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Is Narcissism Sustainable in CEO Leadership of State-Owned Enterprises?

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Abstract: The state sector has been an important part of many economies. This study measures the narcissism of the chief executive officers (CEOs) of state-owned enterprises (SOEs) unobtrusively, and examines the effect of narcissism on the performance and accounting earnings management of firms. This study shows that the narcissism of CEOs positively affects the performance of SOEs, and that the positive effect is a result of real management decisions rather than accounting earnings management. It also shows that CEO narcissism does not affect the earnings management of SOEs. However, this relation changes as the tenure of the CEO gets longer. As tenure gets longer, a CEO's narcissism negatively affects the performance of a SOE, and a CEO with high narcissism is likely to be involved in earnings management to make up for weak performance. This study suggests that narcissism is not a sustainable leadership style. It also suggests that the personal characteristics of executives in public corporations are important in determining the performance of firms. While a longer tenure ensures that a CEO will pursue his/her strategy steadily, the leadership of a narcissistic CEO becomes negative and ineffective as their tenure gets longer. Considering the importance of SOEs in the economy, this is an important policy implication, as the appointment of a CEO and length of tenure are likely to be determined by the government.

Keywords: state-owned enterprises; performance; earnings management; narcissism; leadership

1. Introduction

Many studies show that the chief executive officers (CEOs) of privately owned companies influence the performance of companies through management skills and experiences [1–4]. The state sector has always been an important element of many economies, including the most advanced ones [5]. Public debt has increased sharply since the 2008 financial crisis, especially in advanced countries [6]. According to the OECD, among the world's 2000 largest companies, 649 are located in Asia, of which about one third have at least 10% state ownership [7]. While this shows the importance of state-owned enterprises (SOEs) especially in Asia, there is little research on the influence of a CEO on a SOE's performance. The influence of a CEO on a SOE's performance can be different from that of a private firm's CEO, because a CEO in a SOE is appointed by the government with a fixed term and employees have a high level of job security. In addition, regulations on the scope of business in SOEs give CEOs little room to change the strategies of firms. Hence, it is not clear whether a CEO's influence on a SOE's performance is similar to that of privately owned companies.

This study focuses on the narcissism of a SOE's CEO. Although narcissism was originally studied as extraordinary status of psychology, it has been explored as leadership in recent studies [8–10]. The CEOs of SOEs are likely to have higher self-admiration than others because of the success in the walk of life up to the position of CEO. By examining whether narcissistic CEOs affect the performance of SOEs and accounting earnings management, this study helps to better understand the determinants of a SOE's performance and earnings management, and provides policy implications in hiring CEOs and determining the tenure of CEOs of SOEs.

This study contributes to the literature in three ways. First, it empirically examines the impact of a CEO's personal characteristics on the performance of SOEs where the environment of leadership is different from private firms. Despite the economic importance of SOEs, there is little research on the relation between narcissism of SOEs' CEOs and firm performance. Second, by analyzing the effect of narcissism on business performance and controlling for accounting manipulation, this study investigates whether the effect of narcissism of a CEO on a firm's performance is achieved through real management decisions or accounting earnings management. Prior studies show that a CEO's narcissism increases the performance of firms [11,12], but it is not clear whether the effect is from a CEO's decisions on operations or from accounting earnings management. This is an important question, especially when Rijsenbilt and Commandeur (2013) show that narcissistic CEOs are more likely to commit a corporate fraud to satisfy their optimism [13]. Finally, this study suggests that the effects of narcissism on firm performance and earnings management are non-linear and vary with the tenure of a CEO. The result suggests that earnings management is a substitute to real management decisions. This is the first study to show that narcissistic CEOs are more likely to engage in earnings management as tenure gets longer. This also implies that narcissism is not sustainable leadership.

This paper is organized as follows. Section 2 examines theories about narcissism and the performance of firms, and sets up testable hypotheses. Section 3 explains the sample used in this study, and presents a narcissism measurement method and research models. Section 4 discusses the empirical analysis results, and Section 5 presents conclusions of the study and suggests policy implications.

2. Theories and Hypotheses

2.1. CEO's Narcissism and Performance of Organization

The word "narcissism" comes from Greek mythology, but it was first adopted by a British physician named Ellis (1898) [14]. Narcissism is used in the sense of perverse self-love. The American Psychiatric Association defines narcissism as a psychological form that begins in early adulthood and has an expanded interpretation of oneself, a lack of empathy, and a need for respect or concern [15]. In general, individuals with strong narcissism are known to compensate for self-esteem or lack of self-confidence by showing that they are superior to others. In other words, it emphasizes self-assurance and ignores the opinions and feelings of others to avoid being criticized by others. This is called the paradox of narcissism [13].

Narcissism was originally investigated as an abnormal psychological state in the field of psychology. Later, the field of research was expanded on how a leader's narcissism affects the performance of an organization. CEOs are more likely to have a higher degree of narcissism than others. When they continue to see signs of respect and consent from the employees around them, they are more likely to be lenient to themselves and susceptible to overconfidence [16]. Naturally, CEOs tend to have overvalued self-assessments and self-esteem [8].

Studies about the effect of a CEO's narcissism on firm performance are inconclusive. Although Resick et al. (2009) showed that a CEO's narcissism is irrelevant to firm performance, most studies conclude that a CEO's narcissism has either a positive or negative effect on performance [17]. On one hand, Kim et al. (2014) divided a CEO's narcissism into power-type narcissism and exhibition-type narcissism, and empirically analyzed the effects of these two types of narcissism on the performance of a corporation [18]. They confirmed that both types of narcissism have a negative effect on performance. Lakey et al. (2008) argued that CEOs with high narcissism have a negative impact on corporate performance by increasing the probability of loss through high-risk investments [19]. Ham et al. (2018) found that firms led by narcissistic CEOs experience lower financial productivity in the form of profitability and operating cash flows [20].

On the other hand, Maccoby (2000) argued that narcissistic leaders benefit organizations by providing a strong vision and leading organizations to new directions [21]. In addition, Yoo (2016) analyzed the correlation between narcissism and corporate diversification strategies for large corporations, and confirmed a positive relationship between the two [22]. He found that narcissistic CEOs have a positive impact on their business through bold diversification strategies during recession. Latham and Braun (2011) reported that CEOs positively influence business restructuring and research and development (R&D) investments in economic downturns through charismatic characteristics that are based on narcissism [11]. Wales et al. (2013) surveyed 173 CEOs, and showed that CEOs with high narcissism tend to have high entrepreneurial spirit and positively influence corporate performance [12]. Narcissism is often perceived as a self-centered and negative personality that does not care about others, but at the same time, a CEO with narcissism is perceived as a charismatic leader with a firm vision pursuing high goals [23].

In addition, Chatterjee and Hambrick (2007) found mixed results regarding the effect of narcissism on firm performance [24]. They concluded that it is not clear whether CEOs with a higher level of narcissism have a negative or positive impact on the performance of a firm, but that they bring about high or low management performance and increase the volatility of firm performance.

2.2. Hypotheses Development

As prior studies suggest, the effects of a CEO's narcissism on a firm's performance have both positive and negative sides. On one hand, narcissism can limit internal communication and make employees reactive rather than proactive [25], which may reduce firm performance. In addition, narcissistic leaders can negatively affect performance by increasing the probability of loss through high-risk investments [19]. On the other hand, narcissistic leaders may improve firm's performance with strong vision, bold diversification, and entrepreneurial spirit [12,21,22].

The impact of a CEO's narcissism on a SOE's performance may be limited or insignificant thanks to the following reasons. First, the appointment of a SOE's CEO is heavily influenced by the government, which suggests that the leadership of a CEO is less likely to be accepted by employees if they believe that the appointment is political. Second, the employees of SOEs have a high level of job security, and are less likely to be fired unless they violate laws. Hence, the disadvantage to employees from disobedience to a CEO's strategy is not as strong as private firms. This implies that followship from employees of SOEs might be weaker compared with private firms. Third, the scope of a SOE's business is generally regulated and defined by laws, and day-to-day operations are more likely to be based on rigid internal codes. Hence, it is unlikely that a CEO can change the way that the firm operates, or the scope within the firm runs its business. Therefore, even if a SOE's CEO wants to exert leadership and influence the performance of a firm, the extent to which the CEO can change the direction of the firm may be limited. For these reasons, it is not clear whether a CEO's influence on a SOE's performance is similar to that of privately owned companies. Whether the narcissism of CEOs will affect the performance of SOEs is an empirical question. Therefore, my first hypothesis is as follows:

Hypothesis 1a. *CEOs' narcissism does not affect performance of SOEs.*

Even when narcissism has an impact on firm performance, the effect may not be linear. Campbell (2005) suggested a "chocolate cake model" to describe the experience of narcissism [26]. At first it felt sweet, but later it becomes uncomfortable and unhealthy. Employees may appreciate a CEO's narcissism and follow his/her leadership in the beginning, but later they feel dull or disinterested and oppose the leadership style, which leads to the negative effect of narcissism on firm performance. Hogan and Kaiser (2005) argued that narcissism initially seems confident and charismatic, but over time, it turns into a sense of entitlement and an inability to learn from mistakes [27]. This suggests that narcissism has an initial positive impact on an organization, but it has a negative impact on an organization's performance later, as the effectiveness of leadership declines.

Factors that negatively affect the performance of organizations include a leader's obsession in his or her own interests and frustration from employees [25,28]. In other words, the positive side of narcissistic leadership becomes ineffective or bad as a CEO stays longer. Hence, I further predict that the effect of narcissism on performance may vary with the tenure of a CEO. Therefore, my second hypothesis follows in a null form:

Hypothesis 1b. *The effect of a CEO's narcissism on an SOE's performance will not change as tenure of a CEO gets longer*.

While CEOs can affect a firm's performance through real management decisions such as developing new customers or investing in new technology, they may resort to accounting management to increase performance. Studies show that a CEO manages earnings for various reasons, including stock market purpose, management compensation, and debt contracts [29,30]. Narcissistic CEOs can manage earnings to show their capability or excellence, especially if they underestimate the likelihood of being caught. Rijsenbilt and Commandeur (2013) analyzed Standard & Poor's 500 CEOs in the United States, and found that CEOs with high narcissism have self-confidence in themselves and unrealistic optimism about future performance [13]. They find that those CEOs are more likely to commit corporate fraud to satisfy their optimism. However, on the other hand, Olsen et al. (2013) argued that a CEO with a high degree of narcissism will face loss of reputation or self-esteem if accounting fraud is discovered [31]. Hence, they found that CEOs with high narcissism affect performance through real management decisions rather than earnings management.

In the case of SOEs, the relation between a CEO's narcissism and earnings management is even more complicated. The CEOs of SOEs may be less likely to manage earnings due to heavy punishment for fraud and strong government oversight. On the other hand, if the CEOs of SOEs have less career concern due to a fixed term with a low likelihood of reappointment, the value of their reputation may be low, which suggests that they will rely on earnings management to boost performance. In addition, all public corporations in South Korea are subject to annual performance evaluations governed by the Ministry of Strategy and Finance. The results of performance evaluations are critical to CEOs because their bonuses are contingent on the results, and they may be fired if the results are not favorable [32]. This suggests that CEOs may have incentives to engage in earnings management to achieve short-term goals. Hence, my third hypothesis is as follows in a null form:

Hypothesis 2a. *Narcissistic CEOs are unlikely to commit accounting earnings management in SOEs*.

I further predict a CEO's incentives to manage earnings to improve a firm's performance get stronger when his/her leadership becomes ineffective. If narcissistic CEOs feel that their leadership becomes ineffective with tenure due to an obsession with their own interests, overconfidence, and dullness or disinterest from employees, they are more likely to use earnings management to make up for a weak performance, believing that they are unlikely to be caught. Hence, my fourth hypothesis is as follows:

Hypothesis 2b. *The relationship between a CEO's narcissism and earnings management will not change with the tenure of a CEO*.

3. Sample Selection and Research Models

3.1. Sample Selection

SOEs (which are known as public institutions in South Korea) are institutions that are established and operated by investment or financial support from the government. South Korean SOEs are regulated by the Act on the Management of Public Institutions (hereafter, the Act). The South Korean government designates SOEs based on the ratio of self-generated revenue and the amount of government grants. According to the Act, SOEs are classified into three types: (i) public corporations; (ii) quasi-governmental institutions; and (iii) non-classified public institutions, depending on their asset size, the ratio of self-generated revenue to total revenue, and the number of employees. In 2015, the Minister of Strategy and Finance designated 316 institutions as public institutions: 30 public corporations, 86 quasi-governmental institutions, and 200 non-classified public institutions [7]. In the 2015 fiscal year, public institutions' total assets were valued at 781.3 trillion won (667 billion USD), and their net profit was 12.5 trillion won (10.7 billion USD).

The South Korean government is the sole owner or the highest percentage share-owner of all SOEs. The government appoints CEOs of SOEs, and evaluates SOEs every year. The results of evaluations by the government determine the amount of bonuses for all employees, including CEOs. The government can fire the CEOs of SOEs based on evaluation results, which suggests that the South Korean government has full control of the hiring and firing the CEOs of SOEs [32]. Each SOE is established by a law and monitored by a specific government agency. In 2015, the government agencies that are involved in establishing and monitoring SOEs include 21 ministries and 13 agencies.

Among the three types of SOEs in South Korea, this study focuses on 30 public corporations for two reasons. First, the performance target of public corporations is the most straightforward. Since public corporations are similar to private corporations in business characteristics, they report on performance in the same way as private corporations, and profitability is the main target of the organizations. In other SOEs, such as quasi-governmental institutions or non-classified public institutions, performance targets are various, depending on the purpose of the organizations. For example, some institutions focus on full spending the budget that they receive from the government, and some institutions target to increase the number of people that they provide services to, which makes comparison across institutions difficult. Second, public corporations report financials based on the same accounting standards as private firms. To measure earnings management, I need to compare SOEs' accruals with those of private corporations in the same industry. Since public corporations are similar to private corporations in accounting standards and the classification of industry, the measurement of earnings management is less likely to be subject to an error. I have collected all the necessary information from the public information management system, which is maintained by the Ministry of Strategy and Finance of Korea for the period of 2009–2014.

3.2. Measurement of Narcissism

One of the biggest challenges in narcissism research is how to measure narcissism. Raskin and Hall (1979) developed the Narcissistic Personality Inventory (NPI) based on 54 questionnaire items to measure narcissism [33]. However, this measurement has a limitation in that it is based on a face-to-face survey where respondents may not answer truthfully, or answer erroneously without knowing his or her own behavior. Hence, an unobtrusive measure of narcissism is used in many studies [34]. Rijsenbilt and Commandeur (2013) used 15 variables to measure narcissism unobtrusively [13]. Once they measured the 15 variables of a CEO, they used principal component analysis (PCA) to reduce the dimensions of narcissism to four, which are authority, superiority, self-admiration, and entitlement. In this study, I follow Rijsenbilt and Commandeur (2013) in measuring narcissism with some adjustment, because some of the variables that they used are not applicable to SOEs in Korea [13]. For example, a variable of corporate jet use is not applicable, as no SOE has a corporate jet in South Korea. The variables that were used in this study to measure narcissism are listed in the following paragraph. These variables have also been used in the studies on Korean firms [34]. The variances of the variables in SOEs are also significant. For example, in 2009, the highest CEO salary was 343 million KRW, while the lowest CEO salary was only 95 million KRW. In addition, based on interviews with three public corporations, CEOs make decisions on most CEO exposure measures, such as his/her picture size in the internal magazine.

CEO compensation: The absolute and relative size of CEO compensation are both considered as indicators of CEO power [35]. I identify three narcissism indicators within the CEO compensation category.

- CEO salary: The sum of the base salary, personal allowances, and performance bonuses of a CEO.
- Ratio of CEO salary to a senior manager's salary: Ratio of total CEO salary to the average senior manager's salary. Senior managers are all executive directors in the company, excluding outside directors. Outside directors are excluded, because they are not compensated based on a full-time job.
- Ratio of CEO salary relative to employee's salary: The salary of a CEO compared to the average salary of employees.

CEO exposure: The narcissistic need for reinforcement and public acknowledgement leads to more exposure [13]. I collect six narcissistic indicators in the CEO exposure category.

- CEO's picture size: Although Rijsenbilt and Commandeur (2013) used the size of the CEO's picture in the annual report [13], it is hard to apply this variable to public corporations in South Korea, because most of the public corporations do not include a picture of their CEO in the annual reports. Instead, I used the size of a CEO's picture in the periodic internal magazines. Most corporations issue an internal magazine periodically, ranging from bimonthly to biannually. I used the first issue of the year to measure the size of the CEO's picture. The first issue of the year normally includes a message from the CEO for the year. I collected a pdf version of the first issue from the website. When corporations did not post old versions of internal magazines, I hand-collected it by requesting old magazines to the corporations or visiting their libraries. In cases where I could not get the magazine at all, I used their Sustainability Report or Corporate Social Responsibility Report. I measured the width and length of a CEO picture, and calculated the area of a picture in square centimeters. If the CEO picture also had other people, I drew the smallest rectangle to include the CEO and measured it. For pdf versions, I printed the page that included a CEO picture, and measured it to be precise.
- Relative size of a CEO picture to the total size of a picture: In most cases, the CEO picture included other people and backgrounds. I measure the ratio of the CEO picture to the total size of the picture.
- Number of books published by a CEO: The number of books published by a CEO based on their personal profile in the most popular web version of who's who in Korea, which is called "naver".
- Number of career lines: Number of career lines up to a CEO position, based on their personal profile.
- Academic degree: A CEO received a value of 1 if they had indicated a Master's degree or higher in the most popular web version of who's who in Korea, which is called "naver", and 0 otherwise.
- Pass to mid-career entrance exam for government officials: The exam for the mid-career level of government officials is considered one of the most difficult exams to pass in South Korea. Success to the exam is regarded as prestigious honor, and guarantees that the candidate will work for the government starting in their mid-career. Even after government officials quit governments and move to other careers such as private or public corporations, they indicate they have passed it in their resume. This indicates CEOs' desire to expose their excellence. Baturo and Mikhaylov (2016) reported that globally, 14–17% of political leaders move to business between 1960 and 2000 [36]. In South Korea, it is also common that government officials or political leaders become executives of SOEs. A CEO received a value of 1 if they indicated that they passed the exam in the most popular web version of who's who in Korea, which is called "naver", and 0 otherwise.

Using these variables, principal component analysis (PCA) was used to extract narcissistic elements. PCA can reduce the number of narcissism measure variables by finding the underlying unobserved latent variables. In this study, I followed Emmons (1984), who suggested four narcissistic elements: (1) entitlement; (2) leadership or authority; (3) superiority or arrogance; and (4) self-admiration [37]. Following Kaiser's criterion, only factors with eigenvalues greater than one are retained. The parameters estimated and the coefficients between each factor and four components of narcissism are reported in the Table 1.

I multiplied each variable with a factor loading for each principal component, and added four standardized scores to form one narcissism score.

Table 1. Factor Structure of Narcissism.

	Entitlement	Superiority	Authority	Self-Admiration
CEO salary	0.5378			
Ratio of CEO salary to senior manager's salary	0.5180			
CEO salary relative to employee salary	0.4689			
CEO's picture size		0.6644		
Relative size of CEO picture to the total size of picture		0.6617		
Academic degree			0.5695	
Passed to mid-career entrance exam for government officials			0.3794	
Number of career lines				0.6703
Number of books published by CEO				0.4343

3.3. Research Model

In order to test the hypotheses of this study, I needed to analyze whether a CEO's narcissism affected the SOE's performance or earnings management. I used the following model for the first and third hypotheses.

$$\mathrm{Y} = \alpha + \beta_1 \cdot \mathrm{Narcissism} + \beta_2 \cdot \ln(\mathrm{Tenure}) + \beta_3 \cdot \ln(\mathrm{Firm\ age}) + \beta_4 \cdot \ln(\mathrm{Sales})\ \beta_5 \cdot \ln(\mathrm{Asset}) + \varepsilon$$

where Y is return on assets (ROA) or discretionary accruals.

Return on assets (ROA) represents the efficient use of assets by SOEs, and is most commonly used as an indicator of firm performance in research [38–40]. For earnings management, I used discretionary accruals based on the modified Jones model, which is the most common measure for earnings management [41]. The earnings of SOEs consist of cash transactions and accruals. While cash transactions are hard to be managed, firms can adjust earnings by changing accruals. Hence, if a firm has higher accruals compared with other firms with similar business activities in the same industry, it is likely that the firm manages its earnings through accruals. The portion of the accruals above normal business activities is called discretionary accruals, and is used as a proxy to earnings management in many studies. To estimate discretionary accruals, first I calculated normal accruals (non-discretionary accruals), which vary with the size of sales and tangible assets for every industry. Once non-discretionary accruals are estimated, discretionary accruals are calculated by deducting non-discretionary accruals from the total accruals for each SOE. In this study, I estimated the coefficients to calculate non-discretionary accruals for each classification of South Korean Standard Industry Classification Code (KSIC) that each SOE belongs to. I also include several control variables such as firm age, sales, asset size, and tenure of CEO [18,22].

The second and fourth hypotheses are that the effects of narcissism on firm performance or earnings management may vary with the tenure of a CEO. I inserted an interaction term of narcissism and tenure in the first model to test the hypotheses. Here, the coefficient of interest is β_2 in the following model.

$$\mathrm{Y} = \alpha + \beta_1 \cdot \mathrm{Narcissism} + \beta_2 \cdot \mathrm{Narcissism} \times \ln(\mathrm{Tenure}) + \beta_3 \cdot \ln(\mathrm{Tenure}) + \beta_4 \cdot \ln(\mathrm{Firm\ age}) + \\ \beta_5 \cdot \ln(\mathrm{Sales}) + \beta_6 \cdot \ln(\mathrm{Asset}) + \varepsilon$$

where Y is return on assets (ROA) or discretionary accruals.

4. Empirical Analyses

4.1. Descriptive Statistics and Correlation Analysis

Table 2 shows the descriptive statistics and correlations of the main variables that were used in this study. The average ROA is 2.8%, and the standard deviation is 6.5% suggesting that SOEs are profitable on average, but some experience losses. The firm age of SOEs is 26.5 years on average, and the average tenure of CEOs is 16.4 months. Discretionary accruals are widely distributed, showing a mean of 0.045 and a standard deviation of 0.119. In the correlation analysis, narcissism and ROA show a positive correlation, as predicted by the first hypothesis. However, this correlation is not statistically significant. Since a correlation analysis does not consider the effects of other control variables, a conclusion should be derived from the regression analysis. Discretionary accruals and assets show a negative correlation, which suggests that large SOEs are less likely to manage earnings, thanks to better governance and internal control. Older SOEs tend to have larger assets and sales. Interestingly, the older the organization, the longer the tenure of the CEO.

Table 2. Descriptive Statistics and Correlation Analysis.

	Mean	**Standard Deviation**	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
(1) ROA	0.028	0.065						
(2) Narcissism	0	1	0.1686					
(3) Firm Age(years)	26.582	17.786	−0.0077	−0.1551				
(4) Tenure(months)	16.414	12.994	0.0109	0.0434	**0.3361**			
(5) ln(Sales)	27.588	1.729	−0.0383	−0.0759	0.1563	0.0968		
(6) ln(Asset)	12.525	0.7	**−0.3796**	0.014	**0.2241**	0.0833	**0.7101**	
(7) Discretionary Accruals	0.045	0.119	**0.4678**	−0.0063	−0.1204	−0.0384	0.0674	**−0.2362**

Correlation coefficients that are significant at 5% or higher are in bold.

4.2. Regression Analyses

Table 3 shows the results of the first hypothesis. The first hypothesis is to test whether a CEO's narcissism affects the performance of SOEs. In Model 1, I examined whether narcissism affects the performance of public corporations, while controlling for the characteristics of a CEO and the firm age. The result shows that narcissism positively affects the ROA of public corporations at a significance level of 10%. In other words, in public corporations, a CEO's narcissism seems to be a positive factor in the performance of a firm. In Model 2, the relationship between narcissism and performance continues to be positive, even after controlling for the sales and assets of the firm. The result is statistically significant at 1%. In terms of control variables, larger firms have lower performance. This is likely because, in the case of public corporations, large firms have assets that do not generate profits, or that need more time to generate profits, such as unutilized lands owned due to government policies. In Model 3, year fixed effects are added to control any omitted variables, and the results confirm that narcissism has a positive effect on performance. Finally, in Model 4, discretionary accruals are additionally controlled to exclude the possibility that a positive relationship between narcissism and firm performance results from earnings management, rather than from actual management decisions that CEOs make. The increase of R^2 from 21.9% to 24.9% suggests that the model with discretionary accruals better explains the relation between narcissism and firm performance. The results show that discretionary accruals are positively correlated with ROA, which implies that higher accruals increase the earnings of firms. However, the relationship between narcissism and ROA remains unaffected by including discretionary accruals as a control variable. The coefficient is positive, and has a significance level of 5%. This implies that narcissistic CEOs increase the performance of SOEs through management decisions, rather than accounting manipulation.

Table 3. Relationship between narcissism and performance of SOEs.

Dependent Variable: Return on Assets (ROA)					
Variable	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**
Narcissism	0.0110 * (0.0059)	0.0153 *** (0.0039)	0.0170 *** (0.0051)	0.0147 ** (0.0065)	0.0423 *** (0.0118)
Narcissism x ln(Tenure)					−0.0098 ** (0.0038)
ln(Tenure)	−0.0021 (0.0089)	−0.0018 (0.0064)	−0.0011 (0.0077)	−0.0025 (0.0069)	−0.0032 (0.0065)
ln(Firm age)	−0.0408 (0.171)	0.167 * (0.0821)	0.182 * (0.0971)	0.143 (0.111)	0.162 (0.104)
ln(Sales)		0.0132 (0.0080)	0.0141 (0.0078)	0.0054 (0.0114)	0.0055 (0.0109)
ln(Asset)		−0.0621 ** (0.0216)	−0.0631 ** (0.0210)	−0.0382 * (0.0184)	−0.0384 ** (0.0162)
Discretionary accruals				0.211 * (0.102)	0.219 * (0.104)
Intercept	0.200 (0.721)	−0.245 (0.420)	−0.306 (0.475)	−0.227 (0.535)	−0.303 (0.524)
Sample	80	80	80	80	80
R-squared	0.003	0.217	0.219	0.249	0.256
Year fixed effect	No	No	Yes	Yes	Yes

Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In hypothesis 1b, I projected that the effect of narcissism on the performance of firms may vary with the tenure of a CEO. The rationale was that narcissism might become a negative factor on firm performance since a CEO feels entitled and is unlikely to change, and employees eventually become opposed to the leadership style. To test this, I included an interaction term of tenure and narcissism in Model 5 of Table 3. The coefficient of the interaction term was negative and statistically significant, suggesting that the positive effect of narcissism on business performance becomes negative as the term of a CEO gets longer. In other words, the leadership of a CEO with high narcissism positively affects the performance of SOEs at the beginning of the CEO's term. However, over time, it seems to have a negative effect on the performance of the organization, due to the ineffectiveness of narcissism as a leadership style. This supports the "chocolate cake model" of narcissism [26]. In terms of economic significance, the increase of one month over the average tenure, 16.4 months, decreases the positive impact of narcissism on performance by 1.43%.

Table 4 shows the results of testing the third hypothesis (H2a). This hypothesis tested whether a narcissistic CEO of a SOE uses earnings management to boost earnings. In Model 1, I examined whether narcissism affects the earnings management of firms controlling for the characteristics of a CEO and firm age. The result shows that narcissism of a SOE's CEO does not affect discretionary accruals. Olsen et al. (2013) argued that a CEO with high narcissism avoids accounting fraud due to the cost of reputation and the loss of self-esteem if accounting fraud is discovered [31]. This study also shows that narcissism is not related to the discretionary accruals of SOEs, suggesting that a narcissistic CEO avoids accounting manipulation. This is possibly due to the high cost of reputation or self-esteem. In Model 2, the relationship between narcissism and discretionary accruals continues to be insignificant after further controlling for the sales and assets of the firm. As in Model 1, it shows that narcissism is not related to the accounting manipulation of the firms. However, firms with larger assets have smaller discretionary accruals. This implies that larger corporations have less room to manage earnings because of a better internal control system. In Model 3, I further control for the leverage of firms. Some studies show that firms with higher leverage have an incentive to manage earnings to avoid violations of financial covenants in debt contracts [42]. However, others show that firms with higher leverage are less likely to manage earnings because of stronger monitoring by debt holders [29,43]. The results in Model 3 show that narcissism does not affect earnings management with the control of leverage. Finally, in Model 4, I added year fixed effects to control for any time-invariant omitted variables, and found that the result was not affected.

Table 4. Relationship between narcissism and earnings management.

Dependent Variable: Discretionary Accruals					
Variable	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**
Narcissism	−0.0019 (0.0150)	0.0066 (0.0123)	0.0055 (0.0131)	0.0101 (0.0136)	−0.0218 (0.0176)
Narcissism x ln(Tenure)					0.0112 * (0.0050)
ln(Tenure)	0.0060 (0.0105)	0.0081 (0.0105)	0.0079 (0.0105)	0.0063 (0.0105)	0.0070 (0.0105)
ln(Firm age)	−0.0970 (0.323)	0.130 (0.180)	0.1170 (0.188)	0.173 (0.198)	0.148 (0.198)
ln(Sales)		0.0402 * (0.0185)	0.0396 * (0.0180)	0.0406 ** (0.0182)	0.0401 * (0.0181)
ln(Asset)		−0.116 *** (0.0353)	−0.115 *** (0.0342)	−0.118 *** (0.0344)	−0.116 *** (0.0342)
Debt ratio			−0.0165 (0.0460)	−0.0133 (0.0473)	−0.0151 (0.0480)
Intercept	0.436 (1.348)	−0.161 (0.967)	−0.0983 (0.984)	−0.321 (1.024)	−0.225 (1.028)
Sample	80	80	80	80	80
R-squared	0.003	0.217	0.219	0.249	0.256
Year fixed effect	No	No	No	Yes	Yes

Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In the hypothesis 2b, I projected that the effect of narcissism on earnings management can change depending on the tenure of a CEO. As the tenure of a CEO gets longer, a positive effect of narcissism can be diminished and become negative, in which case a CEO may use earnings management to make up for weak performance. In Model 5 of Table 4, an interaction term between narcissism and tenure shows a positive and statistically significant coefficient. This shows that narcissistic CEOs are more likely to use discretionary accruals as their tenure gets longer. This can be the result of efforts to make up for the ineffectiveness of narcissism as leadership, or a growing underestimation of the likelihood of being caught for accounting fraud as tenure gets longer. This also suggests that CEOs' incentives to achieve short-term goals such as better annual evaluation outweigh the costs of loss of reputation. The results from Tables 3 and 4 suggest that narcissistic CEOs are effective in the beginning of their tenure, because employees accept their leadership. However, as their tenure gets longer, the leadership becomes ineffective, and negatively affects a firm's performance. Hence, CEOs seem to rely on earnings management to boost performance.

5. Conclusions

The state sector has always been an important element of many economies, including the most advanced ones. Although the public enterprise sector in the OECD area has become smaller than in many emerging countries, SOEs remain important across the board in a few OECD economies, and in particular in network industries such as energy, telecommunications, transport, and the banking sector [44]. Hence, what determines the performance of SOEs and the CEO's role in determining a SOE's performance are important questions for scholars and policy makers.

I measured the narcissism of CEOs of SOEs unobtrusively, and examined the effect of narcissism on performance and accounting earnings management. The results show that a CEO's narcissism positively affects a SOE's performance, and that the positive effect is a result of management decisions rather than earnings management. This study also shows that a CEO's narcissism does not affect the earnings management of SOEs, possibly because of the cost of reputation and strong monitoring by the government. However, this relation changes as the tenure of CEOs gets longer. As tenure gets longer, a CEO's narcissism negatively affects the performance of a SOE, and a CEO with high narcissism is likely to be involved in earnings management to make up for weak performance. Campbell (2005) compared narcissism to chocolate cake [26]. In other words, the transformational leadership brought by narcissism initially appears to be positive, but it turns into self-centered leadership over time, and negatively affects the performance of SOEs. In other words, narcissism is not sustainable leadership.

This study contributes to the literature in several ways. It empirically examines the impact of a CEO's personal characteristics on the performance of SOEs where the environment of leadership is different from private firms. It also shows that the effects of narcissism on a firm's performance and earnings management are non-linear, and vary with the tenure of a CEO. This is the first study to show that narcissistic CEOs are more likely to engage in earnings management as their tenure gets longer.

This study suggests that the personal characteristics of executives in public corporations are important in determining the performance of firms [45]. Despite the bureaucracy and rigidity of SOEs, the narcissism of CEOs seems to work as a positive leadership in the first place. However, this leadership becomes ineffective as CEOs stay longer. While a longer tenure ensures that a CEO will pursue his/her strategy steadily, the leadership of a narcissistic CEO becomes negative and ineffective as the tenure gets longer. This study also suggests that it is necessary to monitor SOEs on possible earnings management when narcissistic CEOs stay longer. Considering the significance of SOEs in the economy, this is an important policy implication, as the appointment of a CEO and the length of tenure are determined by the government. Identifying an optimal length of tenure to maximize the positive effect of narcissism as leadership can be a path for future research.

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References

1. Hambrick, D.C.; Mason, P.A. Upper Echelons: The organization as a reflection of Its Top managers. *Acad. Manag. Rev.* **1984**, *9*, 193–206. [CrossRef]
2. Carpenter, M.A.; Sanders, G.; Gregersen, H.B. Bundling human capital with Organizational Context: The Impact of International Assignment Experience on Multinational Firm Performance and CEO Pay. *Acad. Manag. J.* **2001**, *44*, 493–511.
3. Park, J.H.; Sung, Y.D.; Kim, C.S. The CEO hubris and firm performance: The moderating role of board independence and chaebol affiliation. *Korean Manag. Rev.* **2013**, *42*, 673–697.
4. Rosha, A.; Lace, N. The scope of coaching in the context of organizational change. *J. Open Innov. Technol. Mark. Complex.* **2016**, *2*, 2. [CrossRef]
5. Ahi, M.T.; Yildiz, K. Determining performance criteria of railway market: A case study. *J. Open Innov. Technol. Mark. Complex.* **2018**, *4*, 6. [CrossRef]
6. Kim, E.; Ha, Y.; Kim, S. Public Debt, Corruption and Sustainable Economic Growth. *Sustainability* **2017**, *9*, 433. [CrossRef]
7. The Organisation for Economic Co-operation and Development (OECD). *State-Owned Enterprises in Asia: National Practices for Performance Evaluation and Management*; OECD: Paris, France, 2016.
8. Raskin, R.; Novacek, J.; Hogan, R. Narcissistic self-esteem management. *J. Personal. Soc. Psychol.* **1991**, *60*, 911–918. [CrossRef]

9. Petrenko, O.V.; Aime, F.; Ridge, J.; Hill, A. Corporate social responsibility or CEO narcissism? CSR motivations and organizational performance. *Strateg. Manag. J.* **2016**, *37*, 262–279. [CrossRef]
10. Chatterjee, A.; Pollock, T.G. Master of puppets: How narcissistic CEOs construct their professional worlds. *Acad. Manag. Rev.* **2017**, *42*, 703–725. [CrossRef]
11. Latham, S.; Braun, M. Economic recessions, strategy, and performance: A synthesis. *J. Strategy Manag.* **2011**, *4*, 96–115. [CrossRef]
12. Wales, W.J.; Patel, P.J.; Lumpkin, G.T. In Pursuit of Greatness: CEO Narcissism, Entrepreneurial Orientation, and Firm Performance Variance. *J. Manag. Stud.* **2013**, *50*, 1041–1069. [CrossRef]
13. Rijsenbilt, A.; Commandeur, H. Narcissus enters the courtroom: CEO narcissism and fraud. *J. Bus. Ethics* **2013**, *117*, 413–429. [CrossRef]
14. Ellis, H. Auto-eroticism: A psychological study. *Alienist Neurol.* **1898**, *19*, 260–299.
15. American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.; APA: Washington, DC, USA, 2000.
16. Chen, S. The role of ethical leadership versus institutional constraints: A simulation study of financial misreporting by CEOs. *J. Bus. Ethics* **2010**, *93*, 33–52. [CrossRef]
17. Resick, C.J.; Whitman, D.S.; Weingarden, S.M.; Hiller, N.J. The bright side and the dark side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *J. Appl. Psychol.* **2009**, *94*, 1365–1381. [CrossRef] [PubMed]
18. Kim, K.H.; Lee, S.Y.; Park, S.H.; Park, H.J. The Effects of CEO's Narcissism on Corporate Performance: The Moderating Role of CEO's Tenure. *Korean Corp. Manag. Rev.* **2014**, *21*, 61–81.
19. Lakey, C.E.; Rose, P.; Campbell, W.K.; Goodie, A.S. Probing the link between narcissism and gambling: The mediating role of judgment and decision-making biases. *J. Behav. Decis. Mak.* **2008**, *21*, 113–137. [CrossRef]
20. Ham, C.; Seybert, N.; Wang, S. Narcissism is a bad sign: CEO signature size, investment, and performance. *Rev. Account. Stud.* **2018**, *23*, 234–264. [CrossRef]
21. Maccoby, M. Narcissistic leaders: The incredible pros, the inevitable cons. *Harv. Bus. Rev.* **2000**, *78*, 68–78.
22. Yoo, J.W. The Effects of CEO's Narcissism on Diversification Strategy and Performance in an Economic Downturn: The Moderating Role of Corporate Governance System. *Manag. Inf. Syst. Rev.* **2016**, *35*, 1–19.
23. Rosenthal, S.A.; Pittinsky, T.L. Narcissistic leadership. *Leadersh. Q.* **2006**, *17*, 617–633. [CrossRef]
24. Chatterjee, A.; Hambrick, D.C. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Adm. Sci. Q.* **2007**, *52*, 351–386. [CrossRef]
25. Nevicka, B.; Ten Valden, F.; Hoogh, A.B.D.; Van Vianen, A.M. Reality at odds with perceptions: Narcissistic leaders and group performance. *Psychol. Sci.* **2011**, *22*, 1259–1264. [CrossRef] [PubMed]
26. Campbell, W.K. *When You Love a Man Who Loves Himself: How to Deal with a One-Way Relationship*; Sourcebooks Casablanca: Chicago, IL, USA, 2005.
27. Hogan, R.; Kaiser, R. What we know about leadership. *Rev. Gen. Psychol.* **2005**, *9*, 169–180. [CrossRef]
28. Hambrick, D.C.; Fukutomi, G.D.S. The seasons of a CEO's tenure. *Acad. Manag. Rev.* **1991**, *16*, 719–742. [CrossRef]
29. Healy, P.M.; Wahlen, J.M. A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Account. Horiz.* **1999**, *13*, 365–383. [CrossRef]
30. Leuz, C.; Nanda, D.; Wysocki, P.D. Earnings management and investor protection: An international comparison. *J. Financ. Econ.* **2003**, *69*, 505–527. [CrossRef]
31. Olsen, K.J.; Dworkis, K.K.; Young, S.M. CEO narcissism and accounting: A picture of profits. *J. Manag. Account. Res.* **2013**, *26*, 243–267. [CrossRef]
32. Hong, S.; Kim, T.K. Regulatory capture in agency performance evaluation: Industry expertise versus revolving-door lobbying. *Public Choice* **2017**, *171*, 167–186. [CrossRef]
33. Raskin, R.N.; Hall, C.S. A narcissistic personality inventory. *Psychol. Rep.* **1979**, *45*, 590. [CrossRef] [PubMed]
34. Lee, S.Y.; Kim, K.H.; Park, S.H.; Park, H.J. An Examination of Validity for Unobtrusive Measure for CEO Narcissism. *Korean J. Bus. Adm.* **2015**, *28*, 491–503.
35. Hambrick, D.C.; D'Aveni, R.A. Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Manag. Sci.* **1992**, *38*, 1445–1466. [CrossRef]
36. Baturo, A.; Mikhaylov, S. Blair disease? Business careers of the former democratic heads of state and government. *Public Choice* **2016**, *166*, 335–354. [CrossRef]

37. Emmons, R.A. Factor analysis and construct validity of the narcissistic personality inventory. *J. Personal. Assess.* **1984**, *48*, 291–300. [CrossRef] [PubMed]
38. Bertrand, M.; Schoar, A. Managing with Style: The Effect of Managers on Firm Polices. *Q. J. Econ.* **2003**, *118*, 1169–1208. [CrossRef]
39. Crossland, C.; Hambrick, D.C. How national systems differ in their constraints on corporate executives: A study of CEO effects in three countries. *Strateg. Manag. J.* **2007**, *28*, 767–789. [CrossRef]
40. Liu, Y. A Comparison of China's State-Owned Enterprises and Their Counterparts in the United States: Performance and Regulatory Policy. *Public Adm. Rev.* **2009**, *69* (Suppl. 1), S46–S52. [CrossRef]
41. Dechow, P.M.; Sloan, R.G.; Sweeney, A.P. Detecting Earnings Management. *Account. Rev.* **1995**, *70*, 193–225.
42. Franz, D.R.; HassabElnaby, H.R.; Lobo, G.J. Impact of proximity to debt covenant violation on earnings management. *Rev. Account. Stud.* **2014**, *19*, 473–505. [CrossRef]
43. Sweeney, A.P. Debt-covenant violations and manager's accounting responses. *Account. Econ.* **1994**, *17*, 281–308. [CrossRef]
44. Kowalski, P.; Büge, M.; Sztajerowska, M.; Egeland, M. *State-Owned Enterprises Trade Effects and Policy Implications*; OECD Trade Policy Papers; OECD: Paris, France, 2013.
45. Kim, J.H.; Jung, S.H. Study on CEO characteristics for management of public art performance centers. *J. Open Innov. Technol. Mark. Complex.* **2015**, *1*, 5. [CrossRef]