

RESEARCH ARTICLE

Determinants of the Income Strategy of Publicly Listed Corporations in the Philippines

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Abstract: The motivation of managers in selecting accounting policy is believed to be beyond the method's simplicity, ease of implementation, and cost-benefit tradeoff to manage earnings by influencing the treatment of financial information. Anchored on positive accounting theory (PAT), this study examines the factors that influence the managers of 60 publicly listed companies in their choice of accounting methods when used as an income strategy. Specifically, this study evaluates whether efficient contracting, political sensitivity, need for financing, information signaling, investment opportunity set (IOS), and monitoring mechanisms (i.e., ownership concentration, board composition, and external auditor) influence the income strategy of management. Income strategy is based on the portfolio of accounting policies on inventory valuation, subsequent measurement of depreciable PPE, land, investment property, software, and depreciation method. Using partial least square structural equations modeling (PLS-SEM), this study found a significant negative relationship between efficient contracting and income strategy and positive relationship between ownership concentration and income strategy, which suggest the alignment of interests between shareholders and management. Political sensitivity is also found to be negatively significant, which validates that executives of Philippine companies choose income-decreasing policies to reduce the perceived size and resources of the company and eventually avoid government interventions and actions from a labor union.

Keywords: Positive Accounting Theory, Accounting Choice Motivation, Structural Equation Modeling

Earnings management not only includes real profit-taking schemes but evidently highlights managers' use of their discretion over accounting numbers through accounting choice as afforded to them by the flexibility of the International Financial Reporting Standards (IFRS) (Fields et al., 2001). Hence, accounting choice is used by management as a tool for income strategy. The IFRS standards allow management to choose accounting policies and accounting methods (e.g., inventory valuation, depreciation methods, and subsequent measurement of

long-lived assets). Although the method's simplicity and lower implementation cost are the usual and obvious rationalization for accounting method choice (Dey et al., 2009), the motivation of managers in selecting accounting policy goes beyond the mentioned justification to actually manage earnings.

This is consistent with the positive accounting theory (PAT), which is anchored on managerial opportunism (Dey et al., 2007; Watts & Zimmerman, 1990; Waweru et al., 2011). PAT highlighted three motivations of accounting policy choice, namely,

bonus plans, debt covenants, and political sensitivity. The theory hypothesized that management is induced to choose income-increasing accounting policy to increase its compensation, which is linked to accounting performance and to reduce the likelihood of violating debt constraints that are often linked to accounting numbers (Fields et al., 2001; Kabir, 2010; Watts & Zimmerman, 1978, 1990). On the other hand, management is inclined to choose income-decreasing accounting policy to reduce the perceived size and resources of the company by political agencies and employees who may demand more wealth transfers (Watts & Zimmerman, 1978, 1990; Kabir, 2010).

Although developed economies have found most of these variables as significant relevant to accounting choice of managers, the case may not be the same for emerging economies. Companies in emerging economies are mostly characterized by family ownerships (Wang & Shailer, 2017).

It must be noted that the identified factors are anchored on managerial opportunism, which is geared against the interest of stakeholders. Consequently, knowledge of these factors is important for standard-setters in determining the appropriate level of flexibility for management discretion allowed in PFRS standards, and for users of financial statements to holistically grasp and analyze the financial information reported in the financial statements.

Theoretical Background and Hypotheses Development

This study is mainly anchored on PAT. Further, other relevant theories (i.e., investment opportunity set hypothesis, agency theory, and auditor hypothesis) are also included. Figure 1 presents the schematic diagram of the operational framework employed in this study.

Positive Accounting Theory

PAT is anchored on the existence of multiple contractual relationships within the firm and with various parties (Fields et al., 2001; Watts & Zimmerman, 1978, 1990). Executives of the firm manage these relationships to reduce costs through the alignment of the differing incentives of the parties (Fields et al., 2001). Contractual parties of the firm often based their assessment and decisions regarding transactions with the firm on accounting numbers, which are greatly influenced by the methods or accounting policies used

in recognizing and reporting economic transactions. According to PAT, accounting choices are influenced by managerial opportunism (Dey et al., 2007); hence, managers are inclined to maximizing their utility (Watts & Zimmerman, 1978) to increase their own wealth or reduce cost on their part. PAT highlights efficient contracting, political sensitivity, and financing need as the primary motivations of managers in choosing accounting policies.

The efficient contracting hypothesizes that the firm decision maker's behavior is based on the nature of the contractual provisions (Aitken & Loftus, 1994), and management use their discretion to influence the contractual outcomes that are dependent on accounting numbers (Fields et al., 2001). This is to mitigate agency and contracting costs. Consequently, efficient contracting includes bonus agreements with managers and debt covenants with creditors.

Accounting-based bonus plans aim to ensure that shareholder returns are secured through better financial performance, which may lead to increased share prices, while the managers' interest to increase their own wealth is also satisfied. However, the existence of bonus plans that are linked to accounting information may encourage managers to opportunistically select accounting procedures that increase the likelihood of reporting favorable outcomes (Dey et al., 2007) or to shift reported earnings from future to current periods (Young, 1998) to maximize their current compensation.

Accounting-based information, like the current ratio or leverage ratio, is usually used by creditors/suppliers as screening criteria in granting credit or used to monitor the performance of the firm (Peltier-Rivest, 1999) in determining the collectability of amount owed to them. These accounting-based covenants, in effect, restrict wealth transfers between shareholders and creditors (Young, 1998). Firms that violate these covenants may face grave financial consequences like immediate repayment of the entire loan or incurrence of expensive renegotiation or recontracting costs (Baek & Lee, 2016) of which 201 revalued assets and 899 did not during the period 2008–2009, we find that the average debt cost, equity cost, and weighted average cost of capital (WACC). Hence, PAT assumes that managers of firms that are close to violating accounting-based debt restrictions are inclined to select income-increasing accounting policies (Aitken & Loftus, 1994; Peltier-Rivest, 1999; Young, 1998; Astami et al., 2006).

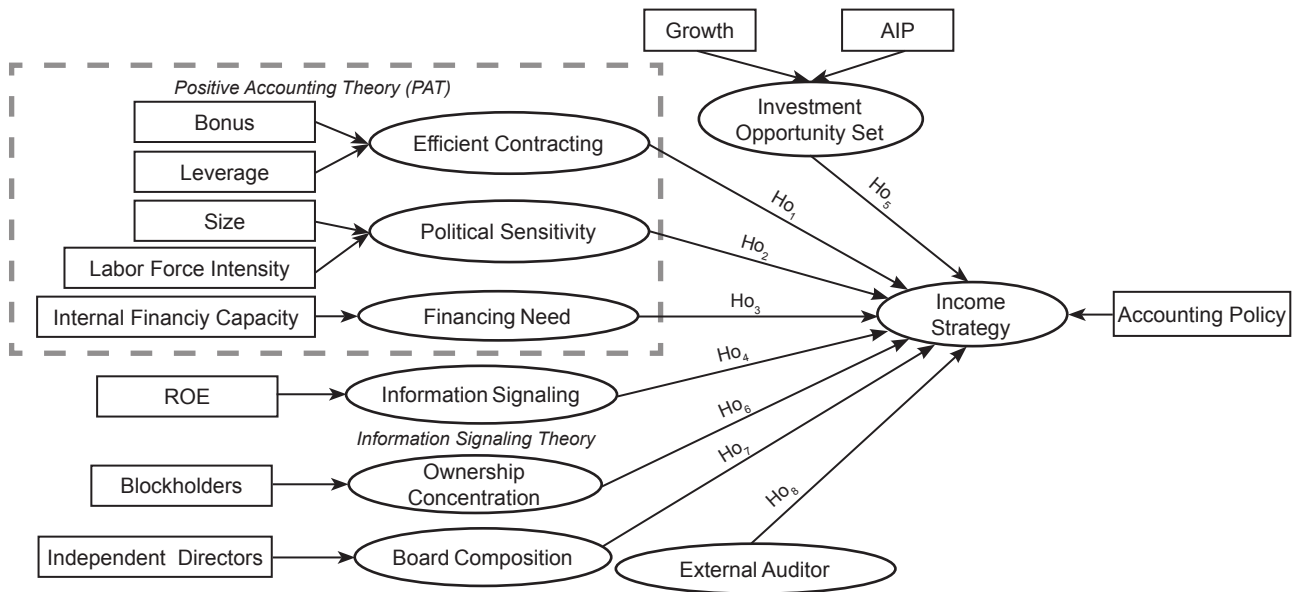


Figure 1. Operational Framework

Using the ratio of executive bonuses and the earnings before interest and taxes (EBIT) as proposed by Inoue and Thomas (1996) as the proxy for bonus and leverage ratio, measured as the ratio of total noncurrent liability to total equity, as a proxy for debt covenant, this study hypothesizes that:

Ho₁: Efficient contracting does not influence management's income strategy.

PAT also assumes political sensitivity wherein large firms tend to be visible to political agencies and are often the subject of regulatory interventions (Watts & Zimmerman, 1978). Political processes impose costs (political costs) to the firms, which may include those related to government interventions like levied taxes and additional regulations (Inoue & Thomas, 1996; Watts & Zimmerman, 1978; Young, 1998) the general business characteristics of the U.S. environment differ, sometimes drastically, from those in Japan. Factors affecting the choice of accounting policy in the U.S. may not similarly affect the choice of accounting policy in Japan. At the same time, new factors may be identified in the Japanese business environment. Income strategy models are developed for each firm according to the type (income increasing or income decreasing). Further, political costs also include the labor cost of unions. Companies with large assets

or sales tend to be more sensitive to the demands of labor unions because of the public's assumption of managements' exploitation of employee labor costs. As political sensitivity increases in terms of size, it is believed that managers of large companies prefer accounting policies that defer/reduce reported earnings to reduce the firm size and effectively minimize political visibility (Aitken & Loftus, 2001; Fields et al., 2001; Watts & Zimmerman, 1990; Young, 1998; Astami et al., 2006).

Using the natural logarithm of the firm's total assets as a measure of the firm size and the difference of one less the ratio of gross property, plant, and equipment and adjusted total assets as the proxy of labor force intensity (Bowen, DuCharme, & Shores, 1995; Cullinan & Bline, 2003), the following null hypothesis is drawn:

Ho₂: Political sensitivity does not influence management's income strategy.

Earnings of companies are either distributed to shareholders as dividends or retained in the company coffers for future investment opportunities. It is generally assumed that shareholders prefer to receive dividends (Waweru et al., 2011), whereas management prefers to retain earnings. The distribution of dividends reduces the amount of available cash or earnings to

take advantage of future investment opportunities, which, in effect, increases the cost of capital (Inoue & Thomas, 1996) the general business characteristics of the U.S. environment differ, sometimes drastically, from those in Japan. Factors affecting the choice of accounting policy in the U.S. may not similarly affect the choice of accounting policy in Japan. At the same time, new factors may be identified in the Japanese business environment. Income strategy models are developed for each firm according to the type (income increasing or income decreasing). However, retaining earnings rather than distributing as dividends may send a negative signal to investors.

To avoid negative signals, managers are inclined to prefer accounting procedures that negatively affect income to reduce the ability of the firm to distribute dividends (Waweru et al., 2011). Earnings then can be retained instead to finance investment opportunities and effectively reduce external borrowing and the cost of capital. Although not emphasized by PAT, the need for financing as a motivation for accounting choice is consistent with managerial opportunism because a lower cost of capital is advantageous for managers during performance evaluation. Hence, using the ratio of retained earnings to total equity as a proxy for internal financing capacity of the company, this study tests the following hypothesis:

Ho₃: The firm's internal financing capacity does not influence management's income strategy.

Information Signaling Theory

The conceptual framework for financial reporting explicitly mentioned that the primary users of financial information depend on the general-purpose financial reports for their information needs. Managers, on the other hand, has internal access to information, which allows them to make better economic decisions. This leads to information asymmetry between the two users of financial information; the disparity of the firm knowledge between better-informed managers and the less well-informed investors (Fields et al., 2001) increases the cost of equity. The commonly used information signaling scheme is dividends (Miller & Modigliani, 1961). However, managers may also use their discretion on accounting choice to provide information in the hope of influencing the decisions of rational investors (Fields et al., 2001). Accounting

choice provides a mechanism to lessen information asymmetry. Management uses accounting methods to send more privately-held information to its primary users (Baek & Lee, 2016; Fields et al., 2001; Young, 1998) of which 201 revalued assets and 899 did not during the period 2008–2009, we find that the average debt cost, equity cost, and weighted average cost of capital (WACC). Accordingly, management prefers an income-increasing accounting method to establish the firm's financial position and performance, thereby gaining favorable actions from investors. In addition, highly leveraged firms engage in earnings management through income-increasing accounting policy choices to attract more capital at favorable costs (Waweru & Riro, 2013).

This study is consistent with the study of Baek and Lee (2016), which uses return on equity (ROE) to proxy for information signaling. This study tests the null hypothesis:

Ho₄: Information signaling does not influence management's income strategy.

Investment Opportunity Set (IOS) Hypothesis

IOS refers to the combination of assets-in-place (AIP) and future investment options (growth) of the firm (Gupta, 1995). There is an inverse relationship between AIP and growth, such that the more AIP a firm has, the lesser growth is available. On the other hand, lesser AIP means more growth opportunities (Skinner, 1993). According to Smith and Watts (1992), accounting policies are determined together with the IOS and are believed to affect each other.

The relationship between IOS and management compensation plan represents a tradeoff between motivating managers and monitoring their accounting choices (Skinner, 1993). Smith and Watts (1992) hypothesized that growth firms give more decision-making discretion to management and are more likely to use incentive plans linked to financial performance to motivate management. It must be noted, however, that accounting numbers are poor measures of financial performance for growth firms (Smith & Watts, 1992) due to recognition principles in accounting, which limit the recognition of future income. Indeed, we had found empirical evidence that firms with more AIP use accounting-based bonus plans; hence, it is expected that these are more likely to choose an income-increasing strategy.

On the other hand, managers of firms with more AIP are reluctant to issue debt for positive net present value investments, which leads to underinvestment (Skinner, 1993). To mitigate this underinvestment, firms only issue debts that can be covered with AIP. Consequently, firms with more AIP are more likely to have accounting-based debt covenants (Skinner, 1993). This follows that managers of higher AIP firms prefer income-increasing accounting procedures to reduce the likelihood of violating these covenants. Smiths and Watts (1992) and Skinner (1993) found significant statistical support on these hypothesized links between IOS, compensation plans, debt covenants, and accounting choices (income strategy).

This study follows the growth ratio used by Gupta (1995) which is the ratio of earnings per share (EPS) to market value of the share (MPS). AIP, on the other hand, is measured as the ratio of gross property, plant, and equipment to the firm value. The following hypothesis is drawn:

Ho₅: The company's IOS does not influence management's income strategy.

Agency Theory

According to agency theory, there exists a conflict of interest (referred to as agency conflicts) between shareholders and management (Brigham & Ehrhardt, 2011) due to the differing goals between these parties. In a way, agency theory and PAT both agree on the presence of managerial opportunism. Due to this conflict of interest, managers act for their own benefit unless an effective and appropriate corporate governance structure is in place to protect the rights of the shareholders (Waweru & Riro, 2013).

Conferring greater discretionary power to management increases the latter's opportunistic behavior, which may increase conflict of interest between management and shareholders. This is even more evident when the management compensation scheme is attached to accounting-based performance (Isa, 2014). On the other hand, when an ample percentage of ownership and voting rights are vested on principal shareholders or when ownership concentration is high, majority shareholders can control (influence) the output of the accounting system et al., 2006). Hence, ownership concentration increases the likelihood of management choosing an income-increasing strategy.

This study follows the usual proxy of ownership concentration, which is the number of blockholders, or the number of shareholders owning 5% or more of the outstanding ordinary shares. Consistent with Waweru et al. (2011), who hypothesized that ownership concentration directly influences income strategy, the following hypothesis is drawn:

Ho₆: Ownership concentration does not influence management's income strategy.

It is expected that an effective governance structure reduces the tendency of management to opportunistically manage earnings (Bekiris & Doukakis, 2011) due to increased monitoring and effective control by the oversight board (Isa, 2014). Most pieces of literature concur that board structure and composition are some of the important facets of corporate governance (Isa, 2014; Waweru & Riro, 2013). Board independence increases monitoring; hence, it reduces the tendency of management in choosing income-increasing accounting policies.

This study employs the ratio of the number of independent directors to the total number of directors on the board. Hence, this study expects that as the number of independent directors increases relative to the total number of directors, management may not be enticed to influence earnings.

Ho₇: Board composition does not influence management's income strategy.

Auditor Hypothesis

External auditors have strong positions and opinions regarding accounting methods or policies (Gupta, 1995). This preference may be due to auditors developing an expertise in specific accounting methods and may influence management to use the same (Simon & Costigan, 1996). In addition, external auditors are more likely to constrain aggressive (income-increasing) reporting, when inappropriate, due to the exposure to litigation, regulatory enforcement, and reputational damage (Bowen et al., 2002; Libby et al., 2015). It is, therefore, expected that the income strategy through accounting method choice is affected by the type and profile of the external auditors. Although this factor has only been empirically tested on matters regarding the first time adoption of an accounting standard, it is believed that the same influence can be expected from on-going accounting method decisions.

The external auditor factor is a dichotomous variable that takes the value of 1 when the firm's auditor is one of the big four audit firms, 0 otherwise. The big four audit firms include SyCip, Gorres, Velayo & Co. for Ernst & Young, Isla Lipana & Co. for PricewaterhouseCoopers, Manabat Sanagustin & Co. for KPMG, and Manabat Delgado Amper & Co. for Deloitte Touche Tohmatsu. This study uses the Big 4 as a category because these firms are relatively independent of their client, and no single client is material to the Big 4 revenue (Bowen et al., 2002).

Ho₈: The external auditor does not influence management's income strategy.

Review of Related Studies

Research on accounting choice and the motivations for such decision span as early as the 1970s. Among all the theories of accounting choice, Watts and Zimmerman's (1978) PAT, which anchors on managerial opportunism, is widely accepted. Although not emphasized in PAT but the technical accounting aspects, including the simplicity of calculation that reduces the cost of implementing the policy and tradeoff between the cost of implementation and benefits from the financial information, are believed to be the basic rationale for choosing an accounting method (Dey et al., 2009). However, as the complexity of business operations increases, accounting method choice may also be influenced by factors more than just ease of implementation.

PAT is based on managerial opportunism and highlights the presence of bonus plans, debt covenants, and political sensitivity as prevailing factors that influence managers' accounting choice. Managers are compensated through additional incentives for good financial performance and are punished for bad performance (Dey et al., 2007). Bonus plans that are linked to financial performance are often used by shareholders to lessen agency conflict (Watts & Zimmerman, 1990). Managers may find incentive in choosing accounting procedures that increase accounting income (i.e., income-increasing strategy; Aitken & Loftus, 2001; Inoue & Thomas, 1996; Watts & Zimmerman, 1978; Waweru et al., 2011; Astam et al., 2006; Young, 1998). In addition, when debt covenants are linked to accounting numbers, managers are assumed to choose policies that increase income

to avoid violations of these covenants. PAT further assumes that large companies are more sensitive to government actions and demands of labor unions (Osma, Mora, & Sabater, 2015); hence, managers are inclined to choosing an income-decreasing strategy to effectively reduce the perceived size of the company. However, the relevance of political cost in the income strategy of the company also diminishes when the companies are successful in lobbying relevant policies (Watts & Zimmerman, 1978) or when countries have weak regulations and support to labor unions (Osma et al., 2015).

Studies on Earnings Management Using Accounting Policy Choice

Most of the research done in this category focus on one accounting policy only: inventory valuation method (Cushing & LeClere, 1992; Skinner, 1993; Bowen et al., 1995), depreciation method (Skinner, 1993; Bowen et al., 1995; Cullinan & Blin, 2003; Dey et al., 2009), accounting treatment of goodwill (Astami et al., 2006; Skinner, 1993) accounting for investments in associates (Mazay et al., 1993), asset revaluation (Baek & Lee, 2016; Cotter, 1999) and income tax allocation (Gupta, 1995). There were also researches that focus on the portfolio approach of accounting policy (Aitken & Loftus, 2001; Inoue & Thomas, 1996; Isa, 2014; Waweru et al., 2011) banking on the assumption that management chooses accounting policies simultaneously.

Although these researches are still anchored on PAT, some researchers decided to focus on selected variables only. The most common variables are (1) leverage, which pertains to debt covenant hypothesis, and (2) firm size, which refers to political cost (Cushing & LeClere, 1992; Dey et al., 2007; Inoue & Thomas, 1996; Isa, 2014; Mazay et al., 1993; Waweru et al., 2011; Baek & Lee, 2016; Cotter, 1999; Gupta, 1995; Hand & Skantz, 1998). Isa (2014), Waweru et al. (2011), and Aitken and Loftus (2001) added ownership concentration or dilution to the items of interest. Although the foundation of PAT is managerial opportunism, only a few researchers included management compensation or bonus as a factor that influences accounting policy choice (Aitken & Loftus, 2001; Dey et al., 2007; Inoue & Thomas, 1996); Waweru et al., 2011). External auditor factor is only included for research involving the first-time adoption of a new or revised standard (Gupta, 1995; Simon & Costigan, 1996).

Given that the measurement of the income strategy usually involves a dichotomous measure of 1 or 0, studies usually employ logistic models (Baek & Lee, 2016; Cushing & LeClere, 1992; Dey et al., 2007; Gupta, 1995) or probit models (Inoue & Thomas, 1996; Mazay et al., 1993); whereas other researchers also use regression models (Beatty & Weber, 2003; Isa, 2014; Waweru et al., 2011).

Results were also mixed, which may be attributed to the difference in methods or data used. Some found empirical support on the political sensitivity hypothesis, as evidenced by the significant association between income strategy and firm size (Hand & Skantz, 1998; Inoue & Thomas, 1996). In addition, most research also found support for the debt covenant hypothesis and found a significant relationship between income strategy and leverage (Baek & Lee, 2016; Beatty & Weber, 2003; Cotter, 1999; Gupta, 1995; Hand & Skantz, 1998; Inoue & Thomas, 1996; Simon & Costigan, 1996). However, only a few research found bonuses to significantly influence management's accounting policy choice (Aitken & Loftus, 2001; Beatty & Weber, 2003; Dey et al., 2007). In addition, Waweru et al. (2011) found evidence to support internal financing.

As an extension to the original PAT variables, in the study of early adoption of SFAS 96, Simon and Costigan (1996) found the type of auditor (as being part of the Big 8 audit firms) to be significant in the determination of early adoption. Further, Gupta (1995) also found a significant relationship between the accounting for domestic international sales corporation and the auditor (whether audited by Arthur Andersen or PriceWaterhouse). Astami et al. (2006) found no significant influence of IOS in the accounting choice of companies for goodwill. However, previous studies (Smith & Watts, 1992; Skinner, 1993) found empirical support on the influence of IOS on accounting policy choice.

Monitoring Features and Earnings Management

Research on Chinese firms confirms that ownership concentration indeed affects earnings management. However, the direction of the impact depends on the type of shareholder. Accordingly, top shareholders have positive relations with earnings management (Guo & Ma, 2015) primarily because Chinese firms are characterized as heavily family-owned or state-owned with "outsider investors" as minority shareholders.

This ownership characteristic is not only evident in China but is a dominant feature in emerging markets (Wang & Shailer, 2017).

In fact, there is a slim distinct separation between ownership and management in emerging countries (Bao & Lewellyn, 2017). Family firms exhibit less opportunistic earnings management (Parte-Esteban & García, 2014). Generally, according to Yoshikawa, Zhu, and Wang (2014, as cited in Bao & Lewellyn, 2017), large controlling owners in emerging markets have the benefit of appointing managers or directors who are already affiliated by the companies in which they are also significant owners. This gives large owners the power to monitor or directly influence management (Wang & Shailer, 2017). Conversely, large shareholders can only influence management up to the extent allowed by the legal systems that protect the rights of minority shareholders (Leuz, Nanda, & Wysocki, 2003).

Consequently, this, in part, explains why internal monitoring mechanisms, like the presence of independent directors fail in emerging markets. As these managers and directors represent the large shareholders, they are less likely to be scrutinized by the other directors for issues like earnings quality and earnings management (Bao & Lewellyn, 2017). Jaggi et al. (2009) and Prencipe and Bar-Yosef (2011, as cited in Stockmans et al., 2013) found that the impact of independent directors on earnings management is weak in public family firms.

Most research concurs that, depending on the type of auditor, earnings quality is either high or low; consequently, earnings management is either mitigated or not. Studies found that renowned audit firms, which generally include those considered Big 4 firms, increase earnings quality and constrain earnings management (Francis & Wang, 2008, DeAngelo, 1981 as cited in Parte-Esteban & García, 2014). However, these audit firms are found to constrain earnings to a greater extent in countries with high tax alignment, which validates that audit firms only constrain those that result in tax savings. Further, Francis and Wang (2008, as cited in Parte-Esteban & García, 2014) found that these prominent firms only enforce earnings quality in countries with strict investor protection laws. This behavior is linked to the litigation costs that audit firms may face and the probable impact on their image.

Bao and Lewellyn (2017) found evidence that external regulation reinforces internal monitoring

mechanisms. In addition, earnings management is also found to be weaker in countries with large stock markets, strong investor rights, dispersed ownership, and strong legal enforcements than those countries that exhibit the opposite characteristics (Leuz et al., 2003). In their study, the Philippines belong to the cluster of countries that exhibit low legal enforcement. Leuz et al. (2003) further documented that earnings management varies systematically across countries.

Methods

Research Design

Following a causal research design, this study used secondary data, both qualitative and quantitative, from the SEC Form 17-A of publicly-listed companies from 2011 to 2015, excluding companies from the financial industry, holding firms, and small, medium, and emerging boards. Companies that are suspended or delisted within the period covered were also excluded. Out of the 168 listed companies, only 60 companies were included in the sample.

Table 1

Final Sample Size

Sector	Number of Companies
Industrial	23 (38.33%)
Property	17 (28.33%)
Services	13 (21.67%)
Mining and Oil	7 (11.67%)
Total	60

Table 2

Income Strategy Classification of Each Policy

Accounting Policy	Income-increasing	Income-decreasing
Inventory valuation estimation	FIFO	Weighted (Moving) Average
Depreciation	Straight-line	Accelerated, Units of Production
Subsequent measurement - PPE	Cost	Revaluation
Subsequent measurement - Land	Revaluation	Cost
Subsequent measurement - Investment Property	Fair Value	Cost
Subsequent measurement - Software	Cost	Revaluation

Accounting policy choices of the sample companies for (1) inventory valuation for finished goods, raw materials, and parts and supplies; (2) depreciation method; and subsequent measurement of (3) land, (4) other depreciable PPE, (5) investment property, and (6) software recognized as intangible assets were determined from the disclosures in the Notes to Financial Statements, specifically the Summary of Accounting Policies portion of the notes. Accounting policies of the firms are categorized as either income-increasing or income-decreasing. The accounting policy is an income-increasing strategy when policy increases current reported earnings or equity; otherwise, the policy is categorized as an income-decreasing strategy.

The overall income strategy is the ratio of the number of income-increasing policies of the firm and the total number of accounting policies used by or applicable to the firm. The denominator varies, depending on the number of accounting policies applicable to the company, but in no case, be higher than eight. Presented in Table 2 are the income strategy classification of each accounting policy, whereas Table 3 presents the indicator variables of each construct with their relevant measures/proxy.

Data Analysis

This study employed structural equation modeling (SEM) for data analysis. SEM allows a quantitative test of the theoretical model of researches by using different types of models (Shumacker & Lomax, 2010). This method allows the incorporation of unobservable variables that are measured indirectly by indicator variables (Hair et al., 2014). Considering that this

Table 3*Proxies of the Variables*

Construct (Latent Variables)	Indicators (Observed Variables)	Proxy
Efficient Contracting	Bonus	Executive Bonus/EBIT
	Leverage	Total Noncurrent Liability/Total Equity
IOS	Growth	EPS/MPS
	AIP	Gross PPE/Firm Value*
Political Sensitivity	Size	Log of Total Assets
	Labor Force Intensity	1 – (Gross PPE/Adjusted Total Assets)
Need for Financing	Internal Financing Capacity	Retained Earnings/Total Equity
Information Signaling	ROE	Net Income/Average Equity
<i>*Market Value of Equity + Book Value of Debt</i>		
	Ownership concentration	Number of blockholders (ordinary shareholders with 5% or more ownership)
	Board Composition	number of independent directors/ total number of directors
	External Auditors	1 when the auditor is part of the Big 4 audit firms; 0 when otherwise

study involves testing of unobservable constructs (e.g., efficient contracting, political sensitivity), SEM is believed to be an appropriate statistical method.

Specifically, this study used partial least square (PLS-SEM), following the basic guidelines outlined by Hair et al. (2014) and Sarstedt et al. (2017), which allows for the estimate of complex models with many constructs and indicator variables, and permits for some data flexibility (like data normality and small sample size).

Results

Table 4 presents a summary of the accounting policies and income strategy of Philippine companies. It can be observed that there is a varying number of observations per type of account because of the difference in the operations of the companies in the sample. Specifically, there is a considerably low number of companies, only 16 out of the 60 samples, have software that is reported as an intangible asset.

Majority of companies in the sample, on average, used income-decreasing accounting policies for all types of inventories, as evidenced by the mean value of less than 50%; thus, preference to moving average

and weighted average valuation estimation method for inventories can be observed. Ibarra (2008) noted that Philippine companies would only prefer the FIFO method when the relevant inventories are perishable, whereas preference to weighted (moving) average method is observed from companies with wide varieties of inventories and with inventories whose costs are unstable. Consequently, this preference is expected as the sample is 38.33% composed of industrial companies.

The same preference for income-decreasing policies can be observed for the subsequent measurement of land and investment property; on average, companies preferred cost model for both assets, which is evident in the mean value of .2018779 and .2465753, respectively. However, substantially, all companies in the sample preferred income-increasing accounting policy or the cost model for the subsequent measurement of PPE with a mean value of .9832215. Although accounting policy choices for other accounts vary, it can be noted that all firms under observation, which have depreciable PPE and software, chose income increasing strategy, straight-line method, and cost model, respectively, as evidenced by the mean value of 1. On average, income strategy decisions of management in the sample are

Table 4*Descriptive Statistics for the Income Strategy of Philippine Companies*

Variable	Obs.	Mean	Std. Dev.	Min	Max
fginv	192	.4166667	.4942956	0	1
rminv	141	.1985816	.4003545	0	1
psinv	174	.1781609	.3837525	0	1
depn	298	1	0	1	1
subland	213	.2018779	.4023472	0	1
subppe	298	.9832215	.1286567	0	1
subinvprop	219	.2465753	.4320048	0	1
subsoftware	80	1	0	1	1
IncStrat	300	.5956786	.2275473	0	1

Maximum number of observations = 300 (2011-2015)

**Legend: fginv=Finished Goods Inventory; rminv=Raw Materials Inventory; psinv=Parts & Supplies Inventory; depn=Depreciation of PPE; subland=Subsequent Measurement of Land; subppe=Subsequent Measurement of PPE other than land; subinvprop=Subsequent Measurement of Investment Property; subsoftware=Subsequent Measurement of Software; IncStrat=Income Strategy*

inclined to income-increasing policies, as evidenced by the mean value of .5956786.

Shown in Table 5 is a summary of the indicators used in the study. As presented, on average, companies granted .0408532 of their EBIT as an executive bonus. Some companies that reported losses did not give bonuses to executives, as evidenced by a 0 minimum bonus value, which may indicate the presence of accounting-based bonuses. However, other companies still gave bonuses to executives despite losses. This may suggest that bonuses for these companies are not performance-based nor accounting-based.

On average, the sample companies are highly-leveraged with a mean value of .7502088. In fact, the highest leverage ratio reported is 74.41, which means that its long-term debt is 74 times higher than its equity.

Companies in the sample have a growth rate of 3%, which suggests that companies in the Philippines still have a large room until full utility. The negative minimum value of growth emanates from the losses reported by some companies. On the other hand, assets in place (AIP) ranges from zero to 2.04. Although there are some companies that reported no property, plant, and equipment (PPE), others also reported a considerably low firm value, which leads to a high AIP value of 2.04, meaning its gross PPE is two times higher than its firm value.

Size, measured as the logarithm of total assets, of the companies also varies from 7.506004 to 11.6581. This variation in size is due to the differences in the operations of the companies in the sample. There is also a wide variation in the values of labor force intensity. However, on average, companies are 0.6660203 dependent on the labor force of employees. This indicates that companies are more labor-intensive and may preempt a higher bargaining power of employees.

The average internal financing capacity of companies in the sample is $-.8843952$. The negative sign is due to companies reporting deficits. A high negative internal financing capacity ratio indicates a very low capability to finance internal investments. This may be the reason why companies are highly leveraged. Information signaling (ROE), on the other hand, has a positive mean value of .0796942 despite a negative lowest value of -1.323629 . This negative value is due to companies reporting losses.

As presented in Table 5, the number of blockholders in the company ranged from one to eight, with an average value of 3.456667. On the other hand, the average ratio of independent directors to total directors is 24.86%, and this ratio goes as low as 9.09%. Most companies in the sample adhered to the requirements of the Code of Corporate Governance; however, there are few companies that only have one independent director

Table 5*Descriptive Statistics of All Variables*

Variable	Mean	Std. Dev.	Min	Max
Bonus	.0408532	.228171	0	3.328353
Leverage	.7502088	4.412071	0	74.41238
Growth	.0308824	.1589419	-1.318182	1.168919
AIP	.2989333	.3482717	0	2.04
Size	10.09872	.9129426	7.506004	11.6581
LabForceIn	.6660203	.2814144	.0611866	.9982601
InterFin	-.8843952	5.967499	-59.16835	1.018041
InfoSig	.0796942	.2030479	-1.323629	1.033923
OwnCon	3.456667	1.378813	1	8
BoardCom	.2485591	.0674119	.0909091	.4444444
ExAud	.8	.4006683		

on the board contrary to the minimum requirement of two by the Code. It can also be seen that most companies in the sample engage the services of any of the top four auditing firms in the Philippines.

Bootstrapping Results: Path Coefficients

Presented in Table 6 is the result of the bootstrapping made based on the framework.

Efficient Contracting and Income Strategy

The result, with a p-value of 0.025, suggests that efficient contracting of firms significantly influences management's income strategy decisions; therefore, H_{01} is rejected. However, the result showed an inverse relationship as the coefficient of efficient contracting is -0.156 contrary to the assumption of PAT; management is less likely to choose income-increasing accounting policies. This further suggests that its influence is not due to the opportunistic behavior of management.

It can be inferred that management prioritizes the interest of shareholders. Nevertheless, management's choice is not purely driven by self-interest, but also the maximization of shareholders' interests (Fields et al., 2001; Libby et al., 2015). For emerging economies, alignment of interests between shareholders and management is expected (Bao & Lewellyn, 2017; Parte-Esteban & García, 2014; Wang & Shailer, 2017) because companies are characterized as either

family-owned or closed family companies that went public, wherein managers are either large owners of the company or were appointed by these large owners.

The significant but negative relationship between efficient contracting and income strategy further suggests that companies that are highly-leveraged choose income-decreasing policies to limit wealth transfers to shareholders; thereby, reassuring creditors of the capability to pay for obligations. Although this too contradicts the opportunistic assumptions of PAT, it must be noted that debt covenants are generally employed to limit the mentioned wealth transfer (Young, 1998), and the result validates this.

Political Sensitivity and Income Strategy

As presented in Table 6, companies in the sample are highly-leveraged, although this may be attributed to companies who reported zero long-term debt and deficits. The results also show that political sensitivity, composed of size and labor force intensity, influences management in their accounting policy decisions. The construct is significant at the 0.05 level; hence, H_{02} is rejected.

The -0.447 coefficient of political sensitivity suggests an inverse relationship to income strategy; that is, as companies become more politically sensitive, managers will prefer income-decreasing policies to reduce the perceived size of the company and avoid government interventions like additional taxes and

Table 6*Bootstrapping Results of the First Path Model Using the Original Framework*

Path	Path Coef.	Sample Mean	Std. Dev.	T-Statistics	P Values	
Ho ₁ : EfficCon -> IncStrat	-0.156	-0.146	0.069	2.246	0.025	***
Ho ₂ : PolSen -> IncStrat	-0.447	-0.393	0.226	1.975	0.048	***
Ho ₃ : FinNeed -> IncStrat	0.041	0.036	0.034	1.221	0.222	
Ho ₄ : InfoSig -> IncStrat	-0.104	-0.105	0.074	1.406	0.160	
Ho ₅ : IOS -> IncStrat	-0.061	-0.065	0.070	0.872	0.383	
Ho ₆ : OwnCon -> IncStrat	0.171	0.168	0.057	2.996	0.003	***
Ho ₇ : BoardComp -> IncStrat	-0.075	-0.075	0.049	1.510	0.131	
Ho ₈ : ExtAud -> IncStrat	-0.033	-0.034	0.048	0.686	0.493	

regulations. This is consistent with PAT and the findings of Waweru et al. (2011), who found a negative, significant relationship between firm size and income strategy.

The significant and inverse influence of political sensitivity to income strategy is common in emerging economies wherein large companies are more likely to be heavily regulated, and reporting higher income will only attract the attention of the government, its employees, the public, and other stakeholders. Although there are many factors considered in union negotiations, the reported earnings and other accounting-based data of the company are the key information used (Osma et al., 2015); such that higher wage increase is demanded from companies that report higher earnings.

Internal Financing Capacity and Income Strategy

The study found no significant statistical evidence that the need for financing influences management in choosing accounting policy; thus, this study fails to reject Ho₃. The positive coefficient validates the perspective that if companies rely more on external debt, management chooses income-increasing policy to signal stronger financial performance to creditors (Waweru et al., 2011). However, this relationship is insignificant.

Contrary to the assumption of PAT that managers will prefer income-decreasing policies to decrease capacity to pay dividends and increase earnings to be retained, managers of Philippine companies are not influenced by the level of retained earnings the

company has or the company's level of internal financing capacity. It can also be noted that companies in the sample, on average, are highly leveraged, which means that companies rely more on external borrowings than on retained earnings.

Information Signaling and Income Strategy

Further, this study fails to reject Ho₄ and found that information signaling does not influence the decision of the management in choosing accounting policy. The direction of the relationship is negative as predicted, which means that when ROE of the company decreases, management is inclined to choose an income-increasing policy to signal strong financial performance to investors.

Companies may have used the distribution of dividends or through long-term investment to signal favorable current earnings and stable future financial conditions to sustain dividends and finance projects (Brigham & Ehrhardt, 2011). The insignificant impact of ROE on income strategy may suggest that Philippine companies use other means of sending a signal to the financial market instead of accounting choice.

IOS and Income Strategy

IOS is believed to be determined together with accounting policy; hence, the same is expected to be considered when making income strategy decisions. However, the results of the study suggest that IOS does not matter in the income strategy of companies; therefore, Ho₅ is not rejected. This is inconsistent

with the assumption of Smith and Watts (1992) of a positive relationship between IOS and accounting choice. Although, IOS is found to be insignificant and the negative relationship with income strategy is inconsistent with the opportunistic assumptions.

Ownership Concentration and Income Strategy

Ownership concentration is found to be a significant factor in the accounting policy decision of management; hence H_{06} is rejected. However, unlike the findings of Astami et al. (2006) and Isa (2014), who documented an inverse relationship, this study found a direct relationship, with the path coefficient of 0.171 significant at $p < 0.05$, between ownership concentration and income strategy. The result implies that as the level of ownership concentration increases, management is inclined to choose income-increasing policies.

The positive and significant relationship of ownership concentration and income strategy for Philippine companies may suggest that blockholders may not have seen management's decision as opportunistic and may indicate that owners believed that managers are advancing their welfare. As suggested in the earlier discussion on efficient contracting, the result of ownership concentration may further validate the alignment of the interest of the managers with the shareholders. This result is consistent with the findings of Guo and Ma (2015), which confirmed that top shareholders have a positive relationship with earnings management.

Board Composition and Income Strategy

Increased monitoring and effective oversight are expected to protect the interest of the owners and reduces the tendency of management to opportunistically manage earnings (Bekiris & Doukakis, 2011). Board independence increases monitoring; however, the study fails to find significant statistical evidence on the impact of board composition (independence) on income strategy. Hence, the study fails to reject H_{07} . Unlike the results of this study, Waweru et al. (2011), Bekiris and Doukakis (2011), and Waweru and Riro (2013) found a significant, negative relationship between board independence and income strategy. However, it can be noticed that the coefficient of the said path is negative (-0.075), which is consistent with the assumption that board monitoring minimizes the opportunistic behavior of management.

Although insignificant, the study found that when the number of independent directors increases relative to the total number of members of the board, management is less likely to prefer an income-increasing strategy. The result is consistent with the findings of Isa (2014), who found no statistical evidence that board composition influences the accounting policy choice of noncurrent assets for IFRS first time adoption. This result further validates the findings of Bao and Lewellyn (2017) that an income strategy of managers is given less attention because they are the representatives of the large owners of the firm. This also provides further evidence on the findings of Jaggi et al. (2009) and Prencipe and Bar-Yosef (2011) that independent directors have weak monitoring power over earnings management of managers in public family firms.

External Auditor and Income Strategy

The external auditor factor is also not statistically supported; thus, this study fails to reject H_{08} . In the researches of Gupta (1995) and Simon and Costigan (1996) about accounting policies for first-time adoption or early adopters of a new accounting standard, they found a significant relationship between the type of external auditor and accounting choice.

Finally, the results of this study found that external auditors do not influence managers' income strategy. Although not significant, the negative path coefficient of -0.033 suggests that when companies employ one of the Big Four auditing firms, management is less likely to employ an income-increasing strategy. This is consistent with the auditor hypothesis, which assumes that auditors will monitor and constrain aggressive earnings management of executives to attest the quality to the accounting information (Libby et al., 2015); thus, an inverse relationship.

Discussion

Accounting policies can be used as an income strategy by managers. PAT generally assumes that the accounting choice of management is driven by their opportunistic behavior; managers are assumed to choose policies that can increase their benefits and decrease wealth transfers to other parties like creditors or government. Philippine companies prefer income-decreasing accounting policies for all types of inventories covered by the study, which may be associated with the non-perishable type of inventories

the companies have and the fluctuating cost of acquisition. The same accounting choice preference is observed over the subsequent measurement of land and investment property. However, all companies with relevant depreciable PPE and software chose income-increasing policies. On average, managers of Philippine companies prefer an income-increasing strategy, which may suggest the presence of earnings management.

The results of the study reveal that efficient contracting, political sensitivity, and ownership concentration are significant variables. Although PAT assumes a positive relationship between efficient contracting and income strategy, this study found a negative direct relationship. The results of this study imply conformance with the agency theory wherein bonuses are not only used by owners to reward good performance but also to align management's interest to theirs.

This characteristic is common to countries with emerging economies like the Philippines, which is characterized by family-owned or closed family companies that went public; managers are either large owners of the company or were appointed by these owners. Nevertheless, the result indicates that the shareholders are successful in securing the alignment of interest of managers with their interests; therefore, managers choose an income-increasing strategy despite reduced or disadvantageous contractual relationships (decrease in bonus and high leverage ratio).

In connection with the results of efficient contracting, ownership concentration also showed a significant positive influence on income strategy instead of the presumed negative relationship. Owners do not see the accounting choice of managers as opportunistic that needs to be restricted, and that their policy choices are similar. As the Philippines is still an emerging market, these managers may be the same large owners of the company or were appointed by these large owners to represent them; hence, there is an alignment of interests between managers and shareholders.

The results of political sensitivity are consistent with the assumption of PAT. Management's decision is influenced by how politically sensitive their company is to government interventions and employee actions. Philippine companies who are perceived to be large and who are more labor-intensive prefer income-decreasing accounting policies. This validates the assumption that executives of Philippine companies

choose income-decreasing policies to reduce the perceived size and resources of the company and avoid government interventions and actions from the labor union. Additional regulation entails costs on the part of the company and wealth transfers to the government and reduces the wealth that can be transferred to management. The same can be observed when the firm is perceived by the employees to have so much resources; union negotiations often entail a cost for both the employees and the firm.

Ownership concentration is also found positively significant, which suggests that both blockholders and management may have the same accounting policy choices for the company and strive to project a strong financial performance and condition of the firm. As discussed, emerging markets are often characterized by family ownership and close relation between large shareholders and managers. As these managers are often appointed by the large owners, if not the large owners themselves, their accounting choice generally reflects the choice of the owners also.

Other variables like the need for financing, information signaling, board composition, and external auditor are found not to influence managers' income strategy decisions. Philippines companies are highly leveraged, which suggests that debt may be easily accessible because Philippine companies often own or a co-subsidiary of financial institutions that prefer to grant credit to affiliated companies. The close relationship between the companies may have weakened the impact of the need for financing to the income strategy decisions of management. On the other hand, as there are other and common forms to send a signal to the market, an accounting choice is not affected by this variable.

The insignificance of IOS may also imply that although accounting choice and other policies may have been determined together, the same does not influence the other. Also, because most of the companies are owned by families, the independent directors may be granted less authority to affect management choices or impose their monitoring roles. Finally, the external auditor factor may only influence accounting choice for the first-time adoption of accounting standards, which may require expertise when implemented.

Although the study had only validated three out of the eight factors presumed to impact income strategy, this still indicates the presence of earnings management through accounting policy choices. This further implies

that the accounting policy decision of management is driven not just by ease of application and lower cost of implementation but also by the nature of the contractual relationships the company has with management and creditors, the sensitivity to government interventions and employee actions, and the degree of owner intercessions in policymaking. Although managerial opportunism is not entirely observable, the results imply that shareholders' interest has been considered in management's accounting choice.

Research and Business Implications

The study documents the presence of earnings management in Philippine companies through the choice of accounting policies. This implies that accounting policies are used as income strategy, that is, to influence the reported earnings of the companies to maximize the utility the managers can get. Specifically, the study identified efficient contracting, political sensitivity, and ownership concentration as significant variables.

The findings suggest that unlike the assumption of PAT of managerial opportunism, the same is not validated in Philippine companies. Instead, the negative coefficient of efficient contracting and positive coefficient of ownership concentration imply the alignment of interests between shareholders and managers. This relationship is expected from companies in emerging markets, like the Philippines, wherein companies are characterized as family-owned and managers are either the large owners, who are also family members, or appointed by the large owners. In addition, Philippine companies are characterized by a very low number of institutional investors or blockholders. This considerably low ownership concentration also equates to low power in policy decisions. These large owners may be active in the management of the corporation or may appoint the managers and directors of the firm; hence, influence managers to secure their interest, notwithstanding the impact on the minority (dispersed) shareholders.

Results also show a negative relationship between political sensitivity and income strategy, which suggests a significant influence of the said factor in the income strategy decision of the management. This further validates the assumption that Philippine companies try to reduce the perceived size and resources of the company in the eyes of the government agencies and the employees to avoid regulatory interventions and

labor negotiations. Emerging markets tend to be highly regulated where government lobbying is uncommon, less is demanded and expected from smaller companies. Edralin (1999) documented the difficulties in labor union negotiations in the Philippines due to a lack of expertise in the side of the union and tactics of management. Nevertheless, union talks are expensive for companies, hence, avoiding the same by reducing the perceived resources of the company will save the company from spending on unions.

Although results suggest that managers advance the interest of the shareholders, it can be observed that the interests of other stakeholders (i.e., government agencies, employees, minority shareholders) are placed with less importance. This calls for the attention of both businesses and regulatory agencies to implement measures to ensure that these stakeholders are not intentionally disadvantaged.

The indicators used in the study are limited to those that had been previously used. Other indicators may also be included to measure each construct to capture holistically the characteristics of each construct. Future research may also consolidate different monitoring features into one monitoring index as a moderating variable instead of using each factor. Also, researchers may further scrutinize the financial statements and other disclosures to specifically determine whether there is, in fact, an accounting-based bonus or not to differentiate the same from other types of bonuses. Stock compensation that is performance-based should also be considered. Finally, the results of this paper may be corroborated by conducting surveys with management to check whether they personally believe they are manipulating earnings driven by their opportunistic behavior or not, or they simply choose policies due to technicalities.

Declaration of ownership

This report is our original work.

Conflict of interest

None.

Ethical clearance

The study was approved by the institution.

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