of investors. Investors will receive appropriate accounting information, as the effect of higher audit quality is reducing the asymmetry information. The appointment of a high-profile auditor resulting in making the published accounts more credible, increasing the reliability of the firm's operations and management, thus will reduce agency costs (Piot, 2005). Higher audit quality reducing the risk premium demanded by the investors and the firm is able to get extra money, which ultimately reduce the issues of underinvestment (Al-Thuneibat, Baker, & Issa, 2011).

CONCLUSION

The purpose of this study is to analyze the effect of financial reporting quality, family ownership, financial reporting quality moderated by audit quality, and family ownership moderated by audit quality on investment efficiency. In this study, about 251 manufacture firms listed in Indonesia Stock Exchange (IDX) in the year of 2015-2019 are used. Financial reporting quality has negative and significant effect on investment efficiency, while audit quality as moderating variable does not affect the relationship of financial reporting quality on investment efficiency significantly. Family ownership has positive and significance effect on investment efficiency, while audit quality as moderating variable also give positive and significant effect on the relationship of family ownership on investment efficiency.

This study has some limitations. The sample in this study, namely family ownership is obtained through analyzing the financial report published by firms in Indonesia Stock Exchange (IDX) website (www.idx.com). Family ownership firms are picked as sample for the study, while non-family ownership firms are eliminated. Not every firms are open to provide clear information about the ownership relationship, especially family ownership. Thus, there may be family ownership firm data missed due to the unclear and bias information about ownership. This study is also only focus on 53 manufacture firms listed in Indonesia Stock Exchange in the year of 2015-2019, therefore the result can't be generalized for other industry sectors in Indonesia as it is only focus on manufacture firms.

Based on the limitations above, the author suggests that to look family ownership information, the author expected for future research to seek the information from a variety of sources like news, interview, etc. not just from a single source. The author hopes that future research could expand the sector of firms for research, not only focusing on manufacture firms as there are still many family firms in different industry sectors in Indonesia.

In this study, financial report quality is proxied by discretionary accrual and it has negative and significant effect on investment efficiency and insignificant effect even if it is moderated by higher audit quality. Therefore, in the future study, discretionary accrual can be change to other proper latest proxies that has been adapted with IFRS. Audit quality in this study is a dummy variable and proxied by big 4 and non-big 4 accounting firms. It is coded 1 if audited by big-4, otherwise, 0. If audit done by big-4, it means higher audit quality, and vice versa. Future study is expected to use other proper proxies and measurements for audit quality which give more in depth-details.

REFERENCES

Al-Thuneibat, A. A., Baker, R. A., & Issa, R. T. (2011). Do audit tenure and firm size contribute to audit quality?: Empirical evidence from Jordan. *Managerial Auditing Journal, 26*(4), 317-334.

Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012, February 15). Socioemotional Wealth in Family Firms: Theroretical Dimensions, Assessment Approaches, and Agenda for Future Research. *Family Business Review, 25*, 258-279.

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009, September 20). How Does Financial Reporting Quality Relate to Investment Efficiency? *Journal of Accounting and Economics*(48), 112-131.

Burgstahler, D., Hail, L., & Leuz, C. (2006). The Importance of Reporting Incentives: Earnings Management in European Private and Public Firms. *The Accounting Review, 81*(5).

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995, April). Detecting Earnings Management. *The Accounting Review, 70*(2), 193-225.

DeFond, M., & Zhang, J. (2014, September 28). A review of archival auditing research. *Journal of Accounting and Economics, 58*, 275-326.

Gomariz, M. C., & Ballesta, J. S. (2013, July 5). Financial reporting quality, debt maturity, and investment efficiency. *Journal of Banking & Finance, 40*, 494-506.

Husein, A. S. (2015). *Penelitian Bisnis dan Manajemen Menggunakan Partial Least Squares (PLS) dengan smartPLS 3.0.* Universitas Brawijaya: Modul Ajar.

IPOTNEWS. (2019, February 7). *Indopremier*. Retrieved from IPOTNEWS: https://www.indopremier.com/ipotnews/newsDetail.php?jdl=Rasio_ICOR_Tinggi__Investasi_di_Indonesia_Kurang_Efisien&news_id=101285&group_news=IPOTNEWS&news_date=&taging_subtype=ECONOMICS&name=&search=y_general&q=ICOR,%20efisiensi%20ekonomi,&halaman=1

Linck, J. S., Netter, J., & Shu, T. (2013). Can Managers Use Discretionary Accruals to Ease Financial Constraints? Evidence from Discretionary Accruals Prior to Investment. *American Accounting Association*.

Liou, F.-M., & Yang, C.-H. (2008). Predicting business failure under the existence of fraudulent financial reporting. *International Journal of Accounting & Information Management, 16*(1), 74-86.

Myers, S. C., & Majluf, N. S. (1984, February). Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics, 13*(2), 187-221.

O'Keefe, T. B., & Westort, P. J. (1992). Conformance to GAAS Reporting Standards in Municipal Audits and the Economics of Auditing: The Effects of Audit Firm Size, CPA Examination Performance, and Competition. *Research in Accounting Regulation, 6*, 39-77.

Park, S., Kim, I., & Kim, W. (2017, November). Investment Efficiency Between Listed And Unlisted Firms, And Big 4 Audit Firms' Effect: Evidence From Korea. *The Journal of Applied Business Research, 33*(6).

Piot, C. (2005). Auditor Reputation and Model of Governance: A Comparison of France, Germany, and Canada. *International Journal of Auditing, 9*(1), 21-44.

Purwanti, A., & Utama, I. W. (2018, June). Earning Management Analysis Before And After Implementation Of International Financial Reporting Standards (IFRS): Empirical Study Of Automotive And Components Companies Registered On The IDX. *Journal of Accounting and Strategic Finance, 1*(1), 45-56.

Rosharlianti, Z. (2018, Januari). Pengaruh Prudence Dan Family Ownership Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Intervening. *Jurnal Akuntansi Berkelanjutan Indonesia, 1*(1), 71.

Setyawati, L. J. (2015, Agustus 2). Kualitas Informasi Pelaporan Keuangan: Faktor-Faktor Penentu Dan Pengaruhnya Terhadap Efisiensi Investasi. *Jurnal Ekonomi dan Bisnis*, 186-196.

Shahzad, F., Rehman, I. U., Colombage, S., & Nawaz, F. (2018, November 6). Financial reporting quality, family ownership, and investment efficiency. *Managerial Finance, 45*(4), 513-535.

Shahzad, F., Rehman, I. U., Hanif, W., Asim, G. A., & Baig, M. H. (2019, January 15). The influence of financial reporting quality and audit quality on investment efficiency. *International Journal of Accounting & Information Management, 27*(4), 600-614.

Soerjonodibroto, T. (2010, Agustus). Practice of Directorship in Family Firms. Jakarta.

Wahedi, S., Tuhardjo, S. M., & Imam Mukhlis, S. M. (2019, February). Moderating Effect Of Accounting Firms On Relationship Good Corporate Governance, Government Ownership, And Firm Value. *International Journal of Business, Economics, and Law, 18*(5), 87.