Following the Rules?
A Mixed Message from Indonesia

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Abstract
This study examines Indonesian Accounting Regulatory Compliance (IARC) by analysing companies' financial reports. Agency theory offers insights into the tendency of listed companies to follow the rules particularly to better ascertain whether or not differing ownership and governance structures lead to increased compliance. Analysis reveals a surprisingly low level of only 43 percent compliance with accounting rules. T-test and statistical regression analysis show that industry type (p-value of 0.013) and auditor type (0.036) are significant predictors of IARC.

The level of average compliance is significantly lower than the 88 percent compliance findings of a similar study by Tower, Hancock and Taplin (1999) for other Asian countries. The fundamental implication of the study is that much more regulatory intervention is needed. These findings add to the growing number of studies expressing concern about the issue of lack of effective supervision and sanctions in Indonesia's regulatory compliance (World Bank, 2005).

Introduction
Accounting compliance is a crucial issue for Indonesia’s regulatory body, the Capital Market Supervisory Agency (Bapepam). One of the underlying issues is whether or not compliance of accounting standards results in more confidence and protection of stakeholders. This study investigates the effectiveness of firms listed on the Jakarta Stock Exchange (JSX) in applying Indonesian accounting standards (the Standards) as a means of contributing to the national economy as an emerging country. Examining the ability of Indonesian listed firms to successfully apply the Standards provides a natural experiment from which to obtain evidence on whether the rules of Bapepam are complied properly in the communication of their economic performance. The study identifies factors that are crucial in successfully implementing the Standards.
Agency problems are common to firms, especially in developing countries. In capital markets, stakeholders will reduce the costs that they want to pay for a company's shares by predicting the extent of management agency costs. For example, in theory, firms will select ownership and corporate governance structures that are well organised to reduce agency costs (Gillan & Starks, 2003).

This study examines factors that influence the compliance of listed companies with four important accounting issues contained in three standards: inventory, fixed assets/depreciation, and impairment of assets (IAI, 2006). The dependent variable, Indonesian Accounting Regulatory Compliance (IARC), measured by a compliance index, is the level of compliance with the Indonesian accounting standards of the listed companies. The aggregate of these standards comprise a 73-item compliance index that forms the basis of reporting compliance.

The predictor variables analysed are ownership concentration (percentage holdings of the top one shareholder) and corporate governance (percentage of independent commissioners on the Board of Commissioners). Control variables also examined are size of firm, type of industry and auditor type. Using statistical analysis, this study investigates the degree to which the Indonesian listed firms comply with the Indonesian accounting standards.

This paper is structured as follows. Section two discusses the literature review and related hypothesis development. The research method and data sources are described in sections three and four. Results are discussed in section five. Finally, the implications and conclusions are outlined in section six.

Literature Review and Hypotheses Development

Agency theory informs this study. Jensen and Meckling (1976, p. 308) define the agency relationship as a contract under which one party (the principal) engages another party (the agent) to perform some services on their behalf. The principal (owner) will delegate some decision making authority to the agent (manager). The main issue regarding the firm is the information asymmetry between agents and principals. In terms of information asymmetry, communication between agents and principals might not always be effective (Brennan, 2006). Information asymmetry happens when the principals' ability to oversee the agents' performances and jobs are limited or interrupted by other factors identified merely to the agents. Agency theory, in this situation, predicts that the agents could decrease their performance or may even shirk their responsibilities due to their ability to conceal such performance deficiencies from the principals (Kunz & Pfaff, 2002). Brennan (1995) and McColgan (2001) argue that agency problems arise due to the difficulty of perfectly contracting for every possible action of agents whose decisions affect both the agent's own welfare and the welfare of the owners.

Agency theory explains how agents could be encouraged to perform in the best interests of principals. The findings of Shleiver and Vishny (1997) and McColgan (2001) suggest that ownership concentration and independent commissioners are key determinants in terms of agency theory. Agency costs can be reduced by varying the governance and ownership structures. In this regard, agency problems occurring from
conflicts of interest between principals and agents could be reduced if the ownership (principals) was less concentrated and if the monitoring between the agent and principal was improved by greater independent commissioner scrutiny. This research offers a useful and practical application of agency theory in an ownership structure and corporate governance mechanism context and seeks to answer the following research question: Are the concepts of ownership structures and corporate governance significant determinants of accounting regulatory compliance in Indonesia?

**Ownership Structures**

Berglof and Claessens (2004) argue that the stakeholders frequently have some degree of ownership in the equity of the firms they control. Some owners, by virtue of the size of their equity positions, effectively have some controls over the firms they own (Villalonga & Amit, 2004). In modern companies, conflicts of interest between corporate insiders (for example controlling shareholders and managers) and outside investors is a central concern that should be analysed (Prasad, Green & Murinde, 2001). The presumption is that the company's ownership structure is a primary determinant of the extent of agency problems between controlling insiders and outside investors.

In general, emerging markets have highly concentrated ownership, particularly in the form of family ownership (Claessens, Djankov & Lang, 1999; Lins, 2003). When ownership is concentrated to a degree in which the single largest shareholder has effective control of the firm, the nature of the agency problem shifts away from the agent-principal conflict. Principal-manager problems are less likely to be about managements' (agents) agendas and more about owners' (shareholders) agendas, and are more likely to be about minority shareholders' agendas than about controlling shareholders' agendas (Berglof & Claessens, 2004). Shleifer and Vishny (1997) argue that, as ownership gets beyond a certain point, large owners gain nearly full control and prefer to use firms to generate private benefits that are not shared by minority shareholders. Studies by La Porta et al. (1998) and Shleifer and Vishny (1997) show the problems associated with high ownership concentration and the agency conflict between large and small shareholders. When large shareholders effectively control corporations, their policies may result in the expropriation of wealth from minority shareholders. The conflicts of interest between large and small shareholders can be crucially important with controlling shareholders enriching themselves by transferring profits to other companies they control.

One unique institutional feature, in the case of Indonesia, which is different from other developed economies such as US and UK, is the high concentration of ownership. Ownership concentration in Indonesia is dominated by families or the government (Claessens et al., 1999). Claessens, Djankov, and Lang (2000) found that there is evidence of expropriation of minority shareholders' wealth by a majority or controlling shareholder. As a result, McKinsey & Company (2001) advises that distinct ownership structures should be examined more explicitly. To formally test the impact of ownership concentration, the following hypothesis is examined:
**Hypothesis 1**

There is a negative relationship between the level of ownership concentration and the level of IARC of listed JSX companies.

**Corporate Governance**

The issue of corporate governance in modern corporations arises because of the separation of ownership and control, and the diffusion of equity among investors (Berle & Means, 1932). The need for appropriate corporate governance has existed since the birth of the corporation, which has become the paramount form of business organisation. Corporate governance has remained constant, even though the rules, principles and practices by which it is expressed continue to evolve over time. The implementation of corporate governance impacts on the structures through which the objectives of the company are set, the means by which those objectives are attained, the monitoring of performance and the ways it can be improved.

Monks and Minow (2001) define corporate governance as the relationship among various participants in determining the direction and performance of corporations. The primary participants are the shareholders, the management and the Board of Commissioners. Corporate governance generally deals with the relationships and obligations between stakeholders and its importance is derived from its contribution to business prosperity and to accountability (Yong & Guan, 2000). Corporate governance is also an important issue in all industrial and emerging economy countries and it is accepted as an important pillar in the architecture of the future global economy (Sarkar & Sarkar, 2000).

There is a major threat of corporate governance, which emphasises the accountability and fiduciary duty of the corporation and the commissioners of the corporation towards its stakeholders (Easterbrook & Fischel, 1993). Good mechanisms and guidelines have to be drafted and implemented to ensure the effective and reliable management within the corporation and to protect the rights of the stakeholders (Blagescu, Casas & Lyod, 2005). Good corporate governance ensures that stakeholders with a relevant interest in the company's business are taken fully into account. Good corporate governance environment is a main requirement for any economy that desires to attract and enhance long-term investments and compete effectively in the global marketplace (Claessens, Glassner & Klingebiel, 2002). Management may enrich itself using creative accounting leading to shareholder distrust (OECD, 2002; Jacobides & Winter, 2005). Good corporate governance can make a significant contribution to the prevention of malpractice and fraud. However, the application of corporate governance is poor in emerging economy countries, especially Indonesia (Roche, 2005). Corporate governance is more a matter of form rather than substance (Roche, 2005).

In terms of the Board of Commissioners in Indonesia, the board's role is to provide an independent oversight of management. The board's role is also to hold management accountable to shareholders for its actions. A widely held view is that boards are more effective in their monitoring of management when there is a strong base of independent commissioners on the board (Federal Register, 2003). Business theory suggests that the
Board of Commissioners is an important part of the corporate governance structure of corporations (Baysinger & Hoskisson, 1990). The Board of Commissioners, which has the power to hire, fire and pay compensation to management teams, serves to resolve conflicts of interest among decision makers. This condition reduces agency costs associated with the separation of ownership and control, which in turn encourages managers to accept agency control mechanisms. The ideal Board of Commissioners have a low number of commissioners who are also past or present employees of the firm (Davidson et al., 2002). Outside commissioners could be required to demonstrate their psychological and financial independence from the organisation's managers in order to assure stakeholders of their fiduciary responsibility (Morck, 2004). In the context of corporate governance mechanisms, the Board of Commissioners is properly viewed as the solution to problems arising from agent-principal relations. The existence of independent commissioners on the Board of Commissioners serves to prevent collusion among managers and thereby increases the effectiveness of management.

Weak corporate governance is viewed as one of the factors that contributed to the Asian financial crisis, including Indonesia's (Choi, 2000). In Indonesia, the securities regulator, Bapepam (Capital Market Supervisory Agency), and the JSX now require all companies listed on the stock exchange to have at least 30 percent of the board as independent commissioners (JSX, 2004a). The objective of this new rule is to induce the listed companies to improve transparency and improve the oversight role of the board by installing independent commissioners (Capital Market Law, 1995). It is likely that the agency conflict between managers and shareholders can be reduced by a greater level of independent commissioners. A study by Fitzpatrick (2000) in Indonesia emphasises that external or independent commissioners can improve corporate governance.

In terms of independent commissioners, an important factor is how to monitor management behaviour with the objective of representing and protecting the interests of shareholders (Berle & Means, 1932; Jensen & Meckling, 1976). Since inside commissioners may not feel compelled to contradict the other executives or chief executive officer, independent commissioners are in a better position to monitor the managerial activities, compliance and performance of the firms (Weisbach, 1998). An independent commissioner usually has a much greater commitment to working for the company's stakeholders (IBL, 2000). Adam and Mehran (2003) suggested that increases in the proportion of outside commissioners on the board should increase firm performance as they are more effective monitors of company managers. The independence of the Board of Commissioners from management or the insider group is crucial because only then can the board truly monitor and discipline the management. Therefore, the general expectation is that the more independent the Board of Commissioners, the greater the compliance of the firm and, in turn, the greater the performance of the firm. To test the degree of corporate governance as measured by independent commissioners, the following hypothesis is examined:

**Hypothesis 2**

There is a positive relationship between the level of independence of the commissioners and the level of IARC of JSX listed companies.
**Research Method**

This study examines factors that influence listed companies' compliance with Indonesian accounting standards: inventory, fixed assets, depreciation and impairment of assets (IAI, 2006). These standards are composed of the following number of explicit requirements: inventory has 16 requirements; fixed assets and depreciation have 30 requirements between them; and impairment of assets has 27 requirements in that standard. This makes up a total of 73 items that require financial reporting compliance. These four standards are analysed in this study because they are universally relevant and applicable to the Indonesian business environment and the reporting practices of companies (World Bank, 2006). It is also important to note that compliance is required by Bapepam (2004) and JSX (2004b).

The dependent variable (IARC), measured by the compliance index, is the level of compliance with the Indonesian accounting standards by the listed companies of the JSX. Marston and Shrives (1991) note that a properly constructed compliance index is seen as a reliable measurement device for compliance of business. The level of compliance with Indonesian accounting standards - inventory, fixed assets, depreciation of fixed assets and impairment of assets - is measured by a self-constructed compliance index consistent with prior studies (Al-Basteki, 1995; Dumontier & Raffournier, 1998; El-Gazzar, Finn & Jacob, 1999; Murphy, 1999; Tower et al., 1999; Street & Bryant, 2000; Street & Gray, 2002; Glaum & Street, 2003; Tarca, 2004). IARCagg (aggregate) is calculated as the actual total number of required items provided by the Indonesian listed companies on their annual reports divided by the maximum applicable score.

The two key predictor variables examined in this study are ownership and governance structures. First, previous studies (La Porta et al., 1998) on publicly listed companies have shown that family control is more common in countries with poor shareholder protection. In Indonesia, public listed companies are controlled by families or by a limited number of shareholders (Kurniawan & Indriantoro, 2000) and previous findings show that 67 percent of publicly listed companies in Indonesia are family held (Claessens et al., 1999). Consistent with prior research (Chen, 2001), ownership structure is proxied by the single largest shareholder. In this study, the ownership structure of top one shareholder ownership is analysed in the Indonesian context because it is consistent with and relevant to prior studies conducted by Claessens et al. (2000). They identified that control was held through pyramid structures and cross holding among firms, with more than two-thirds controlled by a single largest shareholder. Top one shareholder ownership is measured by the proportion of shares owned by the top one shareholder to the total number of shares issued.

Second, corporate governance systems are most often measured by the ratio of the number of independent commissioners to the total number of commissioners on the Board of Commissioners. Pursuant to the Company Law (1995), Indonesia has a two-tiered board structure: Board of Directors and Board of Commissioners. The Board of Commissioners requires directors to represent management. The Board of Commissioners oversees and guides the Board of Directors to protect the owners' interests (Company Law, 1995). The new Indonesian Corporate Governance Code defines board members'
fiduciary duties and urges them to conduct their roles faithfully and responsibly in the company's interest; they also are obliged to disclose all shareholdings (Bapepam 2000). There may be too little protection for members of the Board of Directors, under the Indonesian law, as they can be held jointly and severally liable for losses caused by the board (Kurniawan & Indriantoro, 2000). In terms of good corporate governance, Bapepam and JSX require a public listed company to have at least 30 percent of the Board of Commissioners as independent commissioners (JSX, 2004a). In this research, the measurement of the percentage of independent commissioners is consistent with prior studies (Nasir & Abdullah, 2004). In the context of this study the ratio of the number of independent commissioners to the total number of commissioners on the Board of Commissioners is used as a proxy for corporate governance.

**Figure 1: Conceptual Schema**

Source: Original figure.

Size, type of industry and auditor type are the three control variables employed in this study. The use of firm size as a control variable is consistent with prior studies (Nasir & Abdullah, 2004; Haw *et al.*, 2006). Size of firm is measured by the log of a firm's total assets in rupiah. Industry is measured as a dichotomous classification of industries into high profile and low profile industry, with one (1) for high profile and zero (0) for low profile. Many previous researchers have used this classification for their research (Dierkes & Preston, 1977; Patten, 1991; Roberts, 1992; Choi, 1998). Hackston and Milne (1996) classify low profile industries as building, electrical, finance and banks, food, investment, medical supplies, meat and by-products, miscellaneous services, property, retailers, and textiles and apparel and classify high profile as agricultural and associated services, chemicals, energy and fuel, engineering, forestry, liquor and tobacco, media and communications, mining, transport and tourism. Auditor type is measured as a score of
one (1) given for Big 4 auditors utilised and zero (0) if audited by other public accounting firms. This is consistent with previous research (Barako, Hancock & Izan, 2006).

Figure 1 provides a conceptual schema underlying the two testable hypotheses regarding the degree of association between ownership structures, corporate governance and the level of IARC.

**Statistical Method**

Multiple linear regression is used to model how the possible explanatory variables forecast the level of compliance practices of Indonesian listed companies. Multiple regression analysis is a statistical technique utilised to analyse the relationship between a single metric dependent variable and several metric or non-metric independent variables (Hair *et al.*, 2006).

**Table 1: Legend Explanation of Regression Variables**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Variable name</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Dependent variable:</strong></td>
<td>Aggregate</td>
<td>Actual total number of required items provided by the Indonesian listed companies on their annual reports are divided by the maximum applicable score for firm i</td>
<td>Metric/Ratio</td>
</tr>
<tr>
<td></td>
<td>IARCagg: Indonesian Accounting Regulatory Compliance (aggregate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td><strong>Independent Variables:</strong></td>
<td>Ownership</td>
<td>The proportion of shares owned by the top one shareholder to the total number of shares issued for firm i</td>
<td>Metric/Ratio</td>
</tr>
<tr>
<td></td>
<td>Ownership concentration (top one shareholder)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Corporate governance (independent commissioners)</td>
<td>Commissioners</td>
<td>Ratio of the number of independent commissioners to the total number of commissioners on the Board of Commissioners for firm i</td>
<td>Metric/Ratio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td><strong>Control Variables:</strong></td>
<td>Size</td>
<td>The log of a firm's total assets in rupiah (IDR) for firm i</td>
<td>Metric/Ratio</td>
</tr>
<tr>
<td></td>
<td>Size of firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Auditor type</td>
<td>Audit</td>
<td>1 if Big 4, and 0 if otherwise for firm i</td>
<td>Non-Metric/Nominal</td>
</tr>
<tr>
<td>3</td>
<td>Type of industry</td>
<td>Industry</td>
<td>1 for high profile and 0 for low profile for firm i</td>
<td>Non-Metric/Nominal</td>
</tr>
<tr>
<td>4</td>
<td>ε</td>
<td></td>
<td>Regression residual or error term</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>i</td>
<td></td>
<td>Company indicator</td>
<td></td>
</tr>
</tbody>
</table>
This study uses multiple regression with one metric dependent variable (IARC) and two metric independent variables (ownership and commissioners), with three control variables (size as a metric, and audit and industry as non-metric categorical variables [Table 1]). In this study, the main statistical method utilised to test hypotheses $H_1$ and $H_2$ is Ordinary Least Square (OLS) regression:

$$IARC_i = b_0 + b_1 \text{Ownership}_i + b_2 \text{Commissioners}_i + b_2 \text{Size}_i + b_2 \text{Audit}_i + b_2 \text{Industry}_i + \varepsilon_i$$

The measurement technique for each of these variables is outlined in Table 1.

This study examines a random sample of 30 annual reports of non-financial listed companies on the JSX for the period 1 January to 31 December 2005. The sample is derived from the population of 281 non-financial firms listed on JSX. Financial listed firms are excluded from this compliance study because different regulations from the Central Bank (Bank Indonesia) apply to financial firms such as banks, insurance and investment companies because of the unique nature of transactions and the assets portfolio of such entities (Karim & Ahmed, 2005). Annual reports are chosen as sources of data because they are easily accessed (McQueen, 2001), useful (Yeoh, 2005), widely communicated (Anderson, 1998; Beattie, McInnes & Fearnley, 2004) and financially focused.

**Results**

Table 2a-c report descriptive statistics for all of the observations. Table 2a shows that the mean of aggregate compliance is 43 percent (standard deviation: 11%), with a minimum of 31 percent and a maximum of 61 percent. No company totally complied with all the standards' requirements. The level of average compliance is substantially lower when it is compared to a previous study of listed companies' compliance with international accounting standards of Australia, Thailand, Singapore, Malaysia, Hong Kong and the Philippines where it ranges from 88 percent to 94 percent (Tower et al., 1999).

The mean of ownership concentration (top one shareholder) is 59 percent with a lowest mean of 10 percent and a highest mean of 94 percent. The average of corporate governance (independent commissioners) is 39 percent ranging from 25 percent to 60 percent independent commissioners.

With regard to control variables (firm size, auditor type and type of industry), Table 2a shows that firm size has a wide range. The mean indicates that, on average, firms listed have total assets of about IDR3143 million. Table 2b summarises the frequency of auditor type and type of industry. The table shows that the Big 4 firms audit 57 percent (or 17) of listed companies in Indonesia. Fifty-seven percent of the listed companies are also of the high profile type.

In terms of compliance rate for each standard, Table 2c reveals that the mean of Aggregate1 (for standard of inventory) is 61 percent, ranging from 44 percent to 100 percent. The average of Aggregate2 (for standards of fixed assets and depreciation) is 60 percent, with a minimum 47 percent and a maximum 90 percent. The average of
Aggregate3 (for standard of impairment of assets) is far lower at 11 percent, ranging from four percent to 36 percent.

Table 2a: Descriptive Statistics of Key Predictor Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aggregate Compliance</td>
<td>30</td>
<td>0.31</td>
<td>0.61</td>
<td>0.43</td>
<td>0.11</td>
</tr>
<tr>
<td>2</td>
<td>Ownership</td>
<td>30</td>
<td>0.10</td>
<td>0.94</td>
<td>0.59</td>
<td>0.19</td>
</tr>
<tr>
<td>3</td>
<td>Commissioners</td>
<td>30</td>
<td>0.25</td>
<td>0.60</td>
<td>0.39</td>
<td>0.09</td>
</tr>
<tr>
<td>4</td>
<td>Size (total assets)</td>
<td>30</td>
<td>41*</td>
<td>22,128*</td>
<td>3,143*</td>
<td>5,342*</td>
</tr>
</tbody>
</table>

Source: Original table.

Note(s): * million rupiah.

Table 2b: Audit and Industry Frequencies

<table>
<thead>
<tr>
<th>Audited by:</th>
<th>N</th>
<th>Percent of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audited by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non Big 4</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td>Big 4</td>
<td>17</td>
<td>56.7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Original table.

Table 2c: Level of Compliance with Accounting Standards

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aggregate1 for inventory standard</td>
<td>30</td>
<td>0.44</td>
<td>1.00</td>
<td>0.61</td>
<td>0.11</td>
</tr>
<tr>
<td>2</td>
<td>Aggregate2 for fixed assets and depreciation standard</td>
<td>30</td>
<td>0.47</td>
<td>0.90</td>
<td>0.60</td>
<td>0.18</td>
</tr>
<tr>
<td>3</td>
<td>Aggregate3 for impairment of assets standard</td>
<td>30</td>
<td>0.04</td>
<td>0.36</td>
<td>0.11</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Source: Original table.

Table 3 reports the Pearson and Spearman correlation coefficients. Aggregate (level of compliance) is positively correlated with ownership concentration, number of commissioners, size of firm and audit firm for both Pearson and Spearman correlations. Aggregate compliance is negatively correlated with industry for both Pearson and Spearman correlations. The highest correlations are between ownership and audit, with a
coefficient of 0.417 (p<0.05). Given these relatively low correlations, concerns about multicollinearity for the multiple regression are lessened.

**Table 3: Spearman and Pearson Correlations Matrix**

<table>
<thead>
<tr>
<th></th>
<th>Aggregate</th>
<th>Ownership</th>
<th>Commissioners</th>
<th>Size</th>
<th>Audit</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate</td>
<td>0.229</td>
<td>0.096</td>
<td>0.161</td>
<td>0.285</td>
<td>-0.378*</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>0.245</td>
<td>0.118</td>
<td>0.138</td>
<td>0.351</td>
<td>0.201</td>
<td></td>
</tr>
<tr>
<td>Commissioners</td>
<td>0.061</td>
<td>0.118</td>
<td>0.172</td>
<td>-0.115</td>
<td>0.068</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.119</td>
<td>0.057</td>
<td>0.138</td>
<td>0.351</td>
<td>0.201</td>
<td></td>
</tr>
<tr>
<td>Audit</td>
<td>0.199</td>
<td>0.417*</td>
<td>-0.141</td>
<td>0.346</td>
<td>0.186</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>-0.391*</td>
<td>-0.043</td>
<td>0.061</td>
<td>0.276</td>
<td>0.186</td>
<td></td>
</tr>
</tbody>
</table>

Source: Original table.
Note: * indicates significance at p<0.05.

Table 4 reports that high profile companies have a statistically higher (p-value 0.039) mean compliance than low profile. Surprisingly, the mean of Non Big 4 audit firms is higher than Big 4 firms, but the difference is not statistically significant (p-value 0.110).

**Table 4: T-tests for Aggregate Compliance**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean aggregate</th>
<th>Mean difference</th>
<th>t-statistic</th>
<th>Sig. (2-tailed) (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High profile</td>
<td>17</td>
<td>0.4700</td>
<td>0.07824</td>
<td>2.163</td>
<td>0.039*</td>
</tr>
<tr>
<td>Low profile</td>
<td>13</td>
<td>0.3918</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Size:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>15</td>
<td>0.4100</td>
<td>-0.03133</td>
<td>-.819</td>
<td>0.420</td>
</tr>
<tr>
<td>Large</td>
<td>15</td>
<td>0.4413</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audit:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big 4</td>
<td>17</td>
<td>0.3923</td>
<td>-0.05887</td>
<td>-1.651</td>
<td>0.110</td>
</tr>
<tr>
<td>Non Big 4</td>
<td>13</td>
<td>0.4512</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Original table.
Note: * denotes significance at p<0.05

Table 5 shows the results of the multiple regression. It illustrates that ownership is not significant (p-value 0.650). H1 is not supported by the correlation (Table 3) or multiple regression (Table 5). Table 5 also shows that the percentage of board commissioners is not significantly associated with the extent of compliance (p-value 0.479); H2 is also not supported. Table 6 provides the results of a backward regression illustrating that industry and audit are significant (p-values 0.013 and 0.036 respectively).
Table 5: Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Standardised Coefficients</th>
<th>t-statistic</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beta</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.449</td>
<td>0.657</td>
</tr>
<tr>
<td>Ownership</td>
<td>0.086</td>
<td>0.459</td>
</tr>
<tr>
<td>Commissioners</td>
<td>0.130</td>
<td>0.479</td>
</tr>
<tr>
<td>Size</td>
<td>0.118</td>
<td>0.537</td>
</tr>
<tr>
<td>Audit</td>
<td>0.315</td>
<td>0.134</td>
</tr>
<tr>
<td>Industry</td>
<td>-0.468</td>
<td>0.013</td>
</tr>
</tbody>
</table>

**Model Summary**

- R-Squared: 0.318
- Adj. R-Squared: 0.176
- F-Statistic: 2.237
- Sample Size: 30

Source: Original table.

Table 6: Stepwise Regression Analysis

<table>
<thead>
<tr>
<th>Standardised Coefficients</th>
<th>t-statistic</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beta</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>14.454</td>
<td>0.000</td>
</tr>
<tr>
<td>Industry</td>
<td>-0.447</td>
<td>0.013</td>
</tr>
<tr>
<td>Audit</td>
<td>0.368</td>
<td>0.036</td>
</tr>
</tbody>
</table>

**Model Summary**

- R-Squared: 0.274
- Adj. R-Squared: 0.220
- F-Statistic: 5.085
- Sample Size: 30

Source: Original table.

**Implications and Conclusion**

This study provides an analysis of the extent to which Indonesian listed firms comply with Indonesian accounting standards. The level of average compliance in Indonesia is substantially lower than the 88 percent compliance findings of a similar study by Tower, Hancock and Taplin (1999) for other Asian countries. The implications are that Indonesian firms may have complied with less than 50 percent of the key accounting rule
provisions, suggesting much more regulatory intervention is needed. Differing ownership and governance structures do not affect the level of compliance whereas the industry audit firm does have predictive value.

This finding highlights the importance of the enforcement issue. The benefits derived from greater compliance with core accounting rules could include a reduction in costs associated with agency costs. These findings add to the growing number of studies expressing concern about the issue of lack of effective supervision and sanctions in Indonesia's regulatory compliance environment (World Bank, 2005).

Acknowledgments

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References


Yeoh, J. (2005) Compliance with mandatory disclosure requirements by New Zealand listed companies. *Advances in International Accounting, 18* pp 245-262.


Notes

i According to the Company Law No.1/1995, Indonesian companies have a two tier management structure comprising a Board of Directors headed by a president director and a Board of Commissioners headed by a president commissioner (Company Law, 1995). Directors manage and represent the company on a day to day basis. Commissioners supervise and advise the directors. Directors and commissioners are appointed by shareholders at the general meeting (Company Law, 1995).

ii The Asian Development Bank (ADB, 2001) recommendations to Indonesian government include: appointment of independent commissioners and mandating their functions and responsibilities to public stakeholders.

iii 1) Aggregate1: IARCagg-1, Inventory
    Actual total number of PSAK 14 inventory required items provided by the Indonesian listed companies on their annual reports are divided by the maximum of PSAK 14 inventory applicable score.
    2) Aggregate2: IARCagg-2, Fixed assets and depreciation
    Actual total number of PSAK 16 and 17 fixed assets and depreciation required items provided by the Indonesian listed companies on their annual reports are divided by the maximum of PSAK 16 and 17 fixed assets and depreciation applicable score.
    3) Aggregate3: IARCagg-3, Impairment of assets
    Actual total number of PSAK 48 impairment of assets required items provided by the Indonesian listed companies on their annual reports are divided by the maximum of PSAK 48 impairment of assets applicable score.