

# EARNINGS MANAGEMENT, CORPORATE GOVERNANCE, AND OWNERSHIP STRUCTURE OF PHILIPPINE INITIAL PUBLIC OFFERINGS

Angelo O. Burdeos \*

\* University of San Carlos, Cebu City, the Philippines  
Contact details: University of San Carlos, P. Del Rosario Street, 6000 Cebu City, the Philippines



## Abstract

**How to cite this paper:** Burdeos, A. O. (2021). Earnings management, corporate governance, and ownership structure of Philippine initial public offerings. *Corporate Ownership & Control*, 18(4), 175–191. <https://doi.org/10.22495/cocv18i4art12>

Copyright © 2021 The Author

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). <https://creativecommons.org/licenses/by/4.0/>

**ISSN Online:** 1810-3057

**ISSN Print:** 1727-9232

**Received:** 27.04.2021

**Accepted:** 30.07.2021

**JEL Classification:** G32, G34, M480

**DOI:** 10.22495/cocv18i4art12

Prior studies examined the effect of corporate governance variables on discretionary current accrual, the most widely used measurement of earnings management. The principal-agent conflict implies that the size of the board, the percent of independent directors, CEO duality, and auditor prestige limit discretionary current accruals (DCA). This paper extends past studies by examining the effect of ownership structure on discretionary current accruals. The study determines the level of income-increasing earnings management of initial public offerings (IPOs) in the Philippines and the factors that explain it. Particularly, the paper examines the effect of ownership concentration and largest shareholder ownership on discretionary current accruals. The study uses a final sample of 105 IPO firms in Philippine Stock Exchange (PSE) from 2008 to 2018. Employing the modified Jones's (1991) model to measure discretionary current accrual and multiple regression analysis, the study finds -4.19% discretionary current accrual on the average. It also reveals that the 2002 Philippine Code of Corporate Governance (PCCG) is ineffective in curbing earnings management. In addition, there is an insignificant relationship between the size of the board, CEO duality, ownership concentration, largest shareholder ownership and auditor prestige, and earnings management. Furthermore, the paper finds a significant relationship between the percent of independent directors, industry sector, return on assets (ROA) and cash flow from operations and earnings management.

**Keywords:** Earnings Management, Corporate Governance, Ownership Structure, Principal-Agent Conflict, Principal-Principal Conflict

**Authors' individual contribution:** The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

**Declaration of conflicting interests:** The Author declares that there is no conflict of interest.

## 1. INTRODUCTION

Earnings management by firms going public is well studied in finance and accounting literature. Numerous researchers have reported the earnings management phenomenon in many countries. For instance, Teoh, Welch, and Wong (1998a) documented earnings management in the US during

the initial public offerings (IPOs) year using 1,649 IPO firms during 1980–1992. Also in the US, Friedlan (1994) conducted a study using 277 samples covering the period 1981–1984 and he found that firms going public managed the financial statements prior to the IPO by adjusting the discretionary current accruals (DCA) upwards leading to higher earnings. Ahmad-Zaluki (2008)

confirmed the existence of earnings management in Malaysia using 250 Malaysian IPO companies covering the period 1990–2000. Roosenboom, van der Goot, and Mertens (2003) documented earnings management in the Netherlands with 68 samples during the IPO year but not prior to the offering. Tykvořá (2006) reported earnings management in Germany with 250 IPOs for the period 1999–2000. Contrary findings are also reported by others. Aharony, Lin, and Loeb (1993) examined 229 IPO firms for the period 1985–1987 and found very weak support for earnings manipulation. Ball and Shivakumar (2008) likewise proved that IPO firms reported more conservatively using 394 samples in the UK during 1992–1999.

Recent studies recorded the earnings management phenomenon. Gumanti, Nastiti, Utami, and Manik (2015) using 62 samples of IPOs in Indonesia between 2000 and 2006 confirmed the existence of earnings management. Another study conducted by Gumanti, Nastiti, and Lestari (2016) using 75 IPOs for the period 2003 to 2012 also recorded the phenomenon. Another study in Indonesia by Pramithasari and Yasa (2016) using 31 samples for the period 2008 to 2012 also confirmed earnings management. Kouwenberg and Thontirawong (2016) reported earnings management for 1,427 IPOs in eight Asian countries from 2001 to 2010. Alhadab and Clacher (2018) using 498 IPO samples from 1998 to 2008 documented discretionary accruals in the United Kingdom.

In spite of the much evidence recorded in other countries, earnings management studies in the Philippines are scarce. Banderlipe (2009) reported earnings management in post-IPO or existing publicly-listed firms in the Philippines but not for IPO firms. The motivation to manage earnings for existing publicly-listed firms might be different. It could be to align with financial analysts' expectations. Thus, there is a gap in the literature on whether IPO firms do income-increasing earnings management in the Philippines.

An IPO firm is generally unknown to the public. At this important stage of a firm's life, there is information asymmetry between the firm and the investing public (Leland & Pyle, 1997; Titman & Trueman, 1986). The investing public's main source of information in buying an IPO is the prospectus, the document that the firm submits to the Securities and Exchange Commission (SEC), which is the agency that regulates all publicly-listed companies; and the Philippine Stock Exchange (PSE), which is the institution that requires and monitors submission of prospectus, disclosures, and financial reports. The prospectus contains important information regarding a company that goes public including financial statements for the previous three years before the company goes public. DeAngelo (1988) and Alford (1992) report that investors appraise stock price value using price-earnings (P/E) ratio extensively of similarly listed firms. This is because data for other forms of valuing the firm is not yet available for investors. Knowing this fact, firms that go public for the first time have the incentive to do income-increasing earnings management to influence initial offer price and consequently firm value.

Most investigations on factors that explain earnings management focus on proxies for

corporate governance, particularly, the role of the board of directors in controlling earnings management while controlling for some firm characteristics as predictors. These studies use the agency theory (Jensen & Meckling, 1976) as a theoretical foundation. This current paper is different because it uses not only corporate governance variables from the perspective of a principal-agent problem but also proxies for ownership structure from the perspective of a principal-principal problem (Claessens & Fan, 2002; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Specifically, the study tests whether ownership concentration and largest shareholder ownership explain earnings management in the context of the Philippines. These have not yet been tested using the Philippine data, and few studies were done using ownership structure in emerging countries in explaining earnings management. In addition, firm characteristics such as industry classification, return on assets (ROA), and cash flow from operations are also used as control variables.

Corporate governance effect on the integrity of financial reporting of firms caught renewed attention of regulators, investors, banks, and other users of financial reports after the 1997 Asian financial crisis, and the string of corporate misconducts primarily in the United States of America between 2001–2002 (Wong, 2009). The two events resulted in the release of new guidelines in corporate governance such as the changes suggested by the Organization for Economic Cooperation and Development (OECD). The Philippines instituted the suggested guidelines and released the 2002 Philippine Code of Corporate Governance (PCCG). Specifically, the 2002 PCCG includes the addition of at least two independent directors on the board or 20% of the board whichever is higher; the addition of audit, compensation, and nomination committees, and the separation of the role of the chairman of the board and the CEO. The paper wants to find out whether the 2002 PCCG limits income-increasing earnings management behavior by IPO firms by comparing earnings management values before 2002 and during the period 2002–2018.

Studies confirm that corporate governance is found to control earnings management in the US (Beasley, 1996; Klein, 2002), the United Kingdom (Peasnell, Pope, & Young, 2005), Canada (Park & Shin, 2004), Taiwan (Chen, Elder, & Hsieh, 2007), and Korea (Choi, Jean, & Park, 2004). Most investigations focus on corporate governance from the perspective of agency theory (Jensen & Meckling, 1976). Corporate governance being studied include the following among others: the size of the board, percent of independent director on the board, CEO duality, auditor prestige, underwriter prestige, and presence of finance experts in the audit committee. Agency theory implies that because of the separation of ownership and control board monitoring is necessary to control the opportunistic behavior of managers. This perspective is mostly applicable in developed countries where ownership is diffused widely. However, in the case of emerging markets such as the Philippines where ownership concentration by one family is very common, the conflict is not between the principal and the agent but between the majority owner and

the minority owners. It becomes a principal-principal problem (Claessens & Fan, 2002; Young et al., 2008).

One of the aims of this paper is to determine the level of income-increasing earnings management of IPOs in the Philippines. In addition, the paper wants to find out what factors explain income-increasing earnings management. Particularly, the paper wants to examine the effect of size of the board, percent of independent directors on the board, CEO duality, ownership concentration, family ownership, auditor prestige, and some control variables on income-increasing earnings management.

The findings of this study are important to IPO investors as it will allow them to price IPO firms properly. It will also inform them whether to trust published earnings of IPO firms in their prospectus. The findings are also of importance to the SEC as they will inform them whether PCCG impacted the quality of financial statement reports of IPO firms. The findings are also important to minority shareholders as they will inform them whether the monitoring cost they instituted such as the requirement of having outside auditors examine the financial statements is effective. The study contributes to the growing body of knowledge on earnings management by examining whether this phenomenon is also true in the Philippines, an emerging economy. Although some studies have already been conducted for other emerging economies like Malaysia and Indonesia, the majority of the studies on the phenomenon are from developed countries like the United States, the United Kingdom, Germany, and the Netherlands.

In summary, the paper wants to address the following research questions:

*RQ1: What is the level of income-increasing earnings management of IPO firms in the Philippines?*

*RQ2: Is there a significant difference between earnings management before and after the new guidelines of corporate governance of 2002 in the Philippines?*

*RQ3: What are the factors that explain the earnings management phenomenon in the Philippines?*

The rest of the paper is organized as follows. Section 2 covers the review of related literature and hypotheses development. Section 3 explains the methodology, describes the sample data, and measurements of variables. Results and discussion is presented in Section 4 while Section 5 concludes the paper.

## 2. REVIEW OF EARNINGS MANAGEMENT LITERATURE AND HYPOTHESES DEVELOPMENT

Earnings management study is anchored in at least three theoretical frameworks: signaling theory, agency theory or the principal-agent problem, and principal-principal problem.

### 2.1. Signaling theory

Akerlof (1970) suggested that the presence of “lemons” or bad products in the market creates uncertainty. It can drive good quality products out of the market because of opportunity loss created by the presence of “lemons” which cause the average

price to go down. He used the market for used cars in his analysis. In the used car market, there is information asymmetry between the sellers of used cars and the buyers of the same. The presence of “lemons” in the market drives the average price down because buyers have no knowledge of the quality of the used cars. The result is the opportunity loss for good cars and opportunity gain for “lemons”. In order for good quality used cars to be purchased at a high price, the seller must signal their quality. In the case of used cars, the seller can perhaps provide a product warranty or sign a contract assuring the buyer of the quality of the car. In the same token, information asymmetry exists between issuers of IPOs and buyers of the same or the investing public (Leland & Pyle, 1977). Issuers must find a way of signaling their quality to the investors. They argued that entrepreneurs or IPO issuers signal quality to the investing public by retaining a large portion of ownership. This move they believe signals that the existing owners are confident of the prospects of their company.

In the context of earnings management, managers exploit this information asymmetry situation to their advantage by using their discretion to choose income-increasing accounting methods thereby increasing reported earnings. Higher reported earnings would mean higher offer price because as mentioned, investors price IPOs extensively using P/E ratio. For managers, reporting higher earnings signals good performance to prospective buyers.

Researchers developed methods in detecting managers’ opportunistic behavior by examining the financial statements of the firms around the time of the event of the behavior. In the case of IPOs, they examine the financial statements reported in the prospectus published prior to the IPO. The methods developed by researchers in the literature show a progression from using total accruals as a proxy for earnings management to DCA as a proxy. Healy (1985) and DeAngelo (1986) used total accruals as a proxy for earnings management. Critics say that this is not the case. Total accruals are composed of a discretionary part, one that managers have a say on how to manage; and the non-discretionary part, one that is influenced by economic and business conditions, and thus cannot be controlled by managers. Roosenboom et al. (2003) mentioned that only discretionary accruals were subject to the control of managers, while non-discretionary accruals were constrained by rules and economic circumstances. As a result, the next measures of earnings management techniques focused on measuring the non-discretionary part and subtracted this from the total accruals to get the DCA. Jones’s (1991) model used a technique of regressing total accruals divided by lagged total assets with three regressors; the inverse of lagged total assets, the changes in total revenues divided by lagged total assets, and the property plant and equipment (PPE) divided by lagged total assets. The regression generated three estimators  $\alpha_1$ ,  $\alpha_2$ ,  $\alpha_3$ . These were then used in the calculation of the non-discretionary current accruals (NDCA). Dechow, Sloan, and Sweeney (1995) noticed that the changes in total revenue in Jones’s (1991) technique might not be non-discretionary.

To address this concern, they came up with a modified Jones's model where a change in accounts receivable is subtracted from the change in total revenues. After testing the models for accuracy in testing DCA, they concluded that the modified Jones's (1991) model was the most powerful in detecting DCA. This study uses a modification of the modified Jones's model as used by Tykvoa (2006), and Gumanti et al. (2016). It was a modification of the modified Jones's model because the two studies did not include PPE divided by lagged total asset as a regressor.

A plethora of studies document earnings management using DCA in different countries as mentioned in the previous section. For instance, Kouwenberg and Thontirawong (2016) reported an average of 0.05 earnings management for 1,427 IPOs in nine Asian countries from 2001 to 2010. These countries include Hongkong, Indonesia, India, Korea, Malaysia, the Philippines, Thailand, Taiwan, and Singapore. In addition, Gumanti et al. (2015), Gumanti et al. (2016), and Pramithasari and Yasa (2016) reported earnings management using DCA.

## 2.2. Agency theory

Jensen and Meckling (1976) defined agency relationship as a contract where one or more individuals (principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent. In corporations, the principals are the shareholders while the managers are the agents. Managers are assumed to be utility maximizers. They will make decisions that are not in the interests of the shareholders, thus creating a conflict. In order to align the interests of the agent with the principal, monitoring costs are needed. These costs include giving performance incentives to the agent and requiring the agent to pay bonding costs. Residual loss, the amount of money lost due to divergent decisions by the agent is also part of the monitoring costs. The contract creates a condition where ownership and control are separated. The separation creates principal-agent problems in organizations. Furthermore, Jensen and Meckling (1976) did not limit the contract between the shareholders and managers, they described organizations as a nexus for a set of contracting relationships among individuals.

Jensen and Meckling (1976) analyzed agency costs from two perspectives. One was from the equity holders. The second was from debt holders. In the case of equity holders, which is of interest to this study, they used owner-manager as the agent in their analysis. They suggested that as the percent of equity ownership of the owner-manager goes down it will tend to encourage him/her to channel bigger amounts of company resources to himself/herself in the form of pecuniary and nonpecuniary perquisites. This then will induce outside shareholders to use more company resources to monitor his/her behavior. The monitoring methods include formal auditing of financial statements by outside auditors, budget restrictions, formal control systems, incentive schemes for the agent to align his/her interest with

the principals, and others. They summarized these monitoring costs as 1) the monitoring expenditures by the principal; 2) the bonding expenditures by the agent; 3) the residual loss.

Fama and Jensen (1983) called this a separation of risk-bearing and decision-making functions in organizations. They argued that separation of risk-bearing and decision-making functions survived in organizations because it created an effective common approach in addressing the agency problems. In business organizations, owners are also called shareholders, risk-bearers and residual claimants. Residual claimants because they have claims to whatever is left after fixed payments payoffs or incentive payoffs are subtracted from variable inflows of resources to the organization.

Applying the agency theory to the context of earnings management in initial public offerings, managers have the motivation to manage earnings probably because of the promised incentives they will receive if the IPO is successful. That is, all offered shares are sold at a good price. From the perspective of shareholders, this may be aligned with their goal of wealth maximization. However, from the perspective of the SEC, it is of their interest to preserve the integrity of the reported earnings. Thus, SEC must implement policies that curb earnings management behavior by managers.

Fama and Jensen (1983) emphasized the importance of the role of outside directors in controlling opportunistic behavior of managers. Outside directors' motivation in minimizing divergent goals between risk-bearing owners and managers is anchored on protecting their reputation as experts. They should make sound decisions or recommendations to protect their names. This implies that the higher the number of outside directors the lesser the opportunistic behavior. Jensen and Meckling (1976) asserted that one of the contracts that managers agree with was to allow outside auditors to examine the financial statements of the firm. Thus, the reputation, prestige or quality of outside auditors can curb opportunistic behavior of managers. In addition, Jensen and Meckling (1976) implied that post-IPO retained ownership of original owners can limit opportunistic behavior of managers. As retained ownership of original owners falls, the higher they tended to appropriate pecuniary and nonpecuniary perquisites to themselves.

In summary, principal-agent conflict suggests that certain variables control opportunistic behavior of managers such as 1) size of the board; 2) the presence of outside independent directors; and 3) the hiring of a prestigious outside auditor. Moreover, the board can hire the services of a prestigious underwriter during the IPO to control the opportunistic behavior of managers.

## 2.3. Principal-principal problem

Emerging economies, that is low-income, rapid-growth countries that use economic liberalization as the main engine of growth, do not have stable institutions that are present in developed economies (Hoskisson, Eden, Lau, & Wright, 2000). Thus, the role of board of directors in monitoring the behavior of the managers is weak (Peng, 2004). This means that they have less monitoring and

control role. As a result, ownership concentration by a family becomes the norm in emerging economies (Chen, 2001; Claessens, Djankov, & Lang, 2000; La Porta, Lopez-de-Silanes, & Shleifer, 1999). The controlling family appoints key roles in the firm to minimize divergence of goals between shareholders and managers. There are benefits reported by family business scholars of dominant ownership. It can reduce agency cost through the alignment of ownership and control (Fama & Jensen, 1983; Jensen & Meckling, 1976), develop goal congruence (Habbershon & Williams, 1999), reduce monitoring cost (Lubatkin, Schulze, Ling, & Dino, 2005), and increase performance (Anderson & Reeb, 2003).

These reported benefits however have corresponding problems that arise. Particularly, expropriation of minority shareholders. Expropriation can occur in various forms such as the appointment of less-qualified family members, friends, and cronies to the board (Faccio, Lang, & Young, 2001); purchasing of supplies and materials from group member companies at a higher price (Khanna & Rivkin, 2001), and choosing strategies that are beneficial only to the majority owners (Backman, 2001). This creates a conflict between the majority and the minority shareholders and not between shareholders and managers because the managers are friends if not members of the family. Thus, this is now known to be a principal-principal problem (Dharwadkar, George, & Brandes, 2000). Young et al. (2008) suggested that the principal-principal problem resulted from concentrated ownership, extensive family ownership and control, business group structures and weak legal protection. Ownership of publicly-listed companies in the Philippines, an emerging economy with low-income, rapid-growth characteristics, is dominated by few families. Ownership is concentrated among few owners with one family as the largest owner. The dominant family also owns controlling shares in affiliated businesses forming a business group or conglomerate. In addition, legal frameworks are weak in the Philippines, that is laws are not strictly implemented. It fits the description by Young et al. (2008).

In summary, principal-principal problem theory suggests that ownership concentration, largest shareholder ownership, CEO duality, and group affiliation affect earnings management.

This paper combines the principal-agent conflict variables, which are commonly tested in developed economies, and principal-principal conflict variables, which are more commonly tested in emerging economies. This paper tests the effect of size of the board, percent of an independent board of directors on the board, CEO duality, ownership concentration, shareholding of the largest shareholder, auditor prestige on earnings management while controlling for the industry sector, ROA and cash from operations (CFO).

## 2.4. Hypotheses

### 2.4.1. Discretionary current accruals (DCA)

Signaling theory suggests that due to the information asymmetry between IPO firms and investors, good quality firms signal their quality to

the public (Akerlof, 1970). One way of signaling quality is to report good performance to the public through the financial statements in the prospectus. Thus, managers have the motivation to perform income-increasing earnings management.

Empirical studies from several countries confirm income-increasing earnings management by IPO firms. Teoh, Wong, and Rao (1998b) reported a median of 4.01% DCA during the IPO year in the US covering the period 1980-1992. Also using US data, Chang, Chung, and Lin (2010) reported a mean of 4.8% and a median of 2.10% DCA for the period 1989-2003. In Taiwan, Chen, Lin, and Zhou (2005) documented DCA of 8.3% for using IPO firms between 1992-2002. Roosenboom et al. (2003) reported that in the Netherlands between 1981-1997 the mean DCA is 0.21% for the year end prior to the IPO and 6.55% during the IPO year. It is noteworthy to say that DCA is lower at year  $t-1$  or the year before the IPO. In Malaysia, Ahmad-Zaluki, Campbell, and Goodacre (2011) examined IPO firms in Malaysia and reported a median of 2.92% DCA and a mean of 3.78%. Gumanti et al. (2015) using 62 samples of IPOs in Indonesia between 2000 and 2006 recorded a mean of negative 11% DCA, the most common measurement of earnings management. Another study by Gumanti et al. (2016) using 75 IPOs for the period 2003 to 2012 reported negative 4.6% mean DCA. Another study in Indonesia by Pramithasari and Yasa (2016) using 31 samples for the period 2008 to 2012 reported 23.8% DCA. Kouwenberg and Thontirawong (2016) reported an average of 5% earnings management for 1,427 IPOs in eight Asian countries from 2001 to 2010. Alhadab and Clacher (2018) using 498 IPO samples from 1998 to 2008 documented negative 17.6% discretionary accruals in the United Kingdom.

It should be noted that the Philippines instituted the 2002 SEC PCCG designed to strengthen the role of the board of directors in order to improve the integrity of financial reporting among other things. It is expected that this will improve the quality of reporting by IPO firms in the Philippines. Hence, the paper makes another hypothesis.

*H1: DCA from 2002-2018 is significantly lower than DCA before 2002.*

### 2.4.2. Corporate governance proxies

#### *Size of the board (SB)*

Fama and Jensen (1983) emphasized the importance of outside independent directors in monitoring opportunistic behavior of managers. What is important to them is their human capital, believing that they will not allow their names to be tarnished from any scandal. The addition of outside independent directors to the board of directors could mean an increase in the size of the board of IPO firms.

Several empirical studies involving existing publicly-listed companies across the globe examine the effectiveness of the size of the board in explaining earnings management. The results are varied. Many findings support the theory that a bigger size of the board limits earnings management (Chtourou, Bedard, & Courteau, 2001; Xie, Davidson, & DaDalt, 2003; Peasnell et al., 2005;

Bugshan, 2005; Ebrahim, 2007). These authors found a negative significant relationship between the size of the board and earnings management. On the other hand, other authors found a positive significant relationship between the size of the board and earnings management (Kao & Chen, 2004; Rahman & Ali, 2006; Alves, 2012). Furthermore, some authors found that the size of the board was not significant in explaining earnings management (Banderlipe, 2009; Cornett, Marcus, & Tehranian, 2008; Gulzar & Wang, 2011; Jaggi, Leung, & Gul, 2009).

A study by Ahmad-Zaluki et al. (2011) involving 250 IPOs covering the period 1990–2000 in Malaysia found that the size of the board did not explain earnings management. They found an insignificant relationship.

This paper, consistent with Fama and Jensen (1983) and findings by the majority of previous researches hypothesize the following:

*H2: Size of the board relates negatively with earnings management.*

#### *Percent independent board of directors (PBOD)*

Fama and Jensen (1983) suggested that outside directors control opportunistic behavior of managers. They have to protect their human capital by supporting sound decisions such as reporting true income in the financial statements. Thus, the higher number of outside independent directors the lower will income-increasing earnings management be.

Prior studies on the effect of independent directors on curbing income-increasing earnings management are performed on post IPO or firms that are already publicly listed. Studies by Peasnell et al. (2005), Cornett et al. (2008), Ebrahim (2007), and Jaggi et al. (2009) supported the theory that indeed the percentage of independent directors on the board limits income-increasing earnings management. However, many studies found an insignificant relationship (Xie et al., 2003; Rahman & Ali, 2006; Park & Shin, 2004; Bugshan, 2005; Banderlipe, 2009).

A recent study on IPO firms that went public in Indonesia by Gumanti et al. (2016) supported the theory that the proportion of independent directors on the board limits income-increasing earnings management. However, an earlier study on IPO firms by Chen et al. (2007) found an insignificant relationship.

Thus, this paper consistent with Fama and Jensen (1983) makes the following hypothesis:

*H3: Percent of independent directors on the board relates negatively to earnings management.*

#### *Ceo duality (CEO\_Duality)*

Jensen (1993) asserted that it was imperative to make the position of the CEO independent from the position of the chairman of the board. The chairman runs board meetings and supervises the process of hiring, firing, and compensating the CEO. The CEO cannot execute this function without being biased. Therefore, the oversight

function of the board is diminished if the CEO and the chairman of the board is one and the same person.

Most studies on the effect of CEO duality on income-increasing earnings management is done on post-IPO or existing publicly-listed company. Dechow, Sloan, and Sweeney (1996) discovered that firms that manage earnings have a high probability to have a company founder as CEO who also acted as the chairman of the board. Several authors found an insignificant relationship between CEO duality and Income-increasing earnings management (Chtourou et al., 2001; Xie et al., 2003; Kao & Chen, 2004; Peasnell et al., 2005; Rahman & Ali, 2006; Ebrahim, 2007; Cornett et al., 2008; Jaggi et al., 2009; Banderlipe, 2009).

The 2002 PCCG suggests that chairman of the board and CEO positions should be occupied by different persons to avoid conflict of interest.

Consistent with Jensen (1993), this study makes the following hypothesis:

*H4: There is a positive relationship between CEO duality and earnings management.*

#### *Auditor prestige (AUDITOR)*

Jensen and Meckling (1976) included hiring external auditors to review financial statements as one of the contracts managers enter into to protect shareholders' interests. This implies that hiring a prestigious external auditor to review financial statements can limit income-increasing earnings management. Empirical studies were conducted on the effect of auditor quality on earnings management.

Studies on the effect of auditor quality or prestigious editors on income-increasing earnings management for publicly-listed companies differ in results. Some findings supported the hypothesis that Big 3, Big 4, Big 5, Big 6 as high as Big 8 auditors significantly limits income-increasing earnings management (Becker, DeFond, Jiambalvo, & Subramanyam, 1998; Koh, 2003; Park & Shin, 2004; Ebrahim, 2007). However, other finds reported insignificant relationship (Choi et al., 2004; Davidson, Goodwin-Stewart, & Kent, 2005; Peasnell et al., 2005; Rahman & Ali, 2006; Ali, Salleh, & Hassan, 2008; Banderlipe, 2009; Jaggi et al., 2009).

For the effect of auditor prestige on income-increasing earnings management for IPO firms, the findings are also varied. Chang et al. (2010) find an insignificant relationship. Alsultan (2017) finds that Big 4 audit firms do not deter earnings management in pre-IPO years in Saudi Arabia. However, the majority of findings supported the hypothesis that auditor prestige limits income-increasing earnings management (Ducharme, Malatesta, & Sefcik, 2001; Zhou & Elder, 2001; Chen et al., 2005; Ahmad-Zaluki et al., 2011; Gumanti et al., 2015; Alhadab & Clacher, 2018).

Thus, consistent with Jensen and Meckling (1976) and the findings of many empirical papers that supported it, this paper makes the following hypothesis:

*H5: Auditor prestige limits income-increasing earnings management.*

### 2.4.3. Ownership structure proxies

#### Ownership concentration (OWN)

Ownership concentration by a few owners became the norm in emerging economies in order to fill the gap of institutional deficiencies (La Porta et al., 1999; Claessens et al., 2000). This setup can reduce agency cost through the alignment of ownership and control (Fama & Jensen, 1983; Jensen & Meckling, 1976); and it develops goal congruence (Habbershon & Williams, 1999). This implies that ownership concentration limits opportunistic behavior of managers in general.

Studies conducted on the effect of ownership concentration on income-increasing earnings management were primarily on post-IPO or existing publicly-listed companies. The majority of these studies found an insignificant relationship between ownership concentration and income-increasing earnings management (Choi et al., 2004; Bugshan, 2005; López-Iturriaga & Hoffman, 2005; Rahman & Ali, 2006). Alves (2012) found a negative significant relationship while Gulzar and Wang (2011) found a positive significant relationship.

Following Jensen and Meckling (1976), Fama and Jensen (1983), and Habbershon and Williams (1999) the paper makes the following hypothesis:

*H6: Ownership concentration limits income-increasing earnings management.*

#### Largest shareholder ownership (LARGEST\_SH)

Empirical studies on the effect of the percent ownership of the largest shareholder on income-increasing earnings management again recorded varied results. Park and Shin (2004) and Davidson et al. (2005) found an insignificant relationship. On the other hand, López-Iturriaga and Hoffman (2005) and Jaggi et al. (2009) revealed a negative significant relationship. These studies were conducted for existing publicly-listed companies.

Extending these studies to IPOs and following Jensen and Meckling (1976), Fama and Jensen (1983), and Habbershon and Williams (1999) the paper makes the following hypothesis:

*H7: Percent ownership of largest shareholder is positively related to income-increasing earnings management.*

### 2.4.4. Control variables

#### Industry

Some authors used the industry where the IPO firms are classified as control variables. Teoh et al. (1998a) used oil and gas industry as a control variable for their study using US data. They find a negative significant relationship. This means that firms that belong to the oil and gas industry have less income-increasing earnings management than firms that belong in other industries. Roosenboom et al. (2003) use manufacturing and technology as separate control variables using Canadian data. They found an insignificant relationship for both industries. Chen et al. (2005) used electronics industry as a control variable in examining Taiwan IPO firms. They found a negative significant relationship.

Chang et al. (2010) used high technology industry as a control variable using US data. They found a negative significant relationship. Koh (2003) used existing publicly-listed firm data in Australia and used mining industry as a control variable. He found an insignificant relationship.

Thus this paper makes the following hypothesis.

*H8a: A relationship exists between natural resources industry and income-increasing earnings management.*

*H8b: A relationship exists between manufacturing industry and income-increasing earnings management.*

#### Return on assets (ROA)

Researchers used ROA both in IPO and post IPO firm studies as a control variable. Kothari, Leone, and Wasley (2005) showed that operating performance is associated with the amount of DCA. They used cash flow from operations and return on assets as explanatory variables. In the same manner, Chang et al. (2010) used CFO and change in ROA in predicting DCA. Moreover, Jaggi, Chin, Lin, and Lee (2006) used ROA in explaining DCA. They predicted a significant positive relationship. These studies reported varied results. For IPO firms, Chen et al. (2005) found insignificant results while Jaggi et al. (2006) found positive significant results. On the other hand, Chang et al. (2010) found negative significant results. For post IPO firms, López-Iturriaga and Hoffman (2005), Rahman and Ali (2006), and Ali et al. (2008) found insignificant results. Jaggi et al. (2009) and Gulzar and Wang (2011) found a negative significant relationship while Banderlipe (2009) found a positive significant relationship.

Therefore, this paper makes the following hypothesis:

*H9: Return on assets is positively related to income-increasing earnings management.*

#### Cash flow from operations (CFO)

Operating performance is associated with income-increasing earnings management (Kothari et al., 2005). Cash flow from operations is a good proxy of operating performance because it shows the firm's capacity to support its current operations, pay its obligations, and make new investments (Gumanti et al., 2016).

The majority of the studies on IPO firms that include cash flow from operations as control variables showed that it was negatively and significantly related to income-increasing earnings management (Chen et al., 2005, 2007; Chang et al., 2010; Gumanti et al., 2016). A study by Ducharme et al. (2001) found an opposite positive significant relationship.

In the case of post IPO firms, the same pattern was observed. Choi et al. (2004), Peasnell et al. (2005), and Alves (2012) showed that cash flow from operations was negatively and significantly related to income-increasing earnings management. However, Gulzar and Wang (2011) found a positive significant relationship contrary to the majority of the findings while Rahman and Ali (2006) and Ali et al. (2008) found an insignificant relationship.

Thus, this paper makes the following hypothesis:

*H10: Cash flow from operations is negatively and significantly related to income-increasing earnings management.*

### 3. METHODOLOGY

#### 3.1. Sample

The study covers IPO firms listed in PSE from 1988 to 2018. The number of IPO firms originally collected with prospectuses was 203. Of these, 53 companies under the financial sector that includes banks, insurance, financial institutions, and real estate companies were not included. This is consistent with other studies that exclude these industries because they require different methods in detecting discretionary current accruals. They have different operating characteristics and have complex properties that are unique and different from other sectors. Financial sector firms are excluded because the nature of accruals for these firms differs from other sectors (Kouwenberg & Thontirawong, 2016; Muttakin, Khan, & Mihret, 2017). Financial sector firms have specific rules that might affect the level of discretionary current accruals (Gumanti et al., 2015). Most mining and oil companies do not have complete financial statement data. In addition, seven firms listed by way of introduction were also excluded. The computation of discretionary current accruals requires at least two years of complete financial statements and at least four firms per industry (Gumanti et al., 2016). Because of this, 31 more firms were removed from the sample. Furthermore, outliers or firms that have large discretionary current accrual values were removed from the sample. The final sample used in the analysis is 105. Table 1 shows the summary of industries with the corresponding number of firms used in the study.

**Table 1.** Frequency distribution of samples

Industry	Number of IPO firms
Chemicals	7
Construction infra & allied services	9
Electricity, energy, power & water	10
Electrical components & equipment	5
Food beverage & tobacco	15
Holding	13
Hotel & leisure casino & gaming	4
Information technology	5
Media & telecommunications	5
Property	15
Retail	8
Transportation	9
Total	105

#### 3.2. Definition and measurement of variables

##### 3.2.1. Dependent variables

This study uses DCA as a proxy for income-increasing earnings management. DCA is the unexplained current accruals or abnormal accruals resulting from the changes in revenues (Park & Shin, 2004). Chang et al. (2010) mentioned that earnings management can be accomplished by early recognition of revenues or delayed recognition of expenses or a combination of both. DCA is

the difference between total current accruals and NDCA. DCA is the portion that managers have control while NDCA is subject to industry, regulatory, and economic conditions.

Several studies used the modified Jones's (1991) model in measuring DCA (Teoh et al., 1998a; Zhou & Elder, 2001; Chen et al., 2005; Jaggi et al., 2006; Chang et al., 2010; Ahmad-Zaluki et al., 2011). The modified Jones's (1991) model used property plant and equipment lagged by PPE as one of the regressors in determining the NDCA part of the total current accruals. This paper uses a modification of the modified Jones's (1991) model as used by other researchers (Roosenboom et al., 2003; Tykiová, 2006; Gumanti et al., 2016). These studies did not include PPE as a regressor in determining NDCA.

Calculation of the DCA uses the following steps:

1. Calculate the current accruals (CA) of IPO in year  $t$  using the following equation:

$$CA = \frac{\Delta(\text{current assets} - \text{cash}) - \Delta(\text{current liabilities} - \text{long term liabilities due in less than 1 year})}{TA_{jk,t-1}} \quad (1)$$

2. Calculate the NDCA of firm  $i$  in sub-sector  $j$  using two steps:

Step 1:

$$\frac{CA_{jk,t}}{TA_{jk,t-1}} = \alpha_{j,t,0} \frac{1}{TA_{jk,t-1}} + \alpha_{j,t,1} \frac{\Delta REV_{jk,t}}{TA_{jk,t-1}} + \varepsilon_{jk,t} \quad (2)$$

where,

- $CA_{jk,t}$  = current accruals of firm  $k$  in sub-sector  $j$  at year  $t$ ;
- $TA_{jk,t-1}$  = total assets of firm  $k$  in sub-sector  $j$  at year  $t-1$ ;
- $\Delta REV_{jk,t}$  = the change of revenues (year  $t$  minus year  $t-1$ ) of firm  $k$  in sub-sector  $j$ ;
- $\alpha_{j,t,0}, \alpha_{j,t,1}$  = regression coefficients of NDCA of firm  $k$  in sub-sector  $j$ .

Step 2: Substitute regression coefficients calculated from equation (2) above in the equation below to calculate the NDCA of IPO firm at year  $t$ .

$$NDCA_{ji,t} = \hat{\alpha}_{j,t,0} \frac{1}{TA_{ji,t-1}} + \hat{\alpha}_{j,t,1} \frac{\Delta REV_{ji,t} - \Delta AR_{ji,t}}{TA_{ji,t-1}} \quad (3)$$

where,

- $NDCA_{ji,t}$  = non-discretionary current accruals (NDCA) of IPO firm  $i$  in sub-sector  $j$  at year  $t$ ;
- $TA_{ji,t-1}$  = total assets of IPO firm  $i$  in sub-sector  $j$  at  $t-1$ ;
- $\Delta REV_{ji,t}$  = the change of revenues (year  $t$  - year  $t-1$ ) of IPO firm  $i$  in sub-sector  $j$ ;
- $\Delta AR_{ji,t}$  = the change of accounts receivable (year  $t$  - year  $t-1$ ) of IPO firm  $i$  in sub-sector  $j$ ;
- $\hat{\alpha}_{j,t,0}, \hat{\alpha}_{j,t,1}$  = regression coefficients of NDCA components of firm  $k$  in sub-sector  $j$  from equation (2).

3. Finally, calculate the DCA as the remaining portion of the current accruals:

$$DCA_{ji,t} = \frac{CA_{ji,t}}{TA_{ji,t-1}} - NDCA_{ji,t} \quad (4)$$



### 3.2.2. Independent variables

The paper studies the variables implied by the agency theory. For the conflict between principals and agents, the paper uses the size of the board (*SB*), percentage of independent directors on the board (*PBOD*), and auditor prestige (*AUDITOR*). These three variables in theory limit the opportunistic behavior of managers. For the conflict between majority and minority

principals, the paper considers the percentage ownership of the top 5 owners (*OWN*), and the percentage of ownership of the largest shareholder (*LARGEST\_SH*). These two variables in theory limit opportunistic behavior of managers. Table 2 summarizes the independent variables used in the study and the authors that support its relationship with income-increasing earnings management.

**Table 2.** Definition and measurement of independent variables

Variable	Definition	Source
<i>SB</i>	Size of the board	Fama and Jensen (1983), Ahmad-Zaluki et al. (2011), Chtourou et al. (2001), Xie et al. (2003), Peasnell et al. (2005), Bugshan, (2005), Ebrahim (2007)
<i>PBOD</i>	Percentage of independent directors on the board	Fama and Jensen (1983), Chen et al. (2007), Gumanti et al. (2016)
<i>CEO_Duality</i>	1 if chairman of the board and CEO are the same; 0 otherwise	Kao and Chen (2004), Cornett et al. (2008), Jaggi et al. (2009), Gulzar and Wang (2011)
<i>AUDITOR</i>	Big 3 accounting and auditing firm	Jensen and Meckling (1976), Ducharme et al. (2001), Zhou and Elder (2001), Chen et al. (2005), Ahmad-Zaluki et al. (2011), Chang et al. (2010)
<i>OWN</i>	Ownership concentration — natural log of ratio of percentage shares owned by top 5 owners to non-top 5 owners	Sullivan and Unite (2001), La Porta et al. (1999), Claessens et al. (2000), Chen, (2001), Fama and Jensen (1983), Jensen and Meckling (1976), Choi et al. (2004), Bugshan (2005), López-Iturriaga and Hoffman (2005), Rahman and Ali (2006), Alves (2012)
<i>LARGEST_SH</i>	Natural log of the ratio of percentage owned by largest shareholder to the other shareholders	Park and Shin (2004), Davidson et al. (2005), López-Iturriaga and Hoffman (2005), Jaggi et al. (2009)

### 3.2.3. Control variables

This paper includes control variables commonly used by researchers in earnings management

studies. These are *Industry*, *Leverage*, *ROA*, and *CFO*. Table 3 shows the definition and source of these variables.

**Table 3.** Definition and measurement of control variables

Variable	Definition	Source
<i>IND1</i>	1 if electricity, energy, power and water subsector; 0 otherwise	Jaggi et al. (2006), Chang et al. (2010), Kothari et al. (2005)
<i>IND2</i>	1 if chemicals; construction, infra, and allied services, electrical components & equipment, and food, beverage and tobacco subsector; 0 otherwise	Roosenboom et al. (2003)
<i>ROA</i>	Net income divided by total assets	Kothari et al. (2005), Chang et al. (2010), Jaggi et al. (2006)
<i>CFO</i>	The net operating cash flow from operation at year <i>t</i> is standardized by the total assets of the previous year ( <i>t-1</i> ). Year <i>t</i> is the year of the last complete financial statements reported in the prospectus.	Kothari et al. (2005), Chang et al. (2010), Chen et al. (2005), Ducharme et al. (2001), Gumanti et al. (2016)

### 3.3. Data analysis

The equation below is used in testing the hypothesis:

$$DCA_i = \beta_0 + \beta_1 SB_i + \beta_2 PBOD_i + \beta_3 CEO\_Duality_i + \beta_4 AUDITOR_i + \beta_5 OWN_i + \beta_6 LARGEST\_SH_i + \beta_7 IND1_i + \beta_8 IND2_i + \beta_9 ROA_i + \beta_{10} CFO_i + \epsilon_i \quad (5)$$

where, *DCA* is the discretionary current accruals; *SB* is the size of the board; *PBOD* is the percentage of independent director on the board; *AUDITOR* is the top 3 accounting firm preferred by IPO firms; *OWN* is the percentage of ownership owned by the top 5 owners; *LARGEST\_SH* is the percentage of ownership owned by the top 1 owner; *IND1* is an industry dummy variable with a value of 1 if the IPO firm belongs to natural resources industry; *IND2* is an industry dummy variable with a value of 1 if the IPO firm belongs to manufacturing industry; *ROA* is the return on assets; *CFO\_TA\_t1* is the cash flow from operations divided by lagged total assets.

### 4. RESULTS AND DISCUSSION

One of the objectives of this study is to determine whether there is income-increasing earnings management in the Philippines for the period 1988–2018. Using a modification of the modified Jones's (1991) model (Roosenboom et al., 2003; Tykvová, 2006; Gumanti et al., 2016) in measuring *DCA*, results in Table 4 shows an average *DCA* of negative 4.19%. This means that on average IPO firms that went public during this period have income-decreasing earnings management. Examining

Table 6 Panel A, 57 IPO firms or 54.8% have negative DCAs with an average of negative 26% while 48 IPO firms or 45.2% have positive DCAs with an average of 22.38%. Table 6 Panel A also reveals that the difference is significant. This result is somewhat surprising because this is contrary to the signaling theory which implies that managers of IPO firms have the motivation to report income-increasing earnings management to signal quality. However, this result is not unique to the Philippines. Gumanti et al. (2016) record negative 4.6% in Indonesia using 75 samples covering the period 2003-2012. Tykvová (2006) also recorded negative 0.86% in Germany for the period 1997-2002 with 175 samples. Many researchers recorded income-increasing earnings management (Teoh et al., 1998a; Zhou & Elder, 2001; Chen et al., 2005; Chang et al., 2010).

One possible reason for the negative DCA result is that, unlike most studies where DCA is computed using two-year financial statements including the year of the IPO following Teoh et al. (1998a), this study uses complete financial statements data of the previous two years leading to the IPO year. This is also the case in the study of Gumanti et al. (2016) where they use two years of

financial statements prior to the year of the IPO and they also got a negative DCA result. Ball and Shivakumar (2008) question the use of IPO year in computing for the DCA for the reason that proceeds from the offering can influence the performance of IPO firms because of the increase in working capital generated during the offering year. They find that in the case of the United Kingdom, IPO firms report conservatively due to the increasing scrutiny of financial statement users such as investors, auditors, boards, regulators, and analysts. Another possible explanation for the negative DCA is that IPO firms are not actually concerned about a higher offering price but rather control of the firm after the IPO. For this reason, they signal quality through retaining a large portion of outstanding stocks and through underpricing and therefore lower offering price (Leland & Pyle, 1977). This strategy cannot be copied by poor-performing firms.

#### 4.1. Descriptive statistics

Table 4 below presents the summary statistics of the variables used in the study.

Table 4. Descriptive statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
DCA	104	-0.0419073	0.4107199	-1.652812	1.635228
SB	104	8.384615	2.020803	5	15
PBOD	104	0.1199856	0.1391589	0	0.4285714
OWN	104	0.7664383	0.6234731	-1.237874	2.887033
CEO_Duality	104	0.4519231	0.5000933	0	1
LARGEST_SH	104	-0.0750076	1.014527	-2.751535	2.886999
AUDITOR	104	0.7307692	0.4457081	0	1
IND1	104	0.0961538	0.2962297	0	1
IND2	104	0.3365385	0.4748137	0	1
ROA	104	0.087632	0.078533	-0.2968599	0.3704388
CFO_T1	104	0.0803965	0.3353831	-2.300289	1.245616

#### 4.2. Correlation matrix of variables

Table 5 shows the correlation between the variables.

The table reveals that multicollinearity issue does not exist.

Table 5. Correlation matrix of variables

	DCA	SB	PBOD	CEO_Duality	OWN	LARGEST_SH	AUDITOR	IND1	IND2	ROA	CFO_T1
DCA	1										
SB	0.14	1									
PBOD	0.15	-0.19	1								
CEO_Duality	-0.10	-0.17	0.14	1							
OWN	0.02	-0.11	0.20	0.12	1						
LARGEST_SH	0.02	-0.10	0.11	0.04	0.70	1					
AUDITOR	-0.11	0.12	-0.30	-0.02	-0.11	-0.03	1				
IND1	-0.13	0.10	0.05	-0.10	0.05	0.07	0.05	1			
IND2	-0.09	0.03	-0.04	0.01	0.04	0.13	-0.03	-0.23	1		
ROA	0.30	0.12	-0.03	0.06	0.25	0.18	0.02	0.09	0.13	1	
CFO_T1	-0.41	0.01	0.02	0.11	0.08	0.03	-0.01	0.18	0.06	0.18	1

### 4.3. Univariate analysis

Table 6 below exhibits the result of the t-test of variables by groups.

**Table 6.** Univariate analysis: t-test of variables by groups

<b>Panel A: ttest DCA by income-increasing/decreasing DCA</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	57	-0.26	0.05	0.35		
1	47	0.22	0.05	0.31		
Combined	104	-0.04	0.04	0.41		
Diff		-0.49	0.07		-7.43	0.00
<b>Panel B: ttest DCA by ListingDate</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	47	0.03	0.05	0.31		
1	57	-0.10	0.06	0.47		
Combined	104	-0.04	0.04	0.41		
Diff			0.13	0.08	1.59	0.12
<b>Panel C: ttest DCA by AUDITOR</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	28	0.03	0.06	0.30		
1	76	-0.07	0.05	0.44		
Combined	104	-0.04	0.04	0.41		
Diff		0.10	0.09		1.13	0.26
<b>Panel D: ttest DCA by INDI</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	94	-0.02	0.04	0.40		
1	10	-0.20	0.17	0.53		
Combined	104	-0.04	0.04	0.41		
Diff		0.18	0.14		1.31	0.19
<b>Panel E: ttest DCA by IND2</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	69	-0.02	0.06	0.47		
1	35	-0.09	0.05	0.27		
Combined	104	-0.04	0.04	0.41		
Diff		0.08	0.09		0.90	0.37
<b>Panel F: ttest SB by ListingDate</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	47	8.19	0.22	1.48		
1	57	8.54	0.31	2.38		
Combined	104	8.38	0.20	2.02		
Diff		-0.35	0.40		-0.88	0.38
<b>Panel G: ttest PBOD by ListingDate</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	47	0.25	0.01	0.08		
1	57	0.01	0.01	0.07		
Combined	104	0.12	0.01	0.14		
Diff		0.24	0.01		16.61	0.00
<b>Panel H: ttest CEO_Duality by ListingDate</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	47	0.55	0.07	0.50		
1	57	0.37	0.06	0.49		
Combined	104	0.45	0.05	0.50		
Diff		0.18	0.10		1.90	0.06
<b>Panel I: ttest DCA by CEO_Duality</b>						
Group	Obs.	Mean	Std. err.	Std. dev.	t	p
0	57	-0.01	0.06	0.43		
1	47	-0.09	0.06	0.38		
Combined	104	-0.04	0.04	0.41		
Diff		0.08	0.08		0.99	0.33

Another objective of the study is to determine whether the 2002 PCCG was effective in limiting income-increasing earnings management in the Philippines. Table 6 reveals that the average DCA from 1988-2001 is negative 10% while between 2002-2018 DCA is positive 3%. The difference though is not significant ( $t = 1.59$ ,  $p = 0.12$ ). Thus, the study suggests that PCCG is ineffective in limiting income-increasing earnings management behavior of managers of IPO firms. In fact, the result suggests that it enhances opportunistic behavior of managers. Although the difference is insignificant, it is expected that there should be a significant difference in favor of income-decreasing effect of

PCCG. A possible explanation of this is the weak enforcement of laws by regulatory bodies due to the lack of qualified personnel and funding (Wong, 2009). She further noted that the judiciary system is ineffective in protecting the rights of minority shareholders. Cases filed against wrongdoers take so much time to decide. Cayanan (2007) observes that nobody has ever been imprisoned for not complying with financial reporting standards. Furthermore, Cayanan (2019) raises a concern regarding independent directors. He questions the independence of outside directors nominated by the controlling shareholders. How can they make independent decisions when they receive

benefits because of the nomination of the controlling shareholders? According to him, it is a move in a positive direction to increase the number of independent directors. However, these independent directors should come from minority shareholders. Perhaps, the Philippines should make it mandatory for companies to follow the PCCG in order to have value. Abraham, Marston, and Jones (2015) reported that Indian companies are highly compliant with corporate governance disclosure requirements after making it mandatory and imposing increasing severity of penalties for noncompliance. Cuomo, Mallin, and Zattoni (2016) assert that legislators and policymakers should continue to develop and update national corporate governance codes in order to address the potential failures of corporate governance mechanisms in place. Otherwise, managers knowing these institutional weaknesses may find the environment conducive for opportunistic behavior.

#### 4.4. Regression results

Table 7 shows that the variables used in this study explain 40.6% of the variance in the discretionary current accruals.

Table 7. OLS regression results

Variable	Predicted sign	m	Remarks
SB	-	0.028	not supported
PBOD	-	0.591**	significant, not supported
CEO_Duality	+	-0.073	not supported
AUDITOR	-	-0.081	not supported
OWN	-	-0.05	not supported
LARGEST_SH	-	0.011	not supported
IND1	?	-0.207*	negative relationship
IND2	?	-0.132*	negative relationship
ROA	+	2.227***	supported
CFO_T1	-	-0.537***	supported
_cons		-0.303	
r2		0.406	
r2_a		0.342	
Rmse		0.333	
F		6.3	
P		0	

Notes: \* significant at 10%, \*\* significant at 5%, \*\*\* significant at 1%.

The study predicts that corporate governance variables and ownership structure variables significantly relate to DCA. The regression results of the study in Table 7 show that only the percent of independent directors (*PBOD*) significantly affects *DCA* among the corporate governance proxies used in the paper. This finding is contrary to some studies but also consistent with others. In addition, the relationship between ownership structure variables and *DCA* is insignificant. Table 7 also shows that the control variables used in the paper significantly affect *DCA*. The subsequent paragraphs present, explain, and interpret the findings for each independent variable. The subsequent paragraphs also discuss how the findings differ or are similar to that of previous authors.

Table 4 shows that the average size of the board (*SB*) is 8.38. Its effect on *DCA* while controlling for other variables is insignificant as shown in Table 7. This result is contrary to

the implication of agency theory, which suggests that the size of the board limits opportunistic behavior of managers. This finding is consistent with insignificant findings by many researchers (Banderlipe, 2009; Cornett et al., 2008; Gulzar & Wang, 2011; Jaggi et al., 2009). Table 6 Panel F shows that the average *SB* is higher at 8.54 prior to 2002 compared to after 2002 which is 8.19. This could be an effect of PCCG. It seems firms are more focused on creating audit, compensation, and nomination committees in compliance with PCCG than increasing the size of the board. The result suggests that the monitoring role of the board is not established in an emerging market like the Philippines.

Table 4 shows average percentage of independent directors on the board (*PBOD*) is 12%. This value does not mean anything. What matters is the values shown in Table 6 where *PBOD* mean values before and after 2002 are compared. It shows that from 1988-2001 the average *PBOD* is 1% and from 2002-2018, it is 25%. The difference between the means is significant ( $t = 16.61$ ,  $p = 0.00$ ). This implies that the majority of the IPO firms comply with PCCG of 2002 which mandates a minimum of 2 or 20% of board members should be independent directors. In addition, the effect of *PBOD* on *DCA* while controlling for other variables is positive and significant. This finding is contrary to the agency theory, which suggests that *PBOD* limits income-increasing behavior (Fama & Jensen, 1983). This is also contrary to the finding of Gumanti et al. (2016) in Indonesia, which supported the hypothesis of a significant negative relationship. In addition, Chen et al. (2007) found an insignificant relationship. One possible interpretation of the result is that perhaps IPO firms' compliance with the 2002 PCCG on the percent of independent directors on the board is just in form but not in substance. Independent directors are influenced by ownership structure common in emerging markets like the Philippines where it is common for a single family to have majority ownership. The result suggests that in the case of an emerging market like the Philippines, board independence does not limit income-increasing earnings management.

The 2002 PCCG recommends firms to have different chairman and CEO (*CEO\_Duality*), that is, not to combine the roles into one person. Table 6 Panel H shows that from 1988-2001 37% percent of IPO firms combine the roles. Then from 2002-2018, it increases to 55%. Thus, unlike the guideline on appointing independent directors to the board where the majority of firms readily follow; the guideline on not combining the chairman and CEO roles seems to be ignored. This is probably due to the ownership structure of most firms in the Philippines where ownership is concentrated on one family. Combining the two positions promotes goal congruence and limits opportunistic behavior of managers (Jensen & Meckling, 1976; Habbershon & Williams, 1999). The difference though is not significant as Table 6 shows. The relationship between *CEO\_Duality* and *DCA* is insignificant as Table 7 reveals. This finding is consistent with most studies conducted on post-IPO firms (Chtourou et al., 2001; Xie et al., 2003; Kao & Chen, 2004; Peasnell et al., 2005; Rahman & Ali, 2006; Ebrahim 2007; Cornett et al., 2008; Jaggi et al., 2009;

Banderlipe, 2009). Thus, in the case of the Philippines, *CEO\_Duality* does not promote opportunistic behavior. In fact, the relationship is negative although it is not significant.

Ownership concentration (*OWN*) actual mean is 66.97% with a minimum of 22.24% and a maximum of 94.72%. The effect of *OWN* on *DCA* is insignificant (Table 7). This is consistent with the majority of studies conducted on post-IPO firms (Choi et al., 2004; Bugshan, 2005; López-Iturriaga & Hoffman, 2005; Rahman & Ali, 2006). This result implies that in spite of ownership being concentrated on a family and its close associates, they are not able to manage earnings upward. This also implies that IPO events in the Philippines are closely guarded by regulators, investors, auditors, underwriters, media, and analysts. As such, IPO firms report conservative financial statements. This is consistent with Ball and Shivakumar's (2008) finding in the United Kingdom.

The largest shareholder ownership (*LARGEST\_SH*) mean is 48.25% with a minimum of 6% and a maximum of 94.72%. Since most of the firms in the Philippines are controlled by families, *LARGEST\_SH* is included as a regressor and tested if it significantly affects *DCA*. The result shows an insignificant relationship. This means that contrary to prediction, the largest shareholder ownership does not influence income-increasing earnings management. Perhaps, since IPO events are closely monitored by stakeholders, opportunistic behavior of managers does not flourish.

Of the 104 IPO firms, 76 or 73% (Table 4) is audited by the top 3 prestigious auditing (*AUDITOR*) firms namely Sycip Gorres Velayo and Company, Punongbayan and Araullo, and Joaquin Cunanán & Company. Table 6 Panel C shows that mean *DCA* audited by these prestigious auditing firms is negative 7%. This is lower compared to positive 3% mean *DCA* of the IPO firms audited by non-prestigious auditing firms. The difference however is not significant. This insignificant finding is confirmed in the regression analysis results in Table 7 where it shows that the effect of *AUDITOR* on *DCA* has a negative sign but is insignificant, holding other variables constant. Chang et al. (2010) find the same insignificant relationship while many authors find support to a negative significant relationship (Ducharme et al., 2001; Zhou & Elder, 2001; Chen et al., 2005; Ahmad-Zaluki et al., 2011). The result implies that in the Philippines, prestigious auditing firms have lower income-increasing earnings management compared with non-prestigious auditing firms. However, the difference is not big enough to conclude that it is significant.

Two control variables representing industry subsectors show a negative significant relationship with *DCA* namely electricity, energy, power, and water subsector (*IND1*,  $t = -1.93$ ,  $p = 0.057$ ) and manufacturing-related subsector (*IND2*,  $t = -1.84$ ,  $p = 0.068$ ). Due to differing results from former studies, the relationship is unsigned. In the case of the Philippines, the two industry variables negatively and significantly explain income-increasing earnings management. IPO firms belonging to these subsectors have lower *DCA* than other subsectors.

This paper predicts a positive significant relationship between *ROA* and *DCA*. The result in Table 7 reveals a positive significant relationship.

This is consistent with Jaggi et al.'s (2006) finding but contrary to Chang et al.'s (2010) finding of negative significant result. A positive significant relationship is expected for IPO firms because managers have the motivation to report higher earnings in order to signal firm quality and thus obtain a higher offer price. However, a possible explanation for this is not because of income-increasing earnings management but because of the PSE's requirement that IPO firms should have track record of profitable operations. Issuers should have three successive years of positive earnings before interest, taxes, depreciation and amortization (EBITDA) before they can do an IPO. Specifically, a cumulative 50 million pesos EBITDA for three years for issuers in the main board and a cumulative 15 million pesos EBITDA for three years for issuers in the small, medium and emerging (SME) board (The Philippine Stock Exchange, Inc. Consolidated Listing and Disclosure Rules). Thus, private firms that are not performing well cannot do an IPO.

Table 7 reveals that cash flow from operations deflated by lagged total assets (*CFO\_T1*) is negatively and significantly related to *DCA* as hypothesized. This is expected as previous authors find that *CFO* minimizes income-increasing earnings management (Chen et al., 2005, 2007; Chang et al., 2010; Gumanti et al., 2016). IPO firms with high operating cash flow have less motivation to manage earnings upwards because they are able to generate cash to support their operations (Gumanti et al., 2016b; Chen et al., 2005). Thus, this paper supports previous authors' findings that the higher the *CFO*, the lower the *DCA*.

## 5. CONCLUSION

In sum, the paper finds negative 4.19% *DCA*, a conservative figure rather than an aggressive one. Size of the board, CEO duality, ownership concentration, and percentage ownership of largest shareholder have an insignificant relationship with *DCA*. In addition, the percentage of an independent board of directors is positively associated with *DCA*. Moreover, energy, electricity, power and water subsector, and manufacturing related subsector are found to be negatively related with *DCA*. Furthermore, return on assets is positively related to *DCA*. Finally, cash flow from operations is negatively related to *DCA*. These findings imply that in the case of the Philippines, IPO firms cannot manage their income aggressively upwards probably due to the active participation of the users of the financial statements namely the investors, regulators, auditors, underwriters, and financial analysts. The 2002 PCCG does not limit earnings management. In fact, *DCA* from 2002-2018 is higher than 1988-2001. The 2002 PCCG is successful in requiring the addition of independent directors on the board. However, this seems to be ideal in form only rather than in substance because their addition is positively related to *DCA*. They seem to enhance the behavior of issuers in reporting higher *DCA*. In addition, the 2002 PCCG is not successful in requiring firms in splitting the roles of the chairman of the board and CEO. More IPO firms have combined chairman and CEO from 2002-2018.

The result of the study implies that issuers are truthfully reporting their earnings. This is good for

the PSE. As a self-regulatory organization (SRO), it is successful in approving firms that get publicly listed to be of good quality. This greatly helps investors in making decisions whether to invest or not on IPOs. PSE's listing approval signals to stakeholders that the IPO firm is of good quality. It, therefore, minimizes information asymmetry between the issuers and investors.

Both SEC and PSE should not only look at the proportion of independent directors on the board but also to scrutinize their qualifications. Creation of an audit committee is one of the suggestions of the 2002 PCCG. Perhaps, the two regulatory bodies will make it a requirement that members of the audit committee will all be independent and everyone will have experience in auditing. In addition, splitting the roles of chairman and CEO in IPO firms seems to be ineffective in limiting opportunistic behavior. Previous empirical researches suggest that this is insignificant. Thus, policymakers should not make it a requirement to split the roles. It is probably effective in developed countries but not in emerging countries where ownership structure is different.

For issuers, although auditor prestige is not significantly related to DCA. The fact remains that IPO firms audited by the top 3 auditing firms have lower DCA than non-top 3 auditing firms. This means that financial statements of firms that they audit are more reliable. Thus, it is wise to choose the top 3 auditing firms as external auditors. It somehow signals good quality to investors and other stakeholders.

The paper contributes to the literature on earnings management since it is the first study on identifying earnings management in the Philippines

for IPO firms. In addition, it is the first to attempt to determine the factors that explain income-increasing earnings management phenomenon on IPO firms. The inclusion of ownership concentration and largest shareholder variables to explain DCA is not common in the literature on IPO firms while studies on the improvement of corporate governance in the Philippines are common. This study is unique because it tested the impact of PCCG by measuring abnormal accruals before and after the implementation of the guidelines.

The main limitation of the study is that it has only 105 final IPO firms used for analysis. One of the difficulties in the study of earnings management in the Philippines is the lack of sufficient IPO firms to analyze because publicly-listed firms in the Philippines are few compared to its ASEAN neighbors in spite of being one of the oldest stock exchanges in the region. This is the reason why the period of the study covers a longer period from 2008 to 2018. It is in order to gather enough IPOs for analysis.

Suggested extension for future research is first, the study uses a modified version of the modified Jones's (1991) model in measuring abnormal accruals. Other methods of measuring DCA might yield different results. Thus, measuring DCA using the modified Jones's (1991), DeAngelo's (1986), and Healy's (1985) models is a good area for future research. Second, the study only looks at the size of the board and the percentage of an independent board of directors. Examining the qualifications of these directors, especially the independent directors and the roles they perform on the board, is a good extension of the study.

## REFERENCES

1. Abraham, S., Marston, C., & Jones, E. (2015). Disclosure by Indian companies following corporate governance reform. *Journal of Applied Accounting Research*, 16(1), 114-137. <https://doi.org/10.1108/JAAR-05-2012-0042>
2. Aharony, J., Lin, C.-J., & Loeb, M. P. (1993). Initial public offerings, accounting choices, and earnings management. *Contemporary Accounting Research*, 10(1), 61-81. <https://doi.org/10.1111/j.1911-3846.1993.tb00382.x>
3. Ahmad-Zaluki, N. A. (2008). Post-IPO operating performance and earnings management. *International Business Research*, 1(2), 39-48. <https://doi.org/10.5539/ibr.v1n2p39>
4. Ahmad-Zaluki, N. A., Campbell, K., & Goodacre, A. (2011). Earnings management in Malaysian IPOs: The East Asian crisis, ownership control and post-IPO performance. *The International Journal of Accounting*, 46(2), 111-137. <https://doi.org/10.1016/j.intacc.2011.04.001>
5. Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488-500. <https://doi.org/10.2307/1879431>
6. Alford, A. W. (1992). The effect of the set of comparable firms on the accuracy of the price-earnings valuation method. *Journal of Accounting Research*, 30(1), 94-108. <https://doi.org/10.2307/2491093>
7. Alhadab, M., & Clacher, I. (2018). The impact of audit quality on real and accrual earnings management around IPOs. *The British Accounting Review*, 50(4), 442-461. <https://doi.org/10.1016/j.bar.2017.12.003>
8. Ali, S. M., Salleh, N. M., & Hassan, M. S. (2008). Ownership structure and earnings management in Malaysian listed companies: The size effect. *Asian Journal of Business and Accounting*, 1(2), 89-116. Retrieved from [https://www.researchgate.net/profile/Mohamat-Sabri-Hassan/publication/228683165\\_Ownership\\_Structure\\_and\\_Earnings\\_Management\\_in\\_Malaysian\\_Listed\\_Companies\\_The\\_Size\\_Effect/links/00b4951b993394fb3500000/Ownership-Structure-and-Earnings-Management-in-Malaysian-Listed-Companies-The-Size-Effect.pdf](https://www.researchgate.net/profile/Mohamat-Sabri-Hassan/publication/228683165_Ownership_Structure_and_Earnings_Management_in_Malaysian_Listed_Companies_The_Size_Effect/links/00b4951b993394fb3500000/Ownership-Structure-and-Earnings-Management-in-Malaysian-Listed-Companies-The-Size-Effect.pdf)
9. Alsultan, A. S. (2017). *Audit quality, IPOs and earnings management: Evidence from Saudi Arabia* (Doctoral dissertation, University of Portsmouth). Retrieved from [https://researchportal.port.ac.uk/portal/files/10668749/833676\\_Alsultan.pdf](https://researchportal.port.ac.uk/portal/files/10668749/833676_Alsultan.pdf)
10. Alves, S. (2012). Ownership structure and earnings management: Evidence from Portugal. *Australasian Accounting, Business and Finance Journal*, 6(1), 57-74. Retrieved from <https://ro.uow.edu.au/aabfj/vol6/iss1/12/>
11. Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301-1328. <https://doi.org/10.1111/1540-6261.00567>
12. Backman, M. (2001). *Asian eclipse: Exposing the dark side of business in Asia*. Hoboken, NJ: Wiley.
13. Ball, R., & Shivakumar, L. (2008). Earnings quality at initial public offerings. *Journal of Accounting and Economics*, 45(2-3), 324-349. <https://doi.org/10.1016/j.jacceco.2007.12.001>

14. Banderlipe, M. R. S., II. (2009). The impact of selected corporate governance variables in mitigating earnings management in the Philippines. *DLSU Business & Economics Review*, 19(1), 17-27. <https://doi.org/10.3860/ber.v19i1.1110>
15. Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443-465. Retrieved from <https://www.jstor.org/stable/248566>
16. Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary Accounting Research*, 15(1), 1-24. <https://doi.org/10.1111/j.1911-3846.1998.tb00547.x>
17. Bugshan, T. (2005). *Corporate governance, earnings management, and the information content of accounting earnings: Theoretical model and empirical tests* (Ph.D. dissertation, Bond University). Retrieved from <https://research.bond.edu.au/en/studentTheses/corporate-governance-earnings-management-and-the-information-cont>
18. Cayanan, A. S. (2007). An assessment of the financial reporting practices of selected listed Philippine companies. *Philippine Management Review*, 14, 1-22. Retrieved from <https://pmr.upd.edu.ph/index.php/pmr/article/view/147>
19. Cayanan, A. S. (2019). Corporate governance issues in Philippine-listed companies. *Philippine Management Review*, 26, 1-16. Retrieved from <https://pmr.upd.edu.ph/index.php/pmr/article/view/332>
20. Chang, S.-C., Chung, T.-Y., & Lin, W.-C. (2010). Underwriter reputation, earnings management and the long-run performance of initial public offerings. *Accounting and Finance*, 50(1), 53-78. <https://doi.org/10.1111/j.1467-629X.2009.00329.x>
21. Chen, K. Y., Elder, R. J., & Hsieh, Y.-M. (2007). Corporate governance and earnings management: The implications of corporate governance best-practice principles for Taiwanese listed companies. *Journal of Contemporary Accounting & Economics*, 13(2), 73-105. [https://doi.org/10.1016/S1815-5669\(10\)70024-2](https://doi.org/10.1016/S1815-5669(10)70024-2)
22. Chen, K. Y., Lin, K.-L., & Zhou, J. (2005). Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal*, 20(1), 86-104. <https://doi.org/10.1108/02686900510570722>
23. Chen, M.-J. (2001). *Inside Chinese business: A guide for managers worldwide*. Brighton, MA: Harvard Business Review Press.
24. Choi, J.-H., Jean, K.-A., & Park, J.-I. (2004). The role of audit committees in decreasing earnings management: Korean evidence. *International Journal of Accounting, Auditing and Performance Evaluation*, 1(1), 37-60. <https://doi.org/10.1504/IJAAPE.2004.004142>
25. Chtourou, S. M., Bedard, J., & Courteau, L. (2001). *Corporate governance and earnings management* (Working Paper, Universite Laval). Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=275053](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=275053)
26. Claessens, S., & Fan, J. P. H. (2002). Corporate governance in Asia: A survey. *International Review of Finance*, 3(2), 71-103. <https://doi.org/10.1111/1468-2443.00034>
27. Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1-2), 81-112. [https://doi.org/10.1016/S0304-405X\(00\)00067-2](https://doi.org/10.1016/S0304-405X(00)00067-2)
28. Cornett, M. M., Marcus, A. J., & Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics*, 87(2), 357-375. <https://doi.org/10.1016/j.jfineco.2007.03.003>
29. Cuomo, F., Mallin, C., & Zattoni, A. (2016). Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 24(3), 222-241. <https://doi.org/10.1111/corg.12148>
30. Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal governance structures and earnings management. *Accounting and Finance*, 45(2), 241-267. <https://doi.org/10.1111/j.1467-629x.2004.00132.x>
31. DeAngelo, H., & DeAngelo, L. (1989). Proxy contests and the governance of publicly held corporations. *Journal of Financial Economics*, 23(1), 29-59. [https://doi.org/10.1016/0304-405X\(89\)90004-4](https://doi.org/10.1016/0304-405X(89)90004-4)
32. DeAngelo, L. E. (1986). Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *The Accounting Review*, 61(3), 400-420. Retrieved from <https://www.jstor.org/stable/247149?refreqid=excelsior%3A7142c6a029db95a185844633aa3703e1>
33. DeAngelo, L. E. (1988). Managerial competition, information costs, and corporate governance: The use of accounting performance measures in proxy contests. *Journal of Accounting and Economics*, 10(1), 3-36. [https://doi.org/10.1016/0165-4101\(88\)90021-3](https://doi.org/10.1016/0165-4101(88)90021-3)
34. Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225. Retrieved from <https://www.jstor.org/stable/248303>
35. Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1-36. <https://doi.org/10.1111/j.1911-3846.1996.tb00489.x>
36. Dharwadkar, B., George, G., & Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *Academy of Management Review*, 25(3), 650-669. <https://doi.org/10.5465/amr.2000.3363533>
37. DuCharme, L. L., Malatesta, P. H., & Sefcik, S. E. (2001). Earnings management: IPO valuation and subsequent performance. *Journal of Accounting, Auditing & Finance*, 16(4), 369-396. <https://doi.org/10.1177/0148558X0101600409>
38. Ebrahim, A. (2007). Earnings management and board activity: An additional evidence. *Review of Accounting and Finance*, 6(1), 42-58. <https://doi.org/10.1108/14757700710725458>
39. Faccio, M., Lang, L. H. P., & Young, L. (2001). Dividends and expropriation. *American Economic Review*, 91(1), 54-78. <https://doi.org/10.1257/aer.91.1.54>
40. Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301-325. <https://doi.org/10.1086/467037>
41. Friedlan, J. M. (1994). Accounting choices of issuers of initial public offerings. *Contemporary Accounting Research*, 11(1), 1-31. <https://doi.org/10.1111/j.1911-3846.1994.tb00434.x>
42. Gulzar, M. A., & Wang, Z. (2011). Corporate governance characteristics and earnings management: Empirical evidence from Chinese listed firms. *International Journal of Accounting and Financial Reporting*, 1(1), 133-151. <https://doi.org/10.5296/ijaf.v1i1.854>

43. Gumanti, T. A., Lestari, A. R., & Manan, S. S. (2017). Underpricing and number of risk factors of initial public offerings in Indonesia. *Business: Theory and Practice*, 18, 178–185. <https://doi.org/10.3846/btp.2017.019>
44. Gumanti, T. A., Nastiti, A. S., & Lestari, A. R. (2016). Good corporate governance and earnings management in Indonesian initial public offerings. *Corporate Ownership & Control*, 13(4-4), 558–565. <https://doi.org/10.22495/cocv13i4c4p5>
45. Gumanti, T. A., Nastiti, A. S., Utami, E. S., & Manik, E. (2015). Audit quality and earnings management in Indonesian initial public offerings. *Mediterranean Journal of Social Sciences*, 6(5 S5), 223–229. <https://doi.org/10.5901/mjss.2015.v6n5s5p223>
46. Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review*, 12(1), 1–25. <https://doi.org/10.1111/j.1741-6248.1999.00001.x>
47. Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1-3), 85–107. [https://doi.org/10.1016/0165-4101\(85\)90029-1](https://doi.org/10.1016/0165-4101(85)90029-1)
48. Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249–267. <https://doi.org/10.5465/1556394>
49. Jaggi, B., Chin, C.-L., Lin, H.-W. W., & Lee, P. (2006). Earnings forecast disclosure regulation and earnings management: evidence from Taiwan IPO firms. *Review of Quantitative Finance & Accounting*, 26(3), 275–299. <https://doi.org/10.1007/s11156-006-7434-2>
50. Jaggi, B., Leung, S., & Gul, F. (2009). Family control, board independence and earnings management: Evidence based on Hong Kong firms. *Journal of Accounting and Public Policy*, 28(4), 281–300. <https://doi.org/10.1016/j.jaccpubpol.2009.06.002>
51. Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831–880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
52. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
53. Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193–228. <https://doi.org/10.2307/2491047>
54. Kao, L.-F., & Chen, A. (2004). The effects of board characteristics on earnings management. *Corporate Ownership & Control*, 1(3), 96–107. <https://doi.org/10.22495/cocv1i3p9>
55. Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22(1), 45–74. [https://doi.org/10.1002/1097-0266\(200101\)22:1%3C45::AID-SMJ147%3E3.0.CO;2-F](https://doi.org/10.1002/1097-0266(200101)22:1%3C45::AID-SMJ147%3E3.0.CO;2-F)
56. Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3), 375–400. [https://doi.org/10.1016/S0165-4101\(02\)00059-9](https://doi.org/10.1016/S0165-4101(02)00059-9)
57. Koh, P.-S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review*, 35(2), 105–128. [https://doi.org/10.1016/S0890-8389\(03\)00014-3](https://doi.org/10.1016/S0890-8389(03)00014-3)
58. Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
59. Kouwenberg, R., & Thontirawong, P. (2016). Group affiliation and earnings management of Asian IPO issuers. *Review of Quantitative Finance and Accounting*, 47(4), 897–917. <https://doi.org/10.1007/s11156-015-0524-2>
60. La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517. <https://doi.org/10.1111/0022-1082.00115>
61. Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance*, 32(2), 371–387. <https://doi.org/10.1111/j.1540-6261.1977.tb03277.x>
62. López-Iturriaga, F. J., & Hoffmann, P. S. (2005). Earnings management and internal mechanisms of corporate governance: Empirical evidence from Chilean firms. *Corporate Ownership & Control*, 3(1), 17–29. <https://doi.org/10.22495/cocv3i1p2>
63. Lubatkin, M. H., Schulze, W. S., Ling, Y., & Dino, R. N. (2005). The effects of parental altruism on the governance of family-managed firms. *Journal of Organizational Behavior*, 26(3), 313–330. <https://doi.org/10.1002/job.307>
64. Muttakin, M. B., Khan, A., & Mihret, D. G. (2017). Business group affiliation, earnings management and audit quality: Evidence from Bangladesh. *Managerial Auditing Journal*, 32(4-5), 427–444. <https://doi.org/10.1108/MAJ-01-2016-1310>
65. Park, Y. W., & Shin, H.-H. (2004). Board composition and earnings management in Canada. *Journal of Corporate Finance*, 10(3), 431–457. [https://doi.org/10.1016/S0929-1199\(03\)00025-7](https://doi.org/10.1016/S0929-1199(03)00025-7)
66. Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance and Accounting*, 32(7-8), 1311–1346. <https://doi.org/10.1111/j.0306-686X.2005.00630.x>
67. Peng, M. W. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, 25(5), 453–471. <https://doi.org/10.1002/smj.390>
68. Pramithasari, A. A. P. K., & Yasa, G. W. (2016). The effect of good corporate governance on earnings management in companies that perform IPO. *The Indonesian Accounting Review*, 6(1), 37–44. <https://doi.org/10.14414/tiar.v6i1.851>
69. Rahman, R. A., & Ali, F. H. M. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783–804. <https://doi.org/10.1108/02686900610680549>
70. Roosenboom, P., van der Goot, T., & Mertens, G. (2003). Earnings management and initial public offerings: Evidence from the Netherlands. *The International Journal of Accounting*, 38(3), 243–266. [https://doi.org/10.1016/S0020-7063\(03\)00048-7](https://doi.org/10.1016/S0020-7063(03)00048-7)
71. Sullivan, M. J., & Unite, A. A. (2001). The influence of group affiliation and the underwriting process on emerging market IPOs: The case of the Philippines. *Pacific-Basin Finance Journal*, 9(5), 487–512. [https://doi.org/10.1016/S0927-538X\(01\)00009-9](https://doi.org/10.1016/S0927-538X(01)00009-9)
72. Sun, L., & Rath, S. (2010). Earnings management research: A review of contemporary research methods. *Global Review of Accounting and Finance*, 1(1), 121–135. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=CFAFD944722187D4620D9E3E93100B02?doi=10.1.1.469.8971&rep=rep1&type=pdf>



73. Teoh, S. H., Welch, I., & Wong, T. J. (1998a). Earnings management and the long-run market performance of initial public offerings. *The Journal of Finance*, 53(6), 1935-1974. <https://doi.org/10.1111/0022-1082.00079>
74. Teoh, S. H., Wong, T. J., & Rao, G. R. (1998b). Are accruals during initial public offerings opportunistic? *Review of Accounting Studies*, 3(1), 175-208. <https://doi.org/10.1023/A:1009688619882>
75. Titman, S., & Trueman, B. (1986). Information quality and the valuation of new issues. *Journal of Accounting and Economics*, 8(2), 159-172. [https://doi.org/10.1016/0165-4101\(86\)90016-9](https://doi.org/10.1016/0165-4101(86)90016-9)
76. Tykvová, T. (2006). IPOs and earnings management in Germany. In G. N. Gregoriou (Ed.), *Initial public offerings* (pp. 281-296). <https://doi.org/10.1016/B978-075067975-6.50020-7>
77. Wong, D. C. (2009). An assessment of corporate governance reforms in the Philippines: 2002-2009. *Philippine Management Review*, 16, 24-57. Retrieved from <https://pmr.upd.edu.ph/index.php/pmr/article/view/166>
78. Xie, B., Davidson, W. N., III, & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295-316. [https://doi.org/10.1016/S0929-1199\(02\)00006-8](https://doi.org/10.1016/S0929-1199(02)00006-8)
79. Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies*, 45(1), 196-220. <https://doi.org/10.1111/j.1467-6486.2007.00752.x>
80. Zhou, J., & Elder, R. (2001). *Audit firm size, industry specialization and earnings management by initial public offering firms*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.485.7029&rep=rep1&type=pdf>