

ARE FAMILY FIRM AND CEO OVERCONFIDENCE IMPORTANT IN DETECTING REAL EARNINGS MANAGEMENT AND FIRM PERFORMANCE?

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ABSTRACT

The purpose of this research to explores the impact of family firm on CEO overconfidence, real earnings management and firm performance. Family firm is considered to have a significant impact on the personality trait known as CEO overconfidence. They like new investments and have the courage to take risks that will impact decisions thus encourage real earnings management and future firm performance. The sample of this research includes manufacturing firms listed on the Indonesian Stock Exchange during 2014–2016. This study uses the Sobel test for testing indirect relationships. The findings of this research are that CEO overconfidence has a positive relationship with real earnings management and a negative relationship with firm performance. The results also indicate that family firm doesn't moderate the relationships between CEO overconfidence and real earnings management. Likewise, it doesn't moderate the relationship between real earnings management and firm performance. The decision to undertake real earnings management and thus affect firm performance not only lies in whether the firm is family-controlled but also on other elements, such as external auditors, having a board of commissioners and a good corporate governance system.

Keywords: Family firm, CEO overconfidence, real earnings management, firm performance

INTRODUCTION

Galvin (2015) states that the personality of the CEO becomes an identity or reflection of the firm they lead. CEO is the leader who makes strategic decisions for the firm. Hambrick and Mason (1984), Donaldson and Davis (1991), Bertrand and Schoar (2003), Habib and Hossain (2013) stated that the success of a firm is influenced by the personal characteristics of leaders because the ability or competence of a leader will have an impact on policy, strategy and decision making. It can be concluded that a leader's behavior will be the best predictor of the firm's success (Kouaib & Jarbouï, 2016).

Some literature suggests that CEO overconfident are individuals who like investments, risk-takers, reluctant to pay dividends, prefer external funding and courage to innovate (Malmendier & Tate, 2005; Malmendier, Tate & Yan, 2011; Hirshleifer, Low & Teoh, 2012; Ben-David, Graham & Harvey, 2013; Humphery-Jenner, Lisic, Nanda & Silveri, 2016; Bharati, Doellman & Fu, 2016). Investment and innovation are the factors driving increases in firm performance (Thornhill, 2006; Kouaib & Jarbouï, 2016). Thus, CEO overconfidence tends to overinvest and is interested in innovating strategies through expenditure of research and development, advertising, training and employee education (Hirshleifer et al., 2012).

Nevertheless, other research findings contradict this suggestion, show that CEO overconfident like real earnings management (REM) practices through budget cuts in R&D expenditure in order to increase current earnings aimed at maintaining its reputation and credibility with the public (Kouaib & Jarbouï, 2016, Kouaib & Jarbouï, 2017). Moreover, they are able to increase cash flows from operating activities in the current period, reaching certain earnings targets to achieve conformity or exceed analyst forecasts, avoid losses or income decreases (Roychowdhury, 2006; Cohen, Dey & Lys, 2008; Zang, 2012). Graham, Harvey and Rajgopal (2005) states that 80% of financial executives in the U.S. practice earnings manipulation through REM by cutting discretionary spending budgets to achieve certain earnings targets.

REM is earnings manipulation that is preferred by management compared to accrual earnings management because it is not easily detected and is not the focus of the auditor whose existence can bring negative impacts to the firm in the future (Kim & Sohn, 2008). The impact is that the firm will lose competitive power due to lack of innovation strategy embarked on by the firm so that firm performance will decrease (Gunny, 2010; Tabassum, Kaleem & Nazir, 2015).

This research develops previous research from Sutrisno (2018) by incorporating of several accounting measures that describe the existence of CEO overconfidence (Kouaib & Jarbouï, 2016), to test whether CEO overconfidence as individuals presumably favors innovation progress and much investment in research and development expenditures or, instead, withholding the research and development expenditure budget to increase the current year's earnings. Further tests are conducted to determine whether CEO overconfident who favor an investment strategy and the courage to innovate will be positively related to firm performance rather than reducing firm performance because of excessive optimism that often makes the CEO improperly predict the risks.

In addition, this research examines family firm as a variable that moderates the relationship between CEO overconfidence and REM and the relationship between REM with firm performance. Family firm becomes an important thing to study because the majority of public firms in Indonesia are owned by families. Research conducted by Claessens, Djankov and Lang (2000) shows that 65% more firms in East Asia are family firms. Family firm becomes a factor that influences decision making by the CEO of the firm—especially if the CEO is the founder or family member of the firm's founder. Shefrin (2001) points out that the psychological and sociological characteristics of the CEO will have an impact on the decisions it makes.

Family firms try not to damage the firm's reputation and its own good name as a founder or management so they try to maintain a positive image of every decision taken (Block, 2010). Firms with family firm will better understand the firm's condition

because they have close relationships with firms, have easy access to firm information, are able to closely monitor their firms and will tend to be more cautious and accountable to the firm (Block, Jaskiewicz & Miller, 2011). The research also examined the effect of family firm on the relationship between CEO overconfidence and REM. On the one hand, CEO overconfident like high risk and REM but, on the other hand, as the founder or family member of the firm they will act more carefully to maintain the sustainability of a good corporate reputation. Some research show that REM has a negative impact on the firm's future performance. Tabassum et al. (2015) show that REM has negative consequences on the future firm's financial performance which includes the return of assets (ROA), return on equity (ROE), earnings per share (EPS), price earnings ratio (PER). Similarly, Cupertino, Martinez and Costa (2016) showed that REM negatively affects ROA in the next period, as well as Gunny (2010), who showed that REM decreases ROA and operating cash flows in ensuing years.

Firms with family firm tend to pursue longterm orientation and focus on the firm's future growth (Miller, Miller & Lester, 2010). However, other research reveal that family firm (founders or family members sitting as CEO or directors) tend to have a negative effect on firm performance because they often try to be selfish and incompetent in managing the firm (Morck, Wolfenzon & Yeung, 2005; Shleifer & Vishny, 1997; Volpin, 2002). The research also examined the moderate impact of family firm on the relationships between REM and firm performance.

The contribution of this research is seen in assessing the role of family firm with respect to the relationship between CEO overconfidence and REM, likewise the relationship between REM and firm performance. Measurement of family firm in this research refers to previous research conducted by Block (2010) and Block et al. (2011) by find out whether the founder or family member is the CEO, board of directors, board of commissioners of the firm. This research provides a view as to whether overconfident CEOs who are the founders or family members will create value for the firm itself or vice versa. A second contribution is to create a combined measurement of CEO overconfidence (i.e., overinvestment, debt equity ratio, dividend yield) to obtain more comprehensive measurement results.

THEORETICAL RESEARCH

AGENCY THEORY

Agency theory explains the conflict of interest between the parties because each party has a tendency to maximise its own well-being (Jensen & Meckling, 1976). The management has access to information about the firm's condition compared to other parties so as to establish a state of information asymmetry. This permits those in charge to do earnings management. Likewise, the personal characteristics of executives of corporate leaders affect the decisions and strategies made by the firm (Petrenko, Aime, Ridge & Hill, 2016). Kouaib and Jarboui (2017) indicate that one of the characteristics of CEO overconfidence is an overestimation of their ability and knowledge to influence decisions and actions within the firm. CEO overconfidence shows a tendency toward earnings management income increasing if it is considered an optimal option, for example, to achieve certain earnings targets or to improve personal credibility (Schrard & Zehman, 2012; Hribar & Yang, 2016; Kouaib & Jarboui, 2016). Nevertheless, REM has a negative consequences in the future since it decreases firm performance, such as ROA (Cupertino et al., 2016), operating cash flows (Gunny, 2010; Sutrisno, 2017), ROE, EPS and PER (Tabassum et al., 2015).

Family firm tend to have a second type agency conflict, i.e., the relationship between controlling and non-controlling shareholders. The controlling shareholder is the family because most of the firm's shares are owned by the family. Likewise, the right of control over the firm is owned by the family because the founder or family member will occupy the position of board of directors or commissioners, so they have full access to firm information (Ali, Chen & Radhakrishnan, 2007). The second type of agency conflict indicates a manipulation of earnings, too, like hidden transactions of a related party that facilitate private benefits to them that harm non-controlling shareholders. This activity is often called "tunneling" (Habib et al., 2012; Utama & Utama, 2013).

CEO OVERCONFIDENCE AND FIRM PERFORMANCE

CEO overconfidence is an over-estimation of one's competencies and knowledge that will positively impact their actions within the firm (Kouaib & Jarboui, 2017). Chen, Ho and Ho (2014) shows that CEO overconfidence has a false tendency in determining the level of investment risk and does not cause a positive effect on the firm's performance. Excess CEO confidence can have a negative impact on firm performance because the CEO adopts a risky, inefficient, or false investment policy that ends up determining the risks and returns on some investment (Heaton, 2002; Presley & Abbott, 2013; Ben-David et al. 2013). CEO overconfidence tends to overestimate the return on investment and underestimate risks (Malmendier & Tate, 2005; Kolasinski & Li, 2013). However, several other research has shown different results, where CEO overconfidence tends to lead to optimism about future firm performance and thus overestimates the firm's ability to create future earnings (Hribar & Yang, 2011; Ahmed & Duellman, 2013). The results of prior research suggest differences in findings that encourage the question of whether CEO overconfidence improves firm performance through innovation and investment strategies or whether it will degrade the firm's performance in the next years because of the high risks and expectations of an investment that may be mistaken. Based on the foregoing, this research hypothesis is:

H1: CEO overconfidence negatively affects the future of firm's performance.

FAMILY FIRM, CEO OVERCONFIDENCE AND REAL EARNINGS MANAGEMENT

The high level of optimism of the CEO might cause biases or inaccuracies in decision making and those afflicted by it tend to do earnings management to achieve the earnings target (Schrand & Zechman, 2012; Hribar & Yang, 2016). Habib, et al. (2012), Hsieh, et al. (2014) and Kouaib and Jarboui (2016) show that CEO overconfident tend to do REM through sales manipulation such as giving large discounts and cutting discretionary expenditure budgets to achieve certain earnings target. REM is earnings manipulation that can directly influence earnings in the current period (Graham et al., 2005; Sutrisno, 2017). REM also doesn't violate applicable rules or standards and is difficult to suspect by investors, auditors and users of financial statements (Kim & Sohn, 2008). Based on the foregoing theory, the hypothesis of this study is:

H2a: CEO overconfidence has the negative effect of generating real earnings management.

The tendency of the CEO to undertake REM will be mitigated by the existence of family firm, especially if the founder serves as a CEO of the firm. Family firms will tend to have a low level of earnings management because of a strong sense of ownership of the firms. This is because the family firms want to maintain the long-term sustainability of the firm and maintain their reputation (Anderson & Reeb, 2003; Miller & Le Breton-Miller, 2006; Prencipe, Markarian & Pozza, 2008).

On the one hand, Tai (2017) indicates that firms with a range of directors who are founders or family members will be less fond of REM accomplished through cutting research and development spending budgets. On the other hand, Block (2012) indicates that a CEO who is the founder tends to invest heavily in research and development activities. However, family firm has an intensity in research and development activities that is lower than other firms because of the tradeoff of declining welfare short-term economic benefits while research and development activities are gained in the long term (Chen & Hsu, 2009; Block, 2012; Chrisman & Patel, 2012). This reasoning is in line with the contradictions arising from the CEO overconfidence trait that favors a lot of investment in research and development activity, courageous risk-taking, but one that also runs contrary to other CEO overconfidence traits that tend to favor REM by reducing R&D budgets (Habib et al., 2012; Hsieh et al., 2014; Kouaib & Jarboui, 2016).

Family firms are more trying to maintain the long term sustainability of the firm so that it will avoid things that can harm of the firm. However, Alqatamin, Rateb, Aribi and Arun (2017) show that family firms tend to do REM compared to non-family firms. This is because family firms have control over the management and high access to information on the firm so that they can maximize personal benefits that harm non-controlling shareholders (Claessens et al., 2000; Faccio & Lang; 2002, Ali et al., 2007). From the above, it can be concluded that family firms will mitigate the relationship between CEO overconfident to the decision to make earnings management. Hence, the hypothesis is:

H2b: Family firm moderates the relationship between CEO overconfidence and real earnings management.

FAMILY FIRM, REAL EARNINGS MANAGEMENT AND FIRM PERFORMANCE

Sutrisno (2017) showed that REM through sales manipulation activities and discretionary expenditure budget cuts can improve ROA and cash flows from operation in the current period. REM gives a positive signal in the current period but is negative in the future. Some research indicates that REM will reduce future competitive advantages and firm performance (Mizik & Jacobson, 2007; Gunny, 2010; Zang, 2012; Tabassum et al., 2015). Based on the above background, the proposed research hypothesis is:

H3a: Real earnings management has a negative effect on firm performance.

The founders of a firm who play a role in corporate management will be oriented toward having an entrepreneurial spirit, strive to acquire multiple patents, innovate on projects, be more ambitious, be risk takers and invest more in R&D than leaders do in other firms (Block, Miller, Jaskiewicz & Spiegel, 2013). Family firm is more concentrated on the firm's reputation and seeks to avoid losses stemming from having a poor reputation to defend their corporate dynasties (Godfrey, 2005; Zellweger, Nason, Nordqvist & Brush, 2013). Similarly, Block (2010) showed that family firm will be careful to maintain the firm's reputation. Block (2012) indicates that the founders of a firm who serve as CEO or one of the firm directors will tend to increase the intensity and level of productivity derived from R&D expenditure, compared to firms with other situations.

McConaughy, Matthews and Fialko (2001); Lee (2006) states that family firm control will improve the efficiency, performance and firm value. Prencipe, et al. (2008) suggest that firms with family firm will maintain long-term sustainability and prosperity rather than maximising shareholder wealth in the short term. Hence, they are less motivated to practice income smoothing that may have negative consequences for the firm. Based on foregoing theory, CEO who are founders will mitigate the relationship between REM on the firm performance because they tend to maintain the long term sustainability, leading to the hypothesis of this research:

H3b: Family firm positively effects the relationship between real earnings management and firm performance.

Schrand and Zechman (2012) demonstrate that CEO overconfidence tends to produce undue optimism pertaining to future corporate performance and tends to implement earnings management to achieve expectations of specific earnings targets so as to maintain their reputation for success. CEO overconfidence will adopt a policy of REM that is likely to degrade the firm's performance in the future. This fact shows that CEO overconfidence has an indirect relationship with a decline in future firm performance through an increase in REM activities. Based on the foregoing theory, the hypothesis is:

H4: CEO overconfidence has an indirect relationship with future firm performance, mediated by the decision to undertake real earnings management.

RESEARCH METHOD

SAMPLE AND DATA RESEARCH

The sample and data of this research were taken from manufacturing firms listed on the Indonesian Stock Exchange during 2014–2016. This research uses a sample of manufacturing firms because the REM formula requires inventory data. This data is found in annual reports and was acquired from the Indonesian Stock Exchange website and datastream Thomson Reuters.

RESEARCH FRAMEWORK AND MEASUREMENT OF VARIABLES

The framework of this research is illustrated as follows:

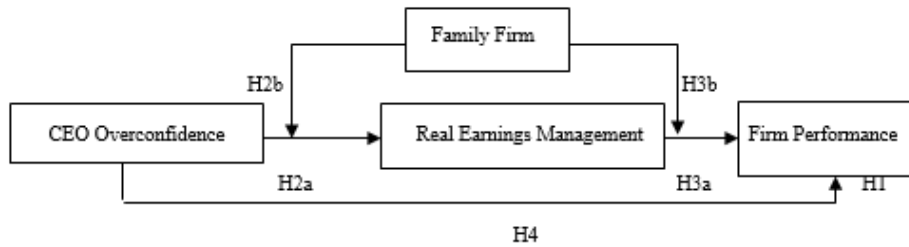


Figure 1. Research Model

FIRM PERFORMANCE MEASURES

Firm performance is measured by calculating ROA_{t+1} (return on assets), which reflects how well assets have generating earnings and CFO_{t+1} (cash flows from operation). Cash flows from operation becomes a performance measure because cash flows from operations are an account that makes managerial manipulation difficult. This measure is appropriate for measuring firm performance. ROA_{t+1} is calculated by dividing EBIT_{t+1} (earnings before interest and taxes) by total assets_t. Cash flows from operation_{t+1} is calculated by dividing cash flow from operation_{t+1} by total assets_t.

CEO OVERCONFIDENCE

Measurement of CEO overconfidence refers to Kouaib and Jarbouï’s (2016) research which shows the CEO’s confidence level by calculating three of the five components of CEO overconfidence—due to limited data availability in Indonesia. The three components are:

- (1) Overinvestment: the level of investment made by the CEO formulated by reducing residual regression on total asset growth and sales growth with the median industry residual value this year. A value of one is assigned if the residual firm is shown to be greater than the median of the residual industry, and zero otherwise. CEO overconfidence tends to make a lot of investment (Malmendier & Tate, 2005, 2008; Ben-David et al., 2013). The CEO overconfidence equation is as follows:

$$\Delta \text{Asset}_{it} / \text{Asset}_{it-1} = \beta_0 + \beta_1 \Delta \text{Sales}_{it} / \text{Sales}_{it-1} + \epsilon$$
- (2) Debt equity ratio. A value of one is assigned if the debt equity ratio is higher than the industry median that year, zero otherwise. CEO overconfident dare to take on higher risk levels, looking for funding in the form of external debt (Malmendier, 2011).
- (3) Dividend yield measures dividend payout by the firm. CEO overconfidence tends to withhold dividend payments because they want to use cash reserves for investment activities (Ben-David et al., 2013). Value of one if dividend yield is zero and the value of zero if the opposite.

The CEO has the characteristic of overconfidence if two of the three components have a value of one.

MEASURES OF REAL EARNINGS MANAGEMENT

The formula of REM refers to Rocychowdhury (2006); Cohen, et al. (2008); Kouaib and Jarbouï (2017), using three proxies: sales manipulation, overproduction and discretionary expenditure as formulated as follows:

- Sales Manipulation: $\text{CFO}_{it} / \text{A}_{it-1} = \alpha_1 (1 / \text{A}_{it-1}) + \beta_1 (\text{S}_{it} / \text{A}_{it-1}) + \beta_2 (\Delta \text{S}_{it} / \text{A}_{it-1}) + \epsilon$ (1)

CFO_{it} is the cash flows from operation divided by total assets, S_{it} is sales and ΔS_{it} is sales difference between period t and t-1. If the residual value is negative then the firm allegedly manipulates sales by giving large discount or facilitating soft loans.

- Overproduction: $\text{PROD}_{it} / \text{A}_{it-1} = \alpha_1 (1 / \text{A}_{it-1}) + \beta_1 (\text{S}_{it} / \text{A}_{it-1}) + \beta_2 (\Delta \text{S}_{it} / \text{A}_{it-1}) + \beta_3 (\Delta \text{S}_{it-1} / \text{A}_{it-1}) + \epsilon$ (2)

$PROD_{it}$ is the production cost divided by total assets, $PROD_{it} = COGS_{it} + \Delta INV_{it}$, S_{it} is sales, ΔS_{it} is sales difference in period t and $t-1$ and ΔS_{it-1} is the sales difference in period $t-1$ and $t-2$. If the residual value is positive then the firm is allegedly doing REM by doing large-scale production that causes a decline in COGS.

$$- \text{Discretionary Expenditure: } DIEXP_{it} / A_{it-1} = \alpha_1 (1/A_{it-1}) + \beta_1 (S_{it-1}/A_{it-1}) + \varepsilon \quad (3)$$

$DIEXP_{it}$ is discretionary expenditure (e.g., R&D, selling, general and administration expense) divided by total assets, S_{it-1} is sales in period $t-1$. If the residual value is negative then the firm is allegedly doing REM by cutting the budget of R&D, sales or promotion and general and administrative items.

This research combines the three REM proxy values (i.e., sales manipulation, overproduction, discretionary expenditure) by adding the residual value of the three proxies. The incorporation of REM values refers to previous research conducted by Cohen et al. (2008) and Kouaib and Jarboui (2017) by summing the following standardised residual values:

$$REM = (-1) * AbnCFO + AbnOP + (-1) * AbnDE$$

FAMILY FIRM

Family firm is measured by seeing if the founder or family member serves as CEO or sits on the board of directors or commissioners of the firms. A value of one indicates that they do, zero otherwise.

RESULTS

DESCRIPTIVE STATISTICS

This research tests the manufacturing firms listed on the Indonesian Stock Exchange during 2014–2016. Samples from 114 firms per year met the criteria and were thus used in this research, with a total of 228 observations. The descriptive statistics are summarized in Table 1:

Table 1. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
ROA _{t+1}	228	0.08555950	0.130935	-0.35619	0.677195
CFO _{t+1}	228	0.08025850	0.114982	-0.362	0.605053
Sales manipulation	228	-0.000000440	0.123381	-0.41289	0.46227
Overproduction	228	0.000000439	0.509743	-1.4043	2.4802
Discretionary Exp.	228	-0.000000438	0.127734	-0.28788	0.47311
REM	228	-0.00000048	2.133824	-6.50063	7.1166
CEOOVER	228	0.46491230	0.499865	0	1
FO	228	0.55263160	0.498316	0	1
CEOFOUNDER	228	0.3684211	0.4834377	0	1
SIZE	228	21.57406000	1.559986	18.18803	26.21382
DTA	228	0.31980910	0.504646	0	4.780508
P/L	228	0.71491230	0.45245	0	1

ROA_{t+1}= return on assets for the next year; CFO_{t+1}= operating cash flows for the next year; Sales manipulation= real activity of sales manipulation; Overproduction= real activity of manipulation of production costs; Discretionary Exp.= real activity of discretionary expenditure manipulation; REM= real earnings management; CEOOVER= CEO overconfidence; FO= family firm; CEOFOUNDER= CEO who is the founder or member of the founding family of the firm; SIZE= firm size (Ln total assets); DTA= debt to total assets, P/L= 1 for profit firms, 0 otherwise.

In Table 1, the descriptive statistics shows the mean value of REM illustrates that on average the listed manufacturing firms during the research period tended to undertake REM, indicates income decreasing. The value of CEOOVER explains that 106 of the 228 observations indicate CEO overconfidence. Fewer Indonesian manufacturing firms are led by CEO overconfident. The value of FF (Family Firm) shows that a total of 126 observations (63 firms per year) have a CEO or board of directors or commissioners who are founders or family members. The value of CEO FOUNDER shows that 84 observations (42 manufacturing firms) where the CEO is the founder or family member.

HYPOTHESIS TESTING

Hypothesis testing was done using multiple regression analysis. Table 2 shows the results of the first and second hypothesis testing the relationships between CEO overconfidence, family firm and REM, as shown in Table 2:

Table 2. Hypothesis Testing

	REM (1)		REM (2)	
CEOOVER	0.582076**	0.044	0.40566	0.348
FF	0.470035*	0.097	0.3331	0.377
CEOOVER*FF			0.31072	0.583
SIZE	-0.17054*	0.058	-0.1714*	0.057
DTA	0.553871*	0.054	0.54463*	0.059
LR	-0.3618	0.266	-0.365	0.263
_cons	3.230387	0.093	3.31572	0.087
R2	0.0916		0.0928	
Adj R2	0.0711		0.0682	
F	4.47		3.77	
F. Sig	0.0007		0.0014	
Obs.	228		228	

*)10%, **)5%, ***)1%

The results of hypothesis testing 2a cannot be rejected statistically ($p\text{-value} \leq 0.05$) which means that CEO overconfidence has a positive effect on REM. This finding suggests that CEO overconfidence will tend to undertake REM because CEO overconfidence strives to achieve expectations of certain earnings targets. In the research model without moderating variables, that the existence of family firm has a positive effect on REM. This fact shows the existence of a second type agency conflict illustrating the relationship between the controlling shareholder (family firm) and non-controlling ones. This tendency is due to the controlling shareholder having more access to firm information and control over the firm being able to take advantage of opportunity to gain for own benefit rather than for the firm. For instance, through tunneling, transferring a firm wealth to another firm (business group), so that the controlling shareholders (families) get certain benefits (Habib et al., 2012; Utama & Utama, 2013).

However, model 2 with moderating variables indicates that family firm has no affect on the existence of REM; in addition, Hypothesis 2b is statistically rejected ($p\text{-value} \geq 0.05$) i.e., family firm doesn't moderate the relationship between CEO overconfidence and REM. This result is due to the possibility of external parties such as an external auditors or audit committee overseeing the fraud committed by the firm.

The results of testing hypotheses 1 and 3 on the relationship between REM, family firm and firm performance are shown in Table 3:

Table 3. Hypothesis testing

Panel A: OLS Regression CEO Overconfidence, family firm, real earnings management on return on assets						
	ROA _{t+1}		ROA _{t+1} (1)		ROA _{t+1} (2)	
CEOOVER	-0.04594***	0.002				
FO			-0.018**	0.03	-0.033**	0.027
REM			-0.032***	0.000	-0.025***	0.000
REM*FO					0.0205***	0.008
SIZE	0.011864**	0.017	0.0069	0.154	0.008*	0.087
DTA	-0.02456***	0.006	-0.018*	0.096	-0.017	0.151
LR	0.099252***	0.000	0.1011***	0.000	0.0971***	0.000
_cons	-0.21213	0.053	-0.111	0.302	-0.137	0.194
R2	0.233		0.3082		0.3317	
Adj R2	0.2193		0.2926		0.3136	
F	17.77		15.81		13.61	
F. Sig	0.000		0.000		0.000	
Obs.	228		228		228	

*)10%, **)5%, ***)1%

Panel B: OLS Regression CEO Overconfidence, family firm, real earnings management on operating cash flows

	CFO _{t+1}		CFO _{t+1} (1)		CFO _{t+1} (2)	
CEOOVER	-0.04114***	0.006				
FO			-0.01519	0.301	-0.016	0.282
REM			-0.0102***	0.004	-0.015**	0.047
REM*FO					0.0154	0.159
SIZE	0.007282	0.124	0.004092	0.388	0.005	0.297
DTA	-0.00711	0.639	-0.00519	0.732	-0.004	0.673
LR	0.057552***	0.001	0.060878***	0.000	0.0579***	0.001
_cons	-0.09659	0.337	-0.04149	0.683	-0.061	0.555
R2	0.1181		0.1293		0.1465	
Adj R2	0.1023		0.1097		0.1234	
F	7.47		6.59		6.02	
F. Sig	0.000		0.000		0.000	
Obs.	228		228		228	

*)10%, **)5%, ***)1%

The results of testing the first hypothesis show that CEO overconfidence negatively effects of long-term operating performance (return on assets and cash flows from operation). Since p-value ≤ 0.01 , it is concluded that H1 is not statistically rejected. The results of this research indicate that CEO overconfident will have low future ROA and cash flows from operation. This proves that CEO overconfidence tends to be brave enough to take high risks, be less careful in estimating returns and do a lot of expenditure activities such as investment, research and development activities (Malmendier & Tate, 2005; Kolasinski & Li, 2013; Hirshleifer et al. 2012).

The test results show that Hypothesis 3a is not statistically rejected. It's p-value ≤ 0.01 , showing the effect of REM on future operational performance (i.e., return on assets_{t+1} and cash flows from operation_{t+1}). It shows that REM will negatively effect on operational performance (i.e., decrease return on assets and cash flows from operation) because firms that do REM will have a low competitive advantage in the future (Gunny, 2010; Tabassum et al., 2015). The results of this research also show that family firm negatively affects on operational performance as measured by ROA. The result of this study indicate that family firms are less professionally managed, thus decreasing firm performance (Shleifer & Vishny, 1997; Morck et al., 2005; Volpin, 2002), especially if there is a transfer of personal gains by a controlling shareholders to non-controlling shareholders through tunneling (Habib et al., 2012; Utama & Utama, 2013).

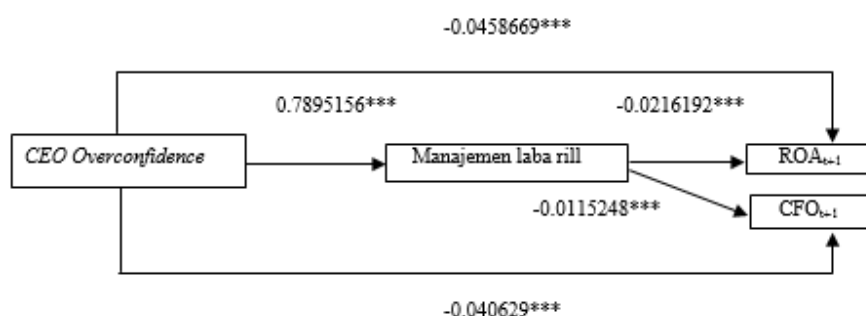
The result of testing Hypothesis 3b shows that family firm moderates the relationship between REM and ROA. This fact is seen in the p-value ≤ 0.01 which means that Hypothesis 3b not statistically rejected. This finding shows that family firm strengthens the negative relationship between REM and the future ROA. A family-owned firm that tends to do earn REM will have a low operating performance (i.e., ROA) in the future. This is consistent with agency theory type II concerning the existence of the conflict of interest between the controlling shareholder (family firm) obtaining some personal gain from their control of a firm against non-controlling shareholders. However, family firm doesn't moderate the relationship between REM and future operating cash flows, as shown in its p-value ≥ 0.05 . This result indicates the possibility of the role of audit committee and external auditor in carrying out its supervisory function over the firm.

The results of testing the fourth hypothesis show an indirect relationship between CEO overconfidence, REM and operational performance (ROA and cash flows from operation) of the firm in the future. This test shows an indirect coefficient between CEO overconfidence, REM and ROA of -0.017069 with a p-value ≤ 0.05 . The proportion of the total effect of mediation is 0.27120864 , with ratio of indirect to direct effect being 0.37213483 and the ratio of total to direct effect being 1.3721348 . The results of this test indicate that although there is an indirect relationship between CEO overconfidence, REM and ROA, the direct relationship between CEO overconfidence and future ROA has a higher coefficient and proportion. It shows that CEO overconfidence is directly related to the future firm performance (ROA).

The results of this research also indicate that CEO overconfidence has an indirect relationship between CEO overconfidence, REM and operating cash flows. This test shows the result of indirect coefficient between CEO overconfidence, REM and operating cash flows of -0.009099 , with a p-value ≤ 0.05 . The proportion of the total effect of mediation is 0.18297535 , with a ratio of indirect to direct effects being 0.22395328 and the ratio of total to direct effect being 1.2239533 . The results of this test suggest that although there is an indirect relationship between CEO overconfidence, REM and operating cash flows of the firm, the direct relationship between CEO overconfidence and the future operating cash flows has a higher coefficient and proportion.

It shows that CEO overconfidence is directly related to the future firm performance (operating cash flows). Here are the results of testing the indirect relationship between CEO overconfidence, REM and operational performance (ROA and cash flows from operation) of the firm in the future:

Figure 2. Hypothesis Testing Mediation (Standardized Coefficient)



SENSITIVITY ANALYSIS

Sensitivity analysis in this research is done by doing partial test on REM (sales manipulation, overproduction and discretionary expenditure). Partial REM test results (table not presented) show that CEO overconfidence (coefficient: -0.0398011^{**}) and family firm (coefficient: -0.0511864^{***}) negatively affect REM on the manipulation of discretionary expenditure, but not on REM activity related to sales manipulation and overproduction. This finding is consistent with the results of previous research showing that CEO overconfidence tends to favor excessive investment in activities such as R&D expenditure, product innovation and marketing and employee training (Hirshleifer et al., 2012). Likewise, family firms will think more about the long-term interests of the firm than mere short-term earnings so that the tendency to invest more in value-added activities (Miller et al., 2010, Block et al., 2011).

This research also adds the CEO being a founder variable to see the difference of influence over the existence of the founding CEO or the family member of the firm, to REM shown in Table 4:

Table 4. Sensitivity Analysis Tests

	REM (4)		REM (5)		REM (6)	
CEOOVER	0.592624**	0.041	0.673769**	0.019	0.699461*	0.051
FO	0.617569*	0.071				
CEOFOUNDER	-0.27188	0.439	0.084406	0.773	0.119471	0.772
CEOOVER*CEOFOUNDER					-0.06987	0.903
SIZE	-0.17984**	0.048	-0.18066**	0.048	-0.18057**	0.049
DTA	0.542247*	0.06	0.554785*	0.055	0.556185*	0.055
LR	-0.34178	0.296	-0.32663	0.32	-0.32718	0.32
_cons	3.43408	0.078	3.60929	0.065	3.59663	0.067
R2	0.094		0.0805		0.0806	
Adj R2	0.0694		0.0598		0.0556	
F	3.82		3.89		3.23	
F. Sig	0.0012		0.0021		0.0046	
Obs.	228		228		228	

*)10%, **)5%, ***)1%

The foregoing results show some consistency with previous testing that CEO overconfidence and family firm positively affect REM. This indicates the existence of a second type of agency conflict. The results also show that there is no difference between the firms led by CEO who is a founder or family member with a firm led by a professional CEO on REM. Similarly, the CEO founder doesn't moderate the relationship between CEO overconfidence to REM. This is because the founding CEO is more focused on the interests of the firm itself (Block, 2010; Block, 2012).

CONCLUSION

This research examines the presence of CEO overconfidence, family firm of REM and its impact on the future operational performance of the firm. This study also examines the indirect relationship between CEO overconfidence to future operational performance through REM. The results of this research indicate that CEO overconfidence has a positive effect on REM and a negative relationship with future operational performance, seen in the decline in ROA and cash flows from operation. Similarly, firms that perform REM will reduce operational performance in the future.

This research shows that family firm has a positive effect on REM and negatively affects future return on assets. This finding indicates the existence of agency conflict type II and the possibility of low competence and experience of the family in managing the firm than when submitted to a professional. Family firm also have no effect on the relationships of CEO overconfidence and REM, however, family firm strengthen the relationship between REM and ROA. This research also shows evidence that REM mediates CEO overconfidence and future firm performance.

The limitations of this research include the measurement of CEO overconfidence that has not fully illustrated its existence, such that yet another test is required to measure it. For example, using content analysis to know about the existence of CEO overconfidence could be used. Future research might also tested the influence of external parties, such as the public accounting firm size or the role of audit committees on the relationships between CEO overconfidence and earnings management.

REFERENCES

- Ahmed, A.S., Duellman, S. (2013). Managerial overconfidence and accounting conservatism. *Journal of Accounting Research*, 51, 1–30.
- Ali, A., Tai-Yuan Chen, Suresh Radhakrishnan. 2007. Corporate disclosures by family firms. *Journal of Accounting and Economics* 44, 238–286.
- Alqatamin, Rateb M., Zakaria Ali Aribi, Thankom Arun. 2017. The Effect of the CEO's Characteristics on EM: Evidence from Jordan. *International Journal of Accounting & Information Management* 25 (3), 356-375.
- Anderson, R.C., David M. Reeb. (2003). Founding-family ownership and firm performance: evidence from the s&p 500. *The Journal of Finance*, 58(3),1301-1328.
- Ben-David, I., Graham, J. R., & Harvey, C. R. (2013). Managerial miscalibration. *The Quarterly Journal of Economics*, 128 (4), 1547–1584.
- Bertrand, M., Schoar, A. (2003). Managing with style: the effect of managers on firm policies. *The Quarterly Journal of Economics*, 118 (4), 1169–1208.
- Bharati, R., Thomas Doellman & Xudong Fu. (2016). CEO confidence and stock returns. *Journal of Contemporary Accounting & Economics*, 12, 89–110.
- Block, J.H. (2010). Family management, family ownership, and downsizing: evidence from S&P 500 firms. *Family Business Review* 23(2), 109-130.
- Block, J.H. (2012). R&D investments in family and founder firms: an agency perspective. *Journal of Business Venturing* 27, 248-265.
- Block, J.H., Danny Miller, Peter Jaskiewicz, Frank Spiegel. (2013). Economic and technological importance of innovation in large family and founder firms: an analysis of patent data. *Family Business Review* 26 (2), 180-199.
- Block, J.H., Peter Jaskiewicz, Danny Miller. (2011). Ownership versus management effect on performance in family and founder companies: a bayesian reconciliation. *Journal of Family Business Strategy* 2, 232-245.
- Chen, H. L., & Hsu, W. T. (2009). Family ownership, board independence, and R&D investment. *Family Business Review*, 22, 347-362.
- Chen, S.S., Ho, K.Y., Ho, P.H. (2014). CEO overconfidence and long-term performance following R&D increases. *Financial Management*, 43, 245–471.
- Chrisman, J. J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives. *Academy of Management Journal*, 55, 976-997.
- Claessens, S., S. Djankov, and L. H. P. Lang. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics* 58:81-112.
- Cohen, D. A., Dey, A., & Lys, T. (2008). Real and accrual-based earnings management in the pre- and post-sarbanes-oxley periods. *The Accounting Review*, 83 (3), 757–787.
- Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasonal equity offerings. *Journal of Accounting and Economics*, 50 (1), 2–19.
- Cupertino, César M., Antonio Lopo Martinez, Newton Carneiro Affonso da Costa Jr. (2016). Consequences for future return with earnings management through real operating activities. *R. Cont. Fin. – USP, São Paulo*, 27 (71), 232-242.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management* 16 (1), 49–64.
- Faccio, M., & L. H. P. Lang. (2002). The Ultimate Ownership of Western European Corporations. *Journal of Financial Economics* 65, 365-395.
- Galvin, Benjamin M., Donald Lange, Blake E. Ashforth. (2015). Narcissistic organizational identification: seeing oneself as central to the organization's identity. *Academy of Management Review* 40(2), 163–181.
- Godfrey, P.C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Acad. Manag. Rev.* 30, 777–798.
- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40 (1–3), 3–73.

- Gunny, K.A. (2010). The relation between earnings management using real activities manipulation and future performance: evidence from meeting earnings benchmarks. *Contemporary Accounting Research*, 27 (3), 855–888.
- Habib, A., Abdul Haris Muhammadi, Haiyan Jiang. 2017. Political connections, related party transactions, and auditor choice: Evidence from Indonesia. *Journal of Contemporary Accounting & Economics* 13, 1–19.
- Habib, A., Sun, J., Cahan, S., Hossain, M. (2012). CEO overconfidence, earnings management and the global financial crisis. Working paper. AUT University, University of Windsor, University of Auckland, and Curtin Business School.
- Habib, A., Hossain, M. (2013). CEO/CFO characteristics and financial reporting quality: a review. *Research in Accounting Regulation*, 25 (1), 88–100.
- Hambrick, D.C., Mason, P.A. (1984). Upper echelons theory: the organization as a reflection of its top managers. *The Academy of Management Review*, 9 (2), 193–206.
- Heaton, J.B. (2002). Managerial optimism and corporate finance. *Financial management*, 31, 33–45.
- Hirshleifer, D., Low, A., Teoh, S.H. (2012). Are overconfident CEOs better innovators? *Journal of Finance*, 67 (4), 1457–1498.
- Hribar, P., Yang, H. (2016). CEO overconfidence and management forecasting. *Contemporary Accounting Research*, 33 (1), 204–227.
- Hsieh, T., Bedard, J., Johnstone, K.M. (2014). CEO overconfidence and earnings management during shifting regulatory regimes. *Journal of Business Finance & Accounting*, 41 (9–10), 1243–1268.
- Humphery-Jenner, Mark; LingLei Lisic; Vikram Nanda; Sabatino Dino Silveri. (2016). Executive overconfidence and compensation structure. *Journal of Financial Economics*, 119, 533–558.
- Jensen, M. C. dan W. H. Meckling. (1976). The Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure. *Journal of Financial Economics* 3 (4), 305–360.
- Kim, Jeong-Bon & B. C. Sohn. (2008). Real versus accrual-based earnings management and implied costs of equity capital. Working paper. SSRN.
- Kolasinski, Adam C., & Xu Li. (2013). Can strong boards and trading their own firm's stock help CEOs make better decisions? evidence from acquisitions by overconfident CEOs. *Journal of Financial and Quantitative Analysis*, 48, 1173–1206.
- Kouaib, A., Jarbouib, A. (2016). The moderating effect of CEO profile on the link between cutting R & D expenditures and targeting to meet/beat earnings benchmarks. *Journal of High Technology Management Research*, 27 (2), 140–160.
- Kouaib, A., Anis Jarbouib. (2017). The mediating effect of REM on the relationship between CEO overconfidence and subsequent firm performance moderated by IFRS adoption: a moderated-mediation analysis. *Research in International Business and Finance*, 42, 338–352.
- Lee, Jim. (2006). Family firm performance: further evidence. *Family Business Review*, 19 (2), 103–114.
- Malmendier, U., Tate, G. (2005). CEO overconfidence and corporate investment. *Journal of Finance*, 60 (6), 2661–2700.
- Malmendier, U., Tate, G. (2008). Who makes acquisitions? CEO overconfidence and the market's reaction. *Journal of Financial Economics*, 89(1), 20–43.
- Malmendier, U., Tate, G., Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *Journal of Finance*, 66 (5), 1687–1733.
- McConaughy, Daniel L., Matthews, Charles H., Fialko, Anne S. (2001). Founding family controlled firms: performance, risk, and value. *Journal of Small Business Management*, 39, 1, 31–49.
- Miller, D., Isabelle Le Breton-Miller. (2006). Family governance and firm performance: agency, stewardship, and capabilities. *Family Business Review* 19(1):73 - 87.
- Miller, D., Isabelle Le Breton-Miller, Richard H. Lester. (2010). Family ownership and acquisition behavior in publicly-traded companies. *Strategic Management Journal*, 31, 201 – 223.
- Mizik, N., & Jacobson, R. (2007). Myopic marketing management: evidence of the phenomenon and its long-term performance consequences in the SEO context. *Marketing Science*, 26 (3), 361–379.
- Morck, R. K., Wolfenzon, D., & Yeung, B. (2005). Corporate governance, economic entrenchment and growth. *Journal of Economic Literature*, 43 (3), 655–720.
- Petrenko, O.V., Federico Aime, Jason Ridge, Aaron Hill. (2016). Corporate social responsibility or ceo narcissism? Csr motivations and organizational performance. *Strategic Management Journal*, 37: 262– 279.
- Prencipe, A., Markarian, G., Pozza, L. (2008). Earnings management in family firms: evidence from R&D cost capitalization in Italy. *Family Business Review*, 21(1), 71–88.
- Presley, Theresa J. & Lawrence J. Abbott. (2013). AIA submission: CEO overconfidence and the incidence of financial restatement. *Advances in Accounting, Incorporating Advances in International Accounting*, 29, 74–84.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42 (3), 335–370.
- Schrand, C.M. & Zechman, S.L.C. (2012). Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics*, 53 (1–2), 311–329.
- Shefrin, H. (2001). Behavioral corporate finance. *Journal of Applied Corporate Finance*, 14(3), 113–126.
- Shleifer, A., & Vishny, R.W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737–783.
- Sutrisno, Paulina. (2017). Earnings management: an advantage or disadvantage? *Accounting and Finance Review*, 2 (2), 64–72.
- Sutrisno, Paulina. (2018). CEO overconfidence, real earnings management and future performance: evidence from Indonesia. *APBEC (Asia Pacific Business and Economic Conference) proceeding*.
- Tabassum, N., Ahmad Kaleem, Mian Sajid Nazir. (2015). Real earnings management and future performance. *Global Business Review*, 16 (1), 21–34.
- Tai, Yi-Hui. (2017). Earnings management in family firms: the role of inside directors. *Corporate Management Review*, 37 (1), 77–114.
- Thornhill, S. (2006). Knowledge, innovation and firm performance in high-and low technology regimes. *Journal of Business Venturing*, 21 (5), 687–703.

- Tucker, Jennifer W. & Paul A. Zarowin. (2006). Does income smoothing improve earnings informativeness? *The Accounting Review* 81 (1), 251–270.
- Utama, C.A., Utama, S., 2013. Corporate governance, size and disclosure of related party transactions, and firm value: Indonesia evidence. *Int. J. Disc. Gov.*, 1–25.
- Volpin, P. F. (2002). Governance with poor investor protection: Evidence from top executive turnover in Italy. *Journal of Financial Economics*, 64 (1),61–90.
- Zang, A. (2012). Evidence on the tradeoff between real activities manipulation and accrual-based earnings management. *The Accounting Review*, 87 (2), 675–703.
- Zellweger, T.M., Nason, R.S., Nordqvist, M., Brush, C.G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrep. Theory Pract.*, 37, 229–248.

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