The roles of internal audit quality on the relationship between narcissistic CEOs and real earnings management

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Abstract
This study aims to investigate the roles of internal audit quality on the effects of narcissistic Chief Executive Officers (CEOs) to earnings management through real activities manipulation. The research design is quantitative method using secondary data. The sample used in this study consisted of 116 manufacturing Companies which are listed on Indonesia Stock Exchanges for the period of 2013 to 2015. Earnings management through real activities manipulation which is also called real earnings management is proxied with three patterns: cash flow from operation (CFO), production costs, and discretionary expenses as developed by Roychowdhury (2006). The results show that narcissistic CEOs has a positive and significant effect toward real earnings management in the pattern of cash flow from operation and in the pattern of discretionary expenses. Narcissistic CEOs has no effect toward real earnings management in production costs pattern. The results of this study also provide empirical evidence that quality of internal audit can alleviate the influence of narcissistic CEOs toward real earnings management in the pattern of cash flow from operation. Meanwhile, internal audit quality can not mitigate the effects of narcissistic CEOs toward real earnings management in the patterns of production costs and discretionary expenses.

Background

Many researches conducted a decade ago were related to accruals earnings management (Im, 2015; Jafarpour et al, 2013; Kalgo et al, 2015; Zang, 2012; Qi, 2014). The researches have examined whether exposure media and corporate actions such as dividen policy, IPO affect accruals earnings management. Meanwhile, there is a limited research regarding earnings management through real activities manipulation which is also called real earnings management (Edinburgh, 2011; Jeong, 2014; Alarlooq, 2014; Malik, 2011).

In addition, research related to incentives to involve in earnings management is not complete if only conducted on aspects of corporate governance and positive accounting theory such as financial performance or corporate action like dividend policy, IPO, and takeover protection, accounting expenses lik e cash flow operation, production cost, and discretionary expenses and R &D expenditures) and accounting conservatism, and ownership structures. Study relating to the characteristic of the person responsible for financial reporting such as the CEO is important to examine. It is because each CEO is a person who has different styles and characteristics.

Research on the effect of CEO characteristics such as CEOs narcissism to earnings management is very limited. Narcissistic CEOs is triggered ideosyncratic, cultural, environmentlal, and structural factors (Ouimet, 2010). CEO narcissim is proven to limit the influence of other directors on the corporate strategy and affect the information process in strategic decision making (Zhu & Chen, 2015).

Fraudulent financial statements will be deterred when internal control function is implemented effectively; therefore, quality of internal control should be increased through the quality of internal auditor (Ege, 2015). Internal audit play an important role in mitigating agressive accounting behaviour of management; hence, reliable internal auditor is expected to take action on anticipating every fraudulent action which could occur in the future (Prawitt & Wood, 2009). Ege (2015) argues that high quality of internal auditor is more likely mitigate management misconduct as compared to low quality of internal auditor. Moreover, high-quality of internal auditor would be as an effective tool to prevent earnings management. Gramling & Hermanson (2009) says that the quality of internal audit is based on what inputs and processes are used to produce quality performance products; in other worlds, using the average experience of audit professionals, certification owned by professional auditors, and training provided to the internal auditors.

The purpose of this study is to examine the influence of Narcissistic CEOs on real earnings management as well as the role of internal audit in moderating it. The significance of this research is to contribute to stakeholders regarding the influence of psychological aspects such as CEOs narcissism on real earnings management. This research raises variables of narcissistic CEOs who are associated with earnings management activities which have been very limited examined in Indonesia. Next section of this paper discusses literature review and hypothesis development, research method, result and discusstion, and conclusion.

Literature Review and Hypothesis Development
The effects of Narcissistic CEOs on Earnings Management

Literatures have evolved in generating models to identify factors which motivate management to commit in earnings management practices. In addition, one of the factors which is indicated to contribute to earnings management is believed to be from a psychological aspect: narcissim. Narcissism is characterized by traits such as dominance, self-confidence, sense of entitlement, grandiosity, and low empathy that have developed evidence that such individuals often appear as Leadership (O'Reilly III et al, 2013). Narcissism has become a popular topic because it has two strong organizational relationships: counterproductive and leadership behaviors (Grijalva, 2014). Another view about the negative nature of narcissistic CEOs are sensitive to criticism, poor listener, lack of empathy, dislike mentoring, intense desire to compete; despite, there is a productive narcissistic such as self-reflection, strong point of view, and a high sense of humor (McMahon, 2009).

Narcissism is a characteristic that is thought to negatively affect the company's financial results and reputation (Duchon & Drake, 2009). Theoretically, extreme narcissistic CEOs point out themselves as the companies they lead and use accounting figures to gain awe from Stakeholders and for example can also result in unfavorable behavior including accounting fraud and stock manipulation (Amernic & Crag, 2010). Chatterjee and Hambrick (2007) discuss that narcissistic CEOs often want a large aide, developing the right-fisted strategy that is related to the fluctuating performance of the company. Furthermore, Chatterjee and Hambrick (2011) add that in comparisons with CEOs who are not narciss, narcissistic CEOs are less responsive to current performance goals. Narcissistic CEOs are preferred by praise and therefore require admiration and social recognition (Judge et al, 2009). In relation to the company's financial performance, Olsen et al (2014) argues that there is a positive relationship between the narcissistic CEO and the earnings per share in the company's financial statements. His research also proved the narcissism CEO crave praise and adulation of the accounting information presented to public. Narcissistic CEOs are not only surviving the influence of other directors' experience but also strengthened by their corporate strategic strategy as opposed to what has been replaced by the experience of other directors (Zhu & Chen, 2015).

Jiang et al (2010) examines the influence between CEOs and CFOs in adopting earnings management. His research finds a strong relationship between CFOs' desires for earnings management action. In contrast, the results of this study differ from the findings of Feng et al (2011) on companies in the US, which found no evidence that CFOs manipulate the company's financial statements; meanwhile, CEOs have a stronger influence within the organization (proxies with CEO position holder as Chairman of Board and often has a compensation share of top five executives) and CFOs often leave the company

before the period of accounting manipulation. This study concludes that CEOs who manipulate corporate financial information have substantial authority over CFOs insofar as the threat of job loss is not involved in accounting manipulation. The results of Feng et al (2011) study are supported by Rijsenbilt and Commandeur (2013) who find that Narcissistic CEOs limit the directors' influence on corporate strategy. Also, the study prove that there is a positive relationship between the psychological point of view of the CEOs who is narcissistic about the potential causes of Fraud. Based on the discussion, the hypothesis of this research is stated as follows:

Hypothesis 1 (H1): Narcissistic CEOs have a positive effects on real earnings management

Internal Audit Quality Roles in Moderating the Effects of Narcissistic CEOs on Real Earnings Management

In the decision of Indonesia Securities Exchange Commission (called Bapepam & LK) decree number: KEP-496/BL/2008 concerning the establishment and guidance of the preparation of the charter for the internal audit unit provides a requirement for auditors of internal audit department that internal auditors should have knowledge and experience on audit technical and other relevant disciplines. Previous studies have found that narcissistic CEOs are preferred by praise and therefore require admiration and social recognition (Judge et al, 2009). In relation to the company's financial performance, Olsen et al (2014) argues that there is a positive relationship between the narcissistic CEO and the earnings per share in the company's financial statements. His research also proved the narcissism CEO crave praise and adulation of the accounting information presented to public. Also, Narcissistic CEOs limit the directors' influence on corporate strategy and there is a positive relationship between the psychological point of view of the CEOs who is narcissistic about the potential causes of Fraud (Feng et al, 2011; Rijsenbilt and Commandeur, 2013). As narcissism is a characteristic that is thought to negatively affect the company's financial results and reputation (Duchon & Drake, 2009), the quality of internal audit through its function in the organization are expected to mitigate the negative characteristic.

Prawitt and Wood (2009) provides empirical evidence that the quality of the internal audit function is negatively related to earnings management. Companies with high internal audit quality are negatively related to abnormal accruals. Internal audits can play an important role in reducing the aggressive management behaviour such as narcissistic CEOs. Thus, reliable internal auditors are expected to take steps to anticipate any possible deviation in the future (Ege, 2010). He also asserts that as compared to low quality auditors, high quality auditors are more likely to reduce management misconduct. Thus, high-quality audits would act as an effective prevention for earnings management practices. Gramling & Hermanson (2009) argue that the quality of internal audit is based on what inputs are used and what processes are implemented to produce quality performance products, using the average audit experience of audit professionals, professional level audit certificates, and training for Professional audit. Based on that discussion, the following hypothesis is established.

Hypothesis 2 (H2): Internal audit quality mitigates the influence of narcissistic CEOs on real earnings management

Firm Size, Leverage, Market to Book, CEO's Tenure, CEO's Age, and CEO's Gender

Dang et al (2017) argue that the most popular proxiest of firm size are based on natural logarithm forms of three firm size measures: total assets, total sales, and market value of equity. Dechow and Dichev (2002) explain that the smaller the firm, the lower accrual quality. Olsen and Stekelberg (2016) document that firm size has a negative sign on management misconduct. In addition, large firms will be more stable and predictable in operation rather than small firms. Thus, firm size has a negative effect on earnings management.

Horne and Wachowicz (2012) confirm that financial leverage or debt to equity ratio is to assess the extent to which the firm using borrowed money; the lower the ratio, the higher the level of the firm's financing that is being provided by shareholders. According to positive accounting theory, firms which have high debt-to-equity ratios tend to use accounting methods to increase corporate earnings to fulfill debt covenants (Scott, 2015). Ege (2015) demonstrates that leverage has a positive relation with management misconduct. Therefore, leverage ratio has a positive effect on real earnings management.

Gitman and Zutter (2015) explain that market to book value ratio provides an assessment of how investors view the firm's performance and it relates the market value of the firm's shares to their book

value. Roychowdhury (2006) who determined suspect firms-year with zero-earnings threshold (firms which have net income scaled by total assets that is greater than or equal to zero but less than 0.005) found that suspect firm-years with high market-to-book ratio exhibit higher abnormal production costs than other suspect firm-years. Suspect firm years with high market-to-book ratio exhibit lower abnormal discretionary expenses than other suspect firm-years. Skinner and Sloan (2002) demonstrated that firms which have growth opportunies are penalized more by capital market as compare to other firms when they do not fulfill certain earnings thresholds. As a result, market to book value has a positif effect toward real earnings management.

In addition to these firm-level variables, at the CEO-level, we control for the CEO's Tenure, CEO's Age, and CEO's Gender. CEO's Tenure is defined as CEO's time in office (Lubojacky, 2017). Olsen et al (2014) found a positive relationship between CEO tenure toward Earnings Per Share. In addition, Olsen and Stekelberg (2016) demonstrates that CEO's tenure has a positive influence toward corporate tax shelters. Thus, CEOs' tenure has a positive effect toward real earnings management.

Serfling (2013) denotes that CEO's Age is the age of CEO at the time served as CEO in the company. Olsen et al (2014) documents that CEO's Age has a positive effect toward Earnings per Share. The findings support the importance of considering how CEO's tenure may impact accounting related policies and decisions. Nevertheless, Olsen and Stekelberg (2016) shows that CEO's Age negatively affect corporate tax shelter. In addition, Chatterjee and Hambrick (2007) found a negative effect of CEO's Age toward ROA extremeness. Therefore, CEO's Age has a negative effect toward earnings management.

Powell and Butterfield (2003) describe that individuals gender identity is defined as their self-concept of possessing masculine or feminine characteristics. In addition, gender refers to the biological and physiological characteristics that define as male or female (Littrell & Nikomo, 2005). According to Olsen et al (2014) CEO's Gender has no effect on Earnings per Share. Nonetheless, Olsen and Stekelberg (2016) provide empirical evidence that the CEO's gender negatively impacted on corporate tax shelter. This indicates CEO's Gender plays a role in determining firm tax policies. Firm tax policies and decisions are related to financial reporting (Dyreng et al, 2010). Therefore, CEO's Gender has a negative effect toward earnings management.

Research Method
Sample Selection
Population of this study is all manufacturing companies listed on the Indonesia Stock Exchange (IDX). The manufacturing sector is chosen because it is the dominant industry with many companies' listings in IDX and manufacturing industry has played an important role in contributing Indonesia's economic growth towards employement, exports, and National Gross Domestic which was 20,8% in 2013 (Nurcahyo & Wibowo, 2015). The technique of determining the sample is purposive sampling with criteria: (1) Manufacturing companies listed in IDX during 2013-2015, (2) The Company issued financial statements and other management reports for the period ended December 31, (3) the company published a complete data in the form of financial reports and other management reports during 2013-2015. Based on the selected criteria, there are 116 manufacturing companies (348 firm-years of observation) can be analyzed.

Variables and Measurement
Real earnings managements were measured by using three models developed by Roychowdhury (2006).

1. Cash flow from operation (CFO) as a linear function of sales and sales changes in one period:

$$\text{CFO}_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \varepsilon_t.$$

2. Normal production costs is Prodt = COGSt + ΔINVt +, using the following regression equation:

$$\text{PROD}_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \beta_3(\Delta S_{t-1}/A_{t-1}) + \varepsilon_t$$

3. Normal discretionary expenses by using the following regression equation

$$\text{DISEXP}_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta(S_t/A_{t-1}) + \varepsilon_t,$$

where CFOt = Operating cash flow of company i in year t; Prodt = Production costs of company i in year t; Disexpt = Corporate discretionary expenses i in year t; At-1 = Total assets of the company at the end of year t-1; St = Sales of the company at the end of the year.

Research on narcissistic CEOs was using secondary data obtained from financial statements and other official information published by the company was first developed by Rijsenbilt (2011) which consists of 5 determinants and 15 variables that are as follows. The first determinant is Media Exposure: consists of number of publications in newspapers & business magazines; Number of awards; Number of lines in the Marquis who's who entry (masuk dalam pemberitaan media Forum eksekutif); Presence and size of the Photo in Annual Report. The second determinant is Compensation: Cash Compensation (Salary & Bonus); Total Compensation (TDC1; Ratio Cash Compensation CEO/Second Best Paid Executive; Ratio Total Compensation; CEO/Second Best Paid Executiv; Executive Rank by Salary and Bonus. The third determinant is Power: consists of CEO Duality; Governance Index of Gompers; Number of official formal titles of the CEO. The fourth determinant is Growth: Number of acquisition, Size Acquisitions. The fifth determinant is Perquisites: Private use of the corporate jet or Membership in Golf Club.

The measure of the narcissistic CEOs has been modified by Olsen and Stekelberg (2016). They score photograph on a scale from 1 to 5 as follows:
Score 1: Annual report contains no photograph of CEO
Score 2: The CEO is photographed with other executives
Score 3: The CEO photographed himself and occupied less than half a page
Score 4: The CEO is photographed alone and occupies at least half a page and is followed by text
Score 5: The CEO is photographed alone and occupies a full page.

Some of these measurements still use 5 determinants with 7 variables that are as the following. The first determinant is Media Exposure which consists of Publication in Print Media; Awards / Awards obtained, the size of photos in the annual report (scale 1 to 5). The second determinant is Compensation indicated with Cash Compensation (Salaries and Bonuses) and Total Compensation. The third determinant is Power determined by CEO Duolity (Multiple Positions). The fourth determinant is Growth indicated with Acquisition Transaction. Last determinant is Perquisites chategorized with Golf Club Membership.
The calculation formula of Narcissistic CEOs's score is stated below:

$$\boxed{NARCISSCEOi_t = \Sigma X_{ij}/n_{ij}}$$

where NARCISCEO$_j$ = NARCISCEO Score of company i in year t; X_{ij} = determinant as indicated in financial statements of company i in year t; n_j = Total 5 determinants (12 indicators).

The quality of Internal Audit function uses measurement developed by Prawitt and Wood (2009) by using scores on three indicators: auditor certification, auditor training, and audit experience. The auditor certification indicator is given a score of 1 if any of the auditors hold CIA, CFE or QIA (Qualified Internal Auditor) certification and is given 0 otherwise; auditor training is also given a score of 1 if the Internal Auditor is given audit training at least twice in one year and score 0 otherwise; and audit experience is given score 1 if there is a provision that to become an internal auditor must have work experience in the accounting or finance company at least 3 years and 0 otherwise. Data is collocted and obtained from information disclosed in the financial statements and other information published by the Company. The calculation formula score quality internal audit function based on the proxy is given below:

$$\boxed{IAQ_{it} = \Sigma X_{it} / n}$$

where IAQ = Internal Audit Quality of company i in year t; Xit = total scores as indicated in financial statements for company i in year t; N = Total scores: 3.indicators

Control variables consist of (1) leverage is measured by total debt/total asset (Ege, 2015); (2) market to book value is measured with closing price/book value of shareholders equity (Roychowdhury, 2006); (3) firm size is measured with natural log of total assets (Dyreng et al, 2010); (4) Gender is the indicator variable that is set 1 if the CEO is male and equal to zero if the CEO is a female (Olsen &

Stekelberg, 2016); (5) Age is the age of the CEO and (6) Tenure is the number of years of CEO's tenure (Olsen & Stekelberg, 2016).

Research Models

The research model is expressed in the following regression equation:

Regression model to test hypotheses 1:

$$\text{REM(CFO)}_{it} = \beta_0 + \beta_1 \text{NARCS}_{it} + \beta_2 \text{LEV}_{it} + \beta_3 \text{SIZE}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{TENURE}_{it} + \beta_6 \text{AGE}_{it} + \beta_7 \text{GENDER}_{it} + \varepsilon$$

$$\text{REM(Prod. Costs)}_{it} = \beta_0 + \beta_1 \text{NARCS}_{it} + \beta_2 \text{LEV}_{it} + \beta_3 \text{SIZE}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{TENURE}_{it} + \beta_6 \text{AGE}_{it} + \beta_7 \text{GENDER}_{it} + \varepsilon$$

$$\text{REM(Disc. Exp)}_{it} = \beta_0 + \beta_1 \text{NARCS}_{it} + \beta_2 \text{LEV}_{it} + \beta_3 \text{SIZE}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{TENURE}_{it} + \beta_6 \text{AGE}_{it} + \beta_7 \text{GENDER}_{it} + \varepsilon$$

Regression model to test hypotheses 2:

$$\text{REM(CFO)}_{it} = \gamma_0 + \gamma_1 \text{NARCS}_{it} + \gamma_2 \text{IAQ}_{it} + \gamma_3 \text{NARCS*IAQ}_{it} + \gamma_4 \text{LEV}_{it} + \gamma_5 \text{SIZE}_{it} + \gamma_6 \text{MTB}_{it} + \gamma_7 \text{TENURE}_{it} + \gamma_8 \text{AGE}_{it} + \gamma_9 \text{GENDER}_{it} + \varepsilon$$

$$\text{REM(Prod. Costs)}_{it} = \gamma_0 + \gamma_1 \text{NARCS}_{it} + \gamma_2 \text{IAQ}_{it} + \gamma_3 \text{NARCS*IAQ}_{it} + \gamma_4 \text{LEV}_{it} + \gamma_5 \text{SIZE}_{it} + \gamma_6 \text{MTB}_{it} + \gamma_7 \text{TENURE}_{it} + \gamma_8 \text{AGE}_{it} + \gamma_9 \text{GENDER}_{it} + \varepsilon$$

$$\text{REM(Disc. Exp)}_{it} = \gamma_0 + \gamma_1 \text{NARCS}_{it} + \gamma_2 \text{IAQ}_{it} + \gamma_3 \text{NARCS*IAQ}_{it} + \gamma_4 \text{LEV}_{it} + \gamma_5 \text{SIZE}_{it} + \gamma_6 \text{MTB}_{it} + \gamma_7 \text{TENURE}_{it} + \gamma_8 \text{AGE}_{it} + \gamma_9 \text{GENDER}_{it} + \varepsilon$$

where, REM(CFO)_{it} is real earnings management for CFO pattern; $\text{REM(Prod. Costs)}_{it}$ is real earnings management for production costs pattern; $\text{REM(Disc. Exp)}_{it}$ is real earnings management for discretionary expenses pattern; NARCS_{it} is Narcissistic CEOs of company; IAQ_{it} is Internal Audit Quality of firm; LEV_{it} is leverage; SIZE_{it} is log natural of total assets; MTB_{it} is market to book value; TENURE_{it} is CEO Tenure; AGE_{it} is the age of the CEO; and GENDER_{it} is the gender of the CEO.

Data Analysis

This study uses panel data analysis because the data containing time series observations of variables of a number of firms. Heidi et al (2004) suggest that observations in panel or pooled data involve at least two dimensions: cross sectional dimension, indicated by subscript i, and a time series dimension, indicated by subscript t. Gujarati and Porter (2012) explain that in pooled estimators, the error terms are likely to be correlated over time for a given subject. Thus, if the fixed effect model is approaproate but we use the pooled estimator then the estimated coefficients will be inconsistent.

According to Greene (2003) as cited by Murwaningsari et al (2015) the steps to determine the suitable model were as follows: (1) to test betweeen pooled OLS and a fixed effect model, one should test the correlation between the cross-section specific effect and the dependent variable using the F-test and the Chi-Square test. If a correlation existed, the pooled OLS was inconsistent; (2) to test between the fixed effect and random effect models, one could use the Hausman specification test, which tests the correlation between unobserved individual random effects and a dependent variable. If the null hypothesis was rejected, then the random effect model was inconsistent, hence use the fixed effect model.

The panel data are analyzed using EViews 8. To test which model is better, Widarjono (2013) explains the following steps, namely: Chow test, Hausman test, and Langrange Multiplier (LM) test. Chow test is to determine which model of common effect or fixed effect is used. If the Prob. cross-section F was smaller than α value (=0.05) then Fixed Effect model was consistent; if it was not then common effect model is selected. Hausman test is to determine between Fixed Effect or random effect model that is suitable for regression model estimator. If the Prob. cross-section F was smaller than α value (=0.05) then Fixed Effect model was consistent; if it was not then Random Effect model was used. LM test is required if there were different test results between Chow test and Hausman test. For example if chow test recommended to use common effect model while Hausman test recommendeded random effect model. Then, LM test is needed to determine which model between common effect and random effect is better. LM test model is developed by Bruesch-Pagan (1980). The test is based on chi-square distribusion with the degree of freedom equivalent to the amount independent variable. If LM statistic was above the critical value of chi-square then random effect is consistent; if it was not, mean otherwise.

Result & Discussion
Descriptive Statistics.

Table 1 Descriptive Statistics

	Mean	Min	Max	Mode	Std. Deviation
Internal Audit Quality (IAQ)	0.28	0	1.00	0.33	0.29
Narcissistic CEOs (NARCS)	0.54	0.23	1.00	0.54	0.17
Leverage (LEV)	2.70	0.04	354.99	0.62	20.11
Size (SIZE)	28.37	25.30	33.13	26.48	1.56
Market to Book Value (MBV)	84.84	0.05	7330.57	5.90	595.90
CEOs Age (AGE)	54.74	34.00	77.00	51.00	8.98
CEOs Tenure (TENURE)	4.49	3.00	5.00	5.00	0.83
CEOs Gender (GENDER)	0.93	0	1	1.00	0.24

Table 1 shows that market to book value ratios and leverage have a relatively high standard deviation as compared to the mean. This indicates that sample variability for market to book value and leverage is quite high. Each variable of internal audit quality and narcissistic CEOs has quite the same value both in average and modes; this means that each firm in the sample are homogeneous and low variability. Other control variables such as Size, CEO's Age, CEO's Tenure and CEO's Gender have lower standard deviation than the mean. This shows that firm size, CEO's Age, CEO's Tenure and CEO's Gender are also homogeneous and low variability. Descriptive statistics also reveal the average age of CEO is 55 years with a maximum age of 77 years and the youngest is a minimum of 34 years. The CEO's tenure is 5 years in average and the gender is generally male.

Before hypothesis test, classical asumption test was undertaken. The test includes (1) data normality test; (2) heteroscedasticity test using the Glejser; (3) multicolinearity test using VIF test; and (4) autocorrelation test using Durbin-Watson Test. Data normality was tested using Eviews 8 through residual diagnostic of histogram – normalitity test. The results show Skewness is in the range of 0 and Kurtosis is in the range below of 3; which mean the regression of residual is normally distributed. Other test results indicate that the data is free from autocorrelation, heteroscedasticity, and multicollinearity.

Then, model selection test is conducted to decide which model is suitable for regression model estimator. Chow test and Hausman test were undertaken. Results of the test indicate for CFO and production costs regression model in table 2 below are better to use fixed effect model, and for discretionary expenses regression is recommended to use random effect model.

The Results of Hypothesis 1

$$REM_{it} = \beta_0 + \beta_1 NARCS_{it} + \beta_2 LEV_{it} + \beta_3 SIZE_{it} + \beta_4 MTB_{it} + \beta_5 TENURE_{it} + \beta_6 AGE_{it} + \beta_7 GENDER_{it} + \varepsilon$$

REM (CFO) = 2.2011 + 0.0345 NARCS – 0.0002 LEV - 0.0628 SIZE + 0.7350 MTB – 0.0112 TENURE + 0.0046 AGE - 0.1051 GENDER + ε

REM (Prod. Costs) = 3.8500 – 0.1298 NARCS + 0.0012 LEV - 0.1170 SIZE - 0.5350 MTB + 0.0011 TENURE - 0.0065 AGE - 0.0986 GENDER + ε

REM (Disc. Exp) = 0.0213 + 0.0158 NARCS – 0.5450 LEV - 0.0003 SIZE - 0.1550 MTB – 0.0042 TENURE - 0.0001 AGE - 0.0181 GENDER + ε

Table 2. Empirical Results

Variables	Pred. Sign	CFO		Production Costs		Discretionary Expenses	
		Coeff (B)	p-value	Coeff (B)	p-value	Coeff (B)	p-value
C		2.2022	0.0000***	3.8500	0.0000***	0.0213	0.0714*.
NARCS	+	0.0345	0.0336**	-0.1298	0.0000***	0.0158	0.0004***
SIZE	-	-0.0628	0.0000***	-0.1170	0.0000***	-0.0003	0.03672
LEV	+	-0.0002	0.0560	0.0012	0.1671	-0.5450	0.5378
MTBV	+	0.7350	0.6528	-0.5350	0.0002***	-0,1550	0.6554
TENURE	+	-0.0112	0.4517	0.0011	0.9455	-0.0042	0.0000***
AGE	-	0.0046	0.0000***	-0.0065	0.0000***	-0.0001	0.0526**
GENDER	-	-0.1051	0.0004***	-0.0986	0.0020***	-0.0181	0.0002***
Adj R2		0.46		0.89		0.23	
Prob(F-statistic)		0.0000	***	0.0000	***	0.0000	***
N		348		348		348	

***Significat at 1 percent; **Significant at 5 percent; *Significant at 10%

Note :   NARCS: narcissistic CEOs; Size: natural log of total assets; LEV: Leverage; MTBV: market to book value; TENURE: Tenure of CEOs; AGE: Age of CEOs; GENDER: Gender of CEOs.

Table 2 shows that narcissistic CEOs have positive and significant effect toward real earnings management for the pattern of cash flow from operation (CFO). Its p-value is 0.0336 (below 0.05). This means that Narcissistic CEOs have the discretion to manage cash flow from operstion to manage the desired earnings. This findings support Roychowdhury (2006) who explains that CFO pattern is one of the real earnings management activities which are related to or conducted through sales manipulation.

However, Narcissistic CEOs has no effect toward real earnings management for production costs pattern. Although, p-value is below 0,05 (0,0000) but its coefficient has a negative direction which is not in accordance with hypothesis . This result supports Feng et al (2011)

The effect of narcissistic CEOs toward real earnings management for the pattern of discretionary expenses shows positive and significant results. Its p-value is 0, 0004 (below 0.05). This means that Narcissistic CEOs have the discretion to manage administrative expenses to maintain the desired earnings. CEO preferred to involve in discretionary expenses manipulation in conducting real earnings management activities. This result is consistent with Jiang et al (2010) and Judge et al (2009).

The test on control variables shows that Size has a negative and significant association toward each pattern of real earnings management: Cash Flow from Operation (CFO), production costs and discretionary expenses. This suggests that a higher level of Size lead to lower real earnings management of cash flow from operation, production costs, and discretionary expense. This result support Dechow & Dichev (2002).

Leverage consistently shows no effect toward each of the two patterns of real earnings management: production costs, and discretionary expenses. Although leverage has a significant effect toward real earnings management in CFO patterns but its direction is negative; thus, it can be concluded no assocation. In contrast, previous study related to accrual earnings management demonstrated positive association (Scott, 2015; Ege, 2015).

Market to book value does not affect real earnings management of CFO, production costs, and discretionary expenses. These results are not consistent with study conducted by Roychowdhury (2006) who found firms with have growth opportunies tent to undertake earnings management to fulfill certain earnings thresholds. Altough CEO's Tenure generates significant p-value of 0, 0000 for CFO and discretionary expenses, but they have negative directions. However, this result support Olsen et al (2014) who argued the importance to consider CEO's Tenure on accounting related policies and decisions.

Empirical evidence on CEO's Age shows negative and significant influence toward each of the three patterns of real earnings managements: CFO, production cost, and discretionary expenses. This suggests that the older an individual at the top leaders of companies such as CEOs, the more conservative in making decisions with the purpose of safety factors for himself after retirement, and in order to be free from corporate problems caused by the decision they made before retirement. This result support Chatterjee and Hambrick (2007) and Olsen & Stekelberg (2016). Table 2 shows CEO's Gender has a negative influence on real earnings management. This result support Olsen & Stekelberg (2016) and Dyreng et al (2010) who argues that CEO's Gender determine firm tax policies which are related to financial reporting.

Simultaneously, with alpha 5%, model of the effect of narcissistic CEOs, size, leverage, market to book value, tenure, age and gender toward real earnings management indicate a good model. This is indicated by F value of 0.000 and adjusted R square valued of 0.92 for CFO pattern of real earnings management; 0.99 for production costs pattern of real earnings management; and 0.23 for discretionary expenses patten of real earnings management.

The Result of Hypothesis 2

$REM_{it} = \gamma_0 + \gamma_1 NARCS_{it} + \gamma_2 IAQ_{it} + \gamma_3 NARCS*IAQ_{it} + \gamma_4 LEV_{it} + \gamma_5 SIZE_{it} + \gamma_6 MTB_{it} + \gamma_7 TENURE_{it} + \gamma_8 AGE_{it} + \gamma_9 GENDER_{it} + \varepsilon$

REM (CFO) = 1.4941 + 0.1309 NARCS + 0.2619 IAQ – 0.5044 NARCS*IAQ – 0.0003 LEV – 0.0478 SIZE + 0.3913 MTB + 0.0082 TENURE – 0.0044 AGE – 0.0021 GENDER - ε

REM (Prod. Costs) = 3.0224 -0.1028 NARCS – 0.0670 IAQ + 0.0051 NARCS*IAQ + 0.0010 LEV – 0.0871 SIZE – 0.4505 MTB – 0.0061 TENURE – 0.0065 AGE – 0.1053 GENDER + ε

REM (Disc. Exp) = -0.0642 – 0.0027 NARCS – 0.0239 IAQ + 0.0615 NARCS*IAQ – 0.4221 LEV – 0.0006 SIZE – 0.6381 MTB – 0.0046 TENURE + 0.0002 AGE – 0.0152 GENDER + ε

Table 3. Empirical Results

Variables	Pred. Sign	CFO		Production Costs		Discretionary Expenses	
		Coeff (B)	p-value	Coeff (B)	p-value	Coeff (B)	p-value
C		1.4941	0.0000***	3.0224	0.0000***	0.0597	0.0000***
NARCS	+	0.1309	0.0034***	-0.1028	0.0365**	-0.0027	0.5506
IAQ	-	0.2619	0.0018***	-0.0670	0.2962	-0.0239	0.0044***
NARCS*IAQ	-	-0.5044	0.0002***	0.0051	0.9688	0.0615	0.0000***
SIZE	-	-0.0478	0.0000***	-0.0871	0.0000***	-0.0006	0.0560*
LEV	+	-0.0003	0.0902*	0.0010	0.0981*	-0.4221	0.5632
MTBV	+	0.3913	0.4766	-0.4505	0.0006***	-0.6381	0.8324
TENURE	+	0.0082	0.6502	-0.0061	0.7722	-0.0046	0.0000***
AGE	-	-0.0044	0.0000***	-0.0065	0.0000***	0.0002	0.0047***
GENDER	-	-0.0021	0.9531	-0.1053	0.0253**	-0.0152	0.0005***
Adj R2		0.94		0.98		0.39	
Prob(F-statistic)		0.0000	***	0.0000	***	0.0000	***
N		348		348		348	

***Significat at 1 percent; **Significant at 5 percent; *Significant at 10%

Note :   Narcceo: narcissistic CEOs; Audint: Internal Audit Quality; Size: natural log of total assets; Lev: Leverage; MTBV: market to book value; Tenure: Tenure of CEOs; Age: Age of CEOs; Gender: Gender of CEOs.

Model selection test is conducted to decide which   model is suitable for regression model estimator. Chow test and Hausman test were undertaken. Results of the test indicate that for CFO and production costs regression model in table 3 are better to use fixed effect model, and for discretionary expenses regression is recommended to use random effect model

Table 3 presents the results of internal audit quality as moderating variable for the effect of narcissistic CEOs toward real earnings management for the patterns of CFO (Cash Flow from Operation), Production Costs and Discretionary Expenses.   Table 3 shows that the interaction between narcissistic CEOs and internal audit quality has a negative and significant interaction toward real earnings management for the pattern of Cash Flow from Operation. The coefficient is -0.5044 (p-value 0.0002 below 0.05). This means that internal audit has significant effects in mitigating the influence of narcisitic CEO toward Cash Flow from Operation in conducting real earnings management activities. Cash flow from operation (CFO) is a model to show and measure whether real earnings management exists in sales activities (Roychowdhury, 2006). Also, internal auditors are involved in conducting operational audit to marketing division which the sales activities and transactions as an audit object. As a consequence, quality of internal audit has been empirically proven to have important role in reducing the impact of narcissistic CEOs to real earnings management practice in manipulation of cash flow from operation. This results support Prawitt and Wood (2009), Ege (2010), and Gramling & Hermanson (2009).

Table 3 also demonstrates the interaction between narcissistic CEOs and internal audit quality was not proven to be the moderating variable for the influence of narcissistic CEOs toward real earnings management for production costs pattern. Its p-value was 0.9688 above 0, 05. This result consistent with the interaction between narcissistic CEOs and, internal audit quality which does not moderate for the impact of narcissistic CEO toward real earnings management of discretionary expenses. P-value is below 0.05 (0.0000); however, the coefficient was positive which had opposite direction with predicted negative sign in the hypothesis. This findings indicate that internal audit quality do not play an important role in mitigating real earnings management of production costs and discretionary expenses which are related to financial statements. This result due to the role of internal audit division which are generally focused

more on operational audits rather than as financial statements auditors. Internal auditors do not engage in financial statements audits since the task are already conducted by public accounting firms as financial statements auditors (Sawyer et al, 2003).

Simultaneously, with alpha 5%, model of the effect of narcissistic CEOs, Internal Audit Quality, interaction of narcissistic CEO and Internal Audit Quality, size, leverage, market to book value, tenure, age and gender toward real earnings management indicate a good model. This is indicated by F value of 0.000 and adjusted R square valued of 0.94 for CFO pattern of real earnings management; 0.98 for production costs pattern of real earnings management; and 0.39 for discretionary expenses pattern of real earnings management.

Conclusions, Limitations, and Future Research

It is concluded that narcissistic CEOs has a positive and significant effect toward real earnings management activities for the pattern of cash flow from operation and for the pattern of discretionary expenses. This indicates that Narcissistic CEOs have the discretion to manage cash flow from operation and administrative expenses to maintain the required earnings. CEO preferred to involve in cash flow from operation and discretionary expenses manipulation in conducting real earnings management activities. This result support Jiang et al (2010) and Judge et al (2009). However, Narcissistic CEOs has no effect toward real earnings management for the pattern of production costs. This result supports Feng et al (2011).

The findings that are related to the roles of internal audit quality has been empirically proven in mitigating the influence of narcissitic CEO toward Cash Flow from Operation (CFO) in conducting real earnings management activities. Cash flow from operation (CFO) is a model to show and measure whether real earnings management exists in sales activities (Roychowdhury, 2006). Also, internal auditors are involved in conducting operational audit to marketing division which the sales transaction as an audit object. As a consequence, quality of internal audit has been empirically proven to have important role in reducing the impact of narcissistic CEOs to real earnings management practice in manipulation of cash flow from operation. This results support Prawit et al (2009), Ege et al (2010), and Gramling & Hermanson (2009).

The interaction between narcissistic CEOs and internal audit quality was not proven to be the moderating variable for the influence of narcissistic CEOs toward real earnings management of prduction costs pattern and discretionary expenses patterns. Internal audit quality do not play an important role in mitigating real earnings management of production costs and discretionary expenses. This result due to the role of internal audit division which are generally focused more on operational audits and not as financial statements auditors. Internal auditors do not engage in financial statements audits since the task are already conducted by public accounting firms as financial statements auditors (Sawyer et al, 2003).

The results of this study contribute to the theoretical implications related to agency theory (Jensen & Meckling, 1976). The results of narcissistic CEOs that has a positive and significant effect toward real earnings management activities for the pattern of cash flow from operation and discretionary expenses support the assumption of agency theory which CEO's characteristics such as narcissism is one the factors that motivate management to commit in real earnings management practices. This study also contributes to the literature related to the internal audit quality which has an important role in mitigating the effect of narcissistic CEOs toward real earnings management for cashflow from operation pattern. The research has implications for shareholders which provide input that the function of internal audit quality can alleviate earnings management.

The limitations of this study are on the availability of secondary data financial reports that publish narcissistic indicators of CEOs provided in the Rijsenbilt model (2011). Therefore, this study uses modification of indicators performed by Olsen and Stekelberg (2016) as indicators available in the financial statements of firms in Indonesia. Further research is recommended to develop narcissistic CEOs indicators for research purposes of corporate cases in Indonesia.

References

Alarlooq, M.N.M., Aslani A., & Azadi B. (2014) Accounting Conservatism Impact on Real Earnings Management. *International Journal of Acconting Research,* 1 (12), 71-76.

Amernic, J. H., & Craig, R.J. (2010) Accounting as a facilitator of extreme narcissism. *Journal of Business Etchics,* 96 (1), 79-93.

Bapepam & LK decree no. Kep-496/BL/2008 about the Establishment and Standard for the Preparation of Internal Audit Charter. 28th November 2008.

Bruesch, T., & Pagan A. Pagan. (1980) The LM test and its Application to Model Specification in Econometrics, *Review of Economic Studies,* 47, 239-254

Chatterjee, A., & Hambrick, D. C. (2007) It's All about Me: Narcissistic CEOs and their Effects on Company Strategy and Performance. *Administrative Science Quarterly,* 52 (3), 351-386.

Chatterjee, A., & Hambrick, D. C. (2011) Executive Personality, Capability Cues, and Risk Taking: How Narcissistic CEOs React to Their Successes and Stumbles. *Administrative Science Quarterly,* 56 (2), 202-237.

Dang, C., Li, Z., & Yang C. (2017) Measuring Firm Size in Empirical Corporate Finance. *Journal of Banking and Finance.* [Online]. Available from: Doi:10.1016/j-jbankfin.2017.09.0006 [Accessed 20th April 2016)

Dechow, P., & Dichev, I. (2002) The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review,* 77 (4), 35-59.

Duchon, D., & Drake, B. (2009) Organizational narcissism and various behaviour. *Journal of Business Ethics,* 85 (3), 301-308.

Dyreng, Scott D., Hanlon, M. & Maydew E.L. (2010) The Effects of Executives on Corporate Tax Avoidance, *The Accounting Review,* 85 (4), 1163-1189.

Edinburgh, L. G., Gunny, K. A., Hee, K. W., & Soderstorm, N. (2011) Earnings Management Using Real Activities: evidence from non profit hospitals. *The Accounting Review,* 86 (5), 1605-1630.

Ege, S Matthew. (2015) Does Internal Audit Function Quality Deter Management Misconduct. *The Accounting Review,* 90 (2), 495-527.

Feng, M., Ge, W., Luo, S. & Shevlin, T. (2011) Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics,* 51, 21-36.

Gitman, L. J., & Zutter, C. J. (2015) *Principles of Managerial Finance.* 14th edition London, Pearson Education Limited.

Gramling, A. A., & Hermanson, D. R. (2009) Internal audit quality: Would we know it if we saw it. *Internal Auditing,* 24 (1), 36-39.

Grijalva, E. & Harms, P.D. (2014) Narcissism: An Integrative Synthesis and Dominance Complementary Model. *The Academy of Management Perspectives,* 28 (2), 108-127.

Gujarati, D. N., & Porter, D. C. (2009) *Basic Econometrics.* New York, McGraw-Hill

Heij, C., & De Boer, P., Franses, P. H., Kloek, Teun., & Van Dijk, H. K. (2004) *Econometric Methods wth Applications in Business and Economics.* New York, Oxford University Press.

Horne, J. C. V., & Wachowic, J. M. (2009) *Fundamentals of Financial Management.* 13th edition. London, Prentice Hall.

Im, C. C., Kim, J. H., & Choi, M. K. (2015) Dividend policy and earnings management: based on discretionary accruals and real earnings management. *International Journal of u- and e- Service Science and technology,* 9 (2), 137-150.

Jafarpour, M., & Soumehsaraei, B. G. (2012) Investigate REM and AEM from the perspective of Income Smoothing. *International Journal of Innovative Research in Science,* 2 (12), 7256-7263.

Jensen, M.C., & Meckling, W.H. (1976) Theory of The Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics,* 3, 305-360.

Jeong, W. G. E. (2014) Boards, Takeover Protection, and Real Earnings Management. *Review of Quantitative Finance Accounting,* 43(4), 651-682.

Jiang, J. X., Petroni, K. R., & Wang, I. Y. (2010) CFOs and CEOs: Who have the most influence on earnings management? *Journal of Financial Economics,* 96, 513-526.

Judge, T.A., Piccolo, R,F., & Kosalka, T. (2009) The bright and dark sides of leader traits: A Review and Theoritical Extension of the Leader Trait Paradigm. *The Leadership Quarterly,* 20, 855-875.

Kalgo, S. H., Noordin, B. A. A., Nahar, H. S., & Turmin, S. Z. (2015) The Impact of Institutional Investors on Real and Accruals Earnings Management around IPO: Evidence from Malaysia Emerging Market. *Capital Market Review,* 23, 65-83.

Lubojacky, C. (2017) The effects of CEO Tenure on entrepreneurial orientation a firm performance. *Academy of Management Proceeding* [Online] Available from: doi: 10.5465/AMBPP [Accessed 14th April 2016].

Littrell, R. F., & Nkomo, S. M. (2005) Gender and race differences in leader behaviour preferences in South Africa. *Women in Management Review,* 20 (8), 562-580.

Malik, M. (2011) Corporate Governance and Real Earnings Management: the role of board and institutional investors. *Journal of Knowledge Globalization,* 8 (1), 37-87.

McMahon, G., & Rosen, A. (2009) Narcissism at Work. [Online] Available from: http://training journal.com. [Accessed 11th April 2016].

Murwaningsari, E., Utama, S., & Rossieta, H. (2015) The Combined Effects of Financial Derivatives and Discretionary Accruals on the Value relevance of Earnings and the Book Value of Equity, *Gadjah mada International Journal of Busine*ss, 17 (2), 179-198.

Nurcahyo, R. & Wibowo, A. D. (2015) Manufacturing Capability, Manufacturing Strategi and Performance of Indonesia Automotive Componen Manufacturer, 12th Globar Conference on Sustainable Manufacturing, *Procedia IEP,* 26, 653-657.

Ouimet, G. (2010) Narcissistic Leadership in Organizations: towards an integrated research model. *Journal of Managerial Psychology,* 25.

Olsen, K. J., Dworkis, K. K., & Young, S. M. (2014) CEO Narcissism and Accounting: A Picture of Profits. *Journal of Management Accounting Research,* 26 (2), 243-267.

Olsen, K. J., & Stekelberg, J. M. (2016) CEO Narcissim and Corporate Tax Sheltering, *The journal of the American taxation association*, 38 (1), 1-22.

O'Reilly III, C. A., Doerr, B., Caldwell, D. F., & Chatman, J. A. (2013) Narcissistic CEO and Executive Compensation. *Leadership Quarterly,* 25, 218-231.

Powell, G. N., & Butterfield, D. A. (2003) Gender, gender identity, and aspirations to top management. Women in Management Review, 18 (1/2), 88-96.

Prawitt, D. F., Smith, J. L., & Wood, D. A. (2009) Internal audit quality and earnings management.*The Accounting Review, 84*(4), 1255-1280.

Qi, B., Yang, R., & Tian G. (2014) Can Media Deter Management from Manipulating Earnings: Evidence from China. *Review of Quantitative Finance and Accounting,* 42 (3), 571-597.

Rijsenbilt, A. (2016) CEO Narcissistic: Measurement and Impac. Erasmus Research Institute of Management, 2011. http://hdl.handle.net/765/23554. Retrieved on 13 April 2016.

Rijsenbilt, A., & Commandeur H. (2013) Narcissus Enter the Courtroom: CEO Narcissism and Fraud, *Journal of Business Ethics,* 117, 413-429.

Roychowdhury, S. 2006. Earnings Management Through Real Activities Manipulation. *Journal of Accounting and Economics,* 42, 335-370.

Scott, W. R. (2015) *Financial Accounting Theory*. Pearson: Toronto

Sawyer, L. B., Dittenhofer, M. A. & Scheiner, J. H. (2003) *The Practice of Modern Internal Auditing*. The IIA (The Institute of Internal Auditors).

Serfling, M. (2014) CEO Age and the Riskiness of Corporate. *Journal of Corporate Finance*, 25, 251-273.

Widarjono, A. (2013) *Ekonometrika: Pengantar dan Aplikasi*. Jakarta, Ekonisia.

Zang, A. Y. (2012) Evidence on the tradeoff between real activities manipulation and accrual-based earnings management. *The Accounting Review,* 87 (2), 675-703.

Zhu, D. H., & Chen, G. (2015) CEO Narcissism and the impact of Prior Board Experience on Corporate Strategy. *Administrative Science Quarterly,* 60 (1), 31-65.