

PROTECTING EXISTING AND PROSPECTIVE INVESTORS AND THE ROLE OF INTERNAL AUDITORS

Md Shoaib Ahmed ^a, Shubhankar Shil ^b

^a School of Business, Independent University, Bangladesh.

^b School of Business, University of Liberal Arts, Bangladesh.

Corresponding author: s.ahmed@iub.edu.bd

Available at <http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html>

ISSN 1923-6654 (print) ISSN 1923-6662 (online).

Ontario International Development Agency, Canada. © Authors et al

Abstract: In this study we tried to explore the idea of the independence of internal audit committee, independence of finance and accounting departments and the corporate charter followed by the board of directors of an organization and how they protect existing and prospective investors. A multiple regression analysis and analysis of covariance (ancova) 2X2 have been used to analyze the data by using the R i386 2.1 5.1. A strong and positive relation has been found in this study with a highly correlated independent variable. It has been also found that 62% of the investors believed that internal auditors and finance and accounting executives are not independent at their work place. Surprisingly 89% felt that if internal audit committee and executives of finance and accounting departments work independently and effectively, then investors will be highly protected.

Keywords: Internal auditors, audit committee, investors' protection and corporate governance

INTRODUCTION

According to the definition of internal audit provided by the Institute of Internal Audit (IIA) in 2011 that “an independent, objective assurance and consulting activity is designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes”. The internal audit function should be given the appropriate status in the organization to enable the function to exercise organizational independence and individual internal auditors to act objectively. This is necessary because internal auditors are in a unique position as employees of an organization with responsibility to assess and monitor decisions made by the management and also to advise the management on the adequacy and effectiveness of internal controls (Sarens & Beelde, 2006). Mercer (2004: 190) notes that internal auditors ‘serve as the first line of defense against disclosure errors, ferreting out unintentional errors caused by weaknesses in a company’s internal controls and intentional errors due to fraud.’ The internal auditing profession in general, and internal audit activities more specifically, have changed significantly over the past decade, mainly driven by evolutions in corporate governance (Ramamoorti, 2003).

Individual investors will use an internal audit reporting (IAR) when evaluating a company and that such a report will increase perceived oversight effectiveness and confidence in financial reporting reliability (Wilson & Walsh, 1996; Case, 2006). Protecting investors rights include those to receive dividends on pro-rata terms, to vote for directors, to participate in shareholders' meetings, to subscribe to new issues of securities on the same terms as the insiders, to sue directors or the majority for suspected expropriation, to call extraordinary shareholders' meetings, etc. Investors are entitled to know information about the company they own. And it is only with that information that they can effectively engage with these companies. If they don't have this information, they really are in the dark. The Institute of Chartered Accountant in England and Wales (ICA) strongly suggested the public interest in audit in the Audit Forum in 2005. Whilst internal auditors carrying out a statutory audit of financial statements are accountable and report to the investors of a company only, there may be other prospective stakeholders who believe that an independent internal audit provides some means of ensuring that the company’s responsibilities to them are being met; in effect that it serves their interests too.

The audit committee is considered to be an important self-regulatory governance mechanism with significant oversight responsibilities over financial reporting, internal control and audit activities (Blue Ribbon Committee (BRC), 1999; United States (US) Congress, 2002). There is also an expectation among these other stakeholders that auditors should be independent of shareholders. Furthermore, according to corporate governance guidelines the audit committee has oversight responsibility for areas associated with preparing reliable financial statements and this includes the internal audit function. Therefore, the need for increased transparency about company governance, management, the audit committee, the external auditor, and the internal audit department are cornerstones of governance that are essential to managing organizational risks (Bailey *et al.*, 2003; Gramling *et al.*, 2004).

The New York Stock Exchange now requires all listed companies to maintain an internal audit function (SEC, 2003). While the NASDAQ has stopped short of requiring member companies to maintain an internal audit function, it does recognize the establishment of this governance mechanism as a best practice (Harrington, 2004). Furthermore, the Public Company Accounting Oversight Board (2004) stated that for large or complex companies, the absence of an effective internal audit function should be regarded as a significant deficiency in internal controls over financial reporting and possibly a material weakness. One of the reports of PWC in 2012 outlined that business trends expected to have the most impact on internal audit roles, responsibilities, and functions between 2007 and 2012 are technology, new regulations, risk management, corporate governance, and ethics and compliance

The main objective of this study is to determine whether and how the internal auditor, finance and accounting department and board of directors can protect the investment of individual investors who are planning to invest in a particular company. We also tried to determine the role of internal auditors in corporate governance and how corporate governance facilitate the internal auditors to prepare the error free financial report so that prospective investors get the real scenario of the company before making the investment decisions. The study was motivated after reading the "Ibrahim Khaled Share Market Probe Committee" report on the share market scam in Dhaka Stock Exchange (DSE) in 2010.

The capital market of Bangladesh is passing through a period of extreme volatility, uncertainty and grave crisis. Following the bursting of the bubble in December 2010, the market has lost values in terms of all major indicators. For example, as of 31 December 2011, DSE General Index (DGEN) dropped by 41 per cent; market capitalization went down by 29 per cent; and total trade value of the DSE suffered erosion to the tune of 83 per cent from the peak on 12 December 2010, when DGEN attained 8918 points. The P/E ratio which rose to as high as 29.7 in November 2010 had come down to 13.68. A committee was formed by the Government of Bangladesh and it was headed by Dr. Ibrahim Khaled. In his report he mentioned five main reasons that triggered the collapse of DSE and one of the reasons was manipulation of financial statements by internal auditors. The scam victimized almost 3 million small shareholders who lost their investment and still they are struggling to recover their principal amount. Moazzem and Rahman (2012) brilliantly summarized the "Probe Report" in their paper. They investigated the reliability and authenticity of audit reports of the listed companies in DSE. The submitted audit reports did not reflect the actual financial situation of the company, and appeared to be prepared with an intention to manipulate the market behavior (e.g. issuance of a large number of right shares by several companies in 2010. They figured out that only 19 per cent of the total listed companies were audited by firms that had official affiliation with international audit firms and about 60 per cent of listed companies were audited by firms which were enlisted with the NGO Affairs Bureau or Bangladesh Bank. Surprisingly, more than one-fifth of the listed companies were audited by firms which had no affiliation other than the Institute of Chartered Accountants of Bangladesh (ICAB).

BACKGROUND STUDIES

Objectives, Independence and Effectiveness of the Internal Auditor

Over the past decade or so, companies have tended to operate with increasingly sophisticated technology, growth in e-commerce transactions, more variations in management control systems, more human resource turnover, and ongoing changes to corporate and professional rules and regulations. Such underlying change and complexity in the organization's operating environment can make it increasingly difficult for internal auditors to conduct their audit tasks or apply professional standards with sufficient clarity. Faced with ambiguity, internal auditors would have less certainty about whether the information gathered in the course of their examinations is sufficiently objective and relevant (Ahmad and Taylor, 2009)

Institute of Internal Audit (IIA) defines the term *Objectivity* as "an unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on

audit matters to that of others.” Independence has been defined as having ‘no relationship to the corporation that may interfere with the exercise of their independence from management and the corporation’ (BRC, 1999). Independence is not an aspect of internal auditing that can be mechanically exercised. Since professional pronouncements on auditor independence, such as ISPPA (2006), tend to be principles-based more than rules-based, the exercise of independence will be cognitive in nature. It will rely on the internal auditor’s personal attitude and commitment towards the exercise of independence in carrying out tasks and making judgments at work. IIA has also published a framework to guide internal auditors with respect to independence and objectivity. In this framework, independence is recognized as a state where threats to objectivity are appropriately managed. Independence, based on the criterion of objectivity, is pivotal to the internal auditing profession and internal auditors (Mutchler, 2003).

Hence, internal auditors are required to identify, access and manage threats to their objectivity, including the need to consider safeguards that can mitigate the effects of the threats. Several empirical studies that have explored the association between audit committee independence and financial reporting outcomes indicate that firms with more independent members display better financial reporting quality. For example, Beasley *et al.* (2000) found that companies committing financial statement fraud have less independent committees than the industry benchmarks. Likewise, Abbott *et al.* (2003), based on 78 matched pairs of fraud and no fraud companies, found that no-fraud companies tend to have more independent audit committees than fraud companies. Independent directors are not economically dependent on the company, and thus are arguably less biased over an entity’s financial outcomes (Beasley *et al.*, 2000).

Internal audit function should be given the appropriate status in the organization to enable the function to exercise organizational independence and individual internal auditors to act objectively. This is necessary because internal auditors are in a unique position as employees of an organization with responsibility to assess and monitor decisions made by management and also to advise management on the adequacy and effectiveness of internal controls (Sarens and Beelde, 2006).

Goodwin and Yeo (2001) surveyed chief internal auditors in Singapore and found that audit committee’s comprised solely of independent directors had more frequent meetings and more private meetings with the chief internal auditor. Goodwin (2003) obtained similar results in a survey of chief internal auditors from Australia and New Zealand. In contrast, however, (O’Leary & Stewart 2007), in a study of Australian internal auditors’ ethical decision making, found that the existence of an effective audit committee had little impact on internal auditors’ perceptions of their willingness to act objectively.

Internal auditors should not be placed in a position where their independence can be questioned and feel unable to make objective professional judgments (Vanasco, 1994). Ideally, internal auditors must be free to report matters they audit as they are and their reporting activities are not subject to any influences (Sawyer & Dittenhofer, 1996). The ISPPA (ISPPA; IIA, 2006) has identified internal auditor’s independence as the most important criterion for effectiveness of the internal audit function. In general, shareholder and stakeholders perceive internal auditors as being entrusted in making independent assessments, judgments and decisions (Mutchler, 2003).

Effectiveness is the achievement of goals and objectives using the factors measures provided for determining such achievements. However, it has been traditional in internal auditing that the determination of internal auditing effectiveness can be accomplished by evaluating the quality of internal auditing procedures (Dittenhofer, 1997). The Sarbanes-Oxley Act of 2002 and board responsibility for the effectiveness of internal control further raise this issue (D’Silva & Ridley, 2007). For internal auditing to be effective, it requires a high standard in work performance (Smith, 2003). The effectiveness of internal auditing relies on an adequately staffed internal audit department (Mitchell & Sikka, 2005).

H1: Existing and prospective investors will have more confidence and feel secure if internal auditors of the companies understand their objectives and work independently than internal auditors of the companies’ who don’t.

Internal Auditors Relation with External Auditors

The frequent use of internal audit report by client firms leads to the possibility that external auditors will increasingly rely on internal audit in conducting their audits (Ward & Robertson, 1980). External auditors are responsible for verifying that the financial statements are fairly stated in conformity with GAAP and that these statements reflect the ‘true’ economic condition and operating results of the entity. Thus, the external auditor’s verification adds credibility to the company’s financial statements. Also, the external auditors are required by auditing standards to discuss and communicate with the audit committee about the quality, not just the acceptability,

of accounting principles applied by the client company. Therefore, a quality audit is expected to constrain opportunistic earnings management as well as to reduce information risk that the financial reports contain such as; material misstatements or omissions. The internal audit function is part of an organization's internal control system and thus the external auditors will seek an understanding of the function as part of their overall audit planning process (ISA 610; SAS 65; AUS 604, Zain et al. 2006).

While the roles of internal and external audit are distinct, there are many opportunities for coordination and cooperation between these two functions that may yield synergistic outcomes, such as higher quality audits and economic benefits. In fact, professional auditing standards acknowledge the potential contribution that an IA function can provide to the external audit (SAS No. 65, AICPA, 1991; ISA No. 610, MIA, 2000; PCAOB, 2007). This contribution can be made by internal auditors either working as assistants under the direct supervision of external auditors or independently performing various audits and reviewing work throughout the audit year on which the external auditors may rely (SAS No. 65, AICPA, 1991; Maletta, 1993).

However, a key factor in the consideration of the use of internal audit in the external audit process is the quality of internal audit. Both professional auditing standards and prior studies (see SAS No. 65, AICPA, 1991; ISA No. 610, MIA, 2000; Felix et al. 2001; IIA 2009; Prawitt, Smith & Wood, 2009) suggest internal audit quality encompasses specific attributes of the organization and parties performing internal audit activities (e.g., competency of internal audit staff) and external auditors are to first consider the quality of internal audit function in terms of objectivity, competence and work performed by the internal audit function before relying on the work of the internal auditor. Previous research suggests that a positive relation exists between external auditors' reliance on internal audit work and the strength of the internal audit function (Khalik *et al.*, 1983; Brody *et al.*, 1998; Maletta, 1993; Schneider, 1985). The findings of (Krishnamoorthy, 2002) indicate that the greater the objectivity, technical competence and quality of work performance (i.e. the exercise of due professional care), the larger the potential for internal auditors to contribute to the external audit. The contribution that internal auditors make towards assisting external auditors in the financial statement audit process has gained renewed attention (Elliot & Korpi, 1978; Felix *et al.*, 2001; Wallace, 1984).

The current governance environment has led to an increased emphasis on the relationship between internal and external auditors (Gramling et al., 2004). The economic benefits of external auditors' reliance on internal audit work are well recognized (Glover et al., 2008). They also predict that external auditors rely more on work performed by outsourced internal auditors than by in-house internal auditors because the latter are closely aligned with management. However, James (2003) argued that in-house internal auditors are likely to be more accessible than those from an outside provider as outsourced audit teams have limited contact with the company.

H2: Existing and prospective investors will have more confidence and feel secured if the companies' internal and external auditors are truly cooperative while auditing the financial statement than the companies' internal and external auditors are not.

Internal Audit as a Part of Corporate Governance

A good corporate governance structure helps ensure that the management properly utilizes the enterprise's resources in the best interest of absentee owners, and fairly reports the financial condition and operating performance of the enterprise. [Audit Quality, Corporate Governance, and Earnings Management: A Meta-Analysis]. According to corporate governance guidelines such as the Auditing and Assurance Standard Board of the Australian Accounting Research Foundation (2002) and the MCCG (Finance Committee on Corporate Governance, 2000), the audit committee has oversight responsibility for areas associated with preparing reliable financial statements and this includes the internal audit function. As Hold (2009) said, from a research perspective of the corporate governance and governance transparency literatures provided evidence that information about the internal audit function affects investor confidence and decision-making. From policy and practice perspectives, the study's findings complement calls in the contemporaneous accounting and governance literature for companies and regulators to consider the potential for an internal audit report (IAR) to external stakeholders to improve governance transparency.

Internal auditors play an important role in their organization's corporate governance, internal control structure, risk management analysis, and financial reporting process. Internal audit resources also have been expanded to satisfy the high demand for services to assist in executive certifications of internal controls and financial reports (Rezaee, 2010). Prior research provides consistent evidence of a positive relation between corporate governance and financial reporting quality (e.g., Dechow *et al.*, 1996; Beasley *et al.*, 1999, 2000; Klein, 2002; Agrawal & Chadha, 2005; Krishnan, 2005; Srinivasan, 2005; Wang, 2006). Recent studies in internal auditing have evaluated extensively the

role of internal auditing in corporate governance. Cooper *et al.* (2006); Hass *et al.* (2006); and Allegrini *et al.* (2006) reviewed details of recent studies on internal auditing in the United States, Europe, Australia and Asia.

It has become clear that, mainly driven by the increased attention for 'good governance' and the resulting regulations and guidelines (for example, the Sarbanes Oxley Act in the US, but also various corporate governance codes in Europe), internal auditing has established its position within the corporate governance field (Paape *et al.*, 2003; Gramling *et al.*, 2004; Leung *et al.*, 2004). More specifically, the internal auditor role in monitoring and improving risk management and internal control processes has turned out to be an important contribution to corporate governance (Sarens & Beelde, 2006).

H3: Existing and prospective investors will have confidence if the companies' internal auditors play significant role in corporate governance than the companies' internal auditors haven't.

Investors Protection and Internal Auditors

To review the previous study we found very little research works have been conducted on this area. This is the reason which drives us to explore the area. Mercer (2004) suggests that internal audit information may be helpful to investors in determining the veracity of information provided by a company. Elliott & Jacobson (1994) noted that informative disclosures help reduce information risk and are useful to investor decision-making by supplying the investor with a better understanding of the company's overall economic risk. Kinney (2000) notes that this increase in reliability is attributable to increased confidence in the competence and care applied to measurement methods and increased confidence in the trustworthiness of the reported results produced by the auditors' efforts.

A study was conducted by Holt (2009) that provided initial evidence that increased internal audit transparency provides incremental usefulness to investors beyond current mandated governance disclosures. The findings suggest that adding an IAR to existing governance-related reports (e.g., Audit Committee Report, External Audit Report, Management Discussion and Analysis) increases investors' perceived oversight effectiveness and confidence in financial reporting reliability. La Porta *et al.* (1997) show that countries that protect shareholders have more valuable stock markets, larger numbers of listed securities per capita, and a higher rate of IPO (initial public offering) activity than do the un-protective countries. Countries that protect creditors better have larger credit markets. Johnson *et al.* (2000) draw an ingenious connection between investor protection and financial crises. In countries with poor protection, the insiders might treat outside investors well as long as future prospects are bright and they are interested in continued external financing. When future prospects deteriorate, however, the insiders step up expropriation, and the outside investors, whether shareholders or creditors, are unable to do anything about it. As (Levine *et al.* 2000, La Porta *et al.* 1998) said all outside investors, be they large or small, creditors or shareholders, need rights to get their money back.

H4: Protection of existing and prospective investors will mediate if the companies' board of directors let finance and accounts department, internal auditors and external auditors do their job independently to prepare the financial statement than the companies' board of directors don't.

METHODOLOGY

Data & Instrument

We developed four different survey questionnaires for internal auditors (staffs and head), finance and accounting department executives (head and staffs), investors (only individual) and Board of Directors. The questionnaire for internal auditors was designed to evaluate their skills, knowledge, and independence and understand of the objectivity of the audit functions. A major role is played by the finance and accounting department in preparing the financial statements. Therefore, we thought it would be an important criterion to evaluate the objectivity and interdependence of finance and accounts departments. Investors are the key members of the whole system. So we strongly believed that it is important to know what they think about the work procedure, objectivity and independence of internal auditors and finance and accounts departments of the local companies. And what duties the board of directors should perform so that all investors will feel protected. Finally, we approached to Board of Directors about their insightfulness regarding the practice of corporate governance (e.g. independence of internal audit, preparation of error free financial statements and the protection of individual investors). In the stock market probe report, Dr. Ibrahim Khalid mentioned the name of 25 companies, which manipulated the financial statements that was one of important causes of crash of the market (e.g. DSE) in 2010. We selected 100 companies to survey that are operating in stock market including those 25 companies. We personally went to these companies, distributed the questionnaires and tried to interview the Board of Directors. Regarding the investor survey, we distributed the

survey questionnaire to the different brokerage houses in four major cities in Bangladesh. The target number of investors was 500 but we ended up with 400 complete questionnaires.

In the questionnaire, internal audit, the finance and accounts department and the Board of Directors were asked to complete the structured survey questions using a five point Likert scale (Strongly Agree =1, Agree=2, Neutral=3, Disagree=4, and Strongly Disagree=5). However, investors were asked to complete the structured survey questions using a five point Likert scale (Excellent = 4 and N/A = 0). For the convenience of the respondents, we provided them a soft copy of the questionnaire so that they could return it through email. We also provided the prepaid envelope with the survey questions for the participants' convenience.

Design

We analyzed all the data acquired from the questionnaires by using ANCOVA (2 X 2) that enabled us to test the significance of the differences among more than two sample means. Using this analysis of covariance, we were able to make inferences about whether our samples are drawn from a population having the same mean. Later, we used a multiple regression and it helped us to use more of the information available to us to estimate the dependent variables. Analysis of covariance has been used because sometimes the correlation between two variables maybe insufficient to determine a reliable estimating equation. As we have three independent variables, we may be able to determine an estimating equation that describes the relationship with greater accuracy.

We used mediation to test the H4 that assumed both existing and prospective investors will feel more condolence and secured if the companies' board of directors let finance and accounts department, internal auditors and external auditors do their job independently to prepare the financial statement. Therefore, the equations are:

$$IIA_t = \alpha_0 + \alpha_1 CG + \varepsilon_t \quad (1)$$

$$IEA_t = \alpha_0 + \alpha_1 CG + \varepsilon_t \quad (2)$$

$$IFA_t = \alpha_0 + \alpha_1 CG + \varepsilon_t \quad (3)$$

Where, *IP* = Investors Protection, *IIA* = Independence of Internal Auditors, *IFA* = Independence of Finance & Accounts Department and *CG* = Corporate Governance. However, α = regressions intercept, ε = residual error.

Finally, we also used a multivariate regression analysis to see how protected the investors are if you combine all the above mentioned variables such as; *IIA* = Independence of Internal Auditors, *IFA* = Independence of Finance & Accounts Department and *CG* = Corporate Governance. Hence the equation is;

$$IP_t = \beta_0 + \beta_1 IIA + \beta_2 IFA + \beta_3 CG + \varepsilon_t \quad (4)$$

Where, *IP* = Investors Protection and β = regression coefficient and ε = residual error.

RESULT ANALYSIS

At first we checked the demographic factors of the participants. All the participants were male for investors, internal audit and board of director's survey. From the investors survey 70% of the investors were trading in DSE for more than five years, and considered themselves experienced investors. The rest of them were considered inexperienced. In internal audit survey, 65% of the respondents were working more than 5 years as a professional chartered accountant. Rests of the 25% have less than 5 years of experience but they were also chartered accounts. In finance and accounting departments, 10% of the respondents were female, 55% of the total respondents have more than 5 years of working experience in a related field. However, 70% of the participants have formal accounting or finance education. Finally, boards of directors have the average age of 45 and 60% had the professional experience in related field of more than 15 years.

We also conducted the manipulation check of the questionnaire and 90% of the investors found the questions were relevant and important in the current scenario of the country. The mean of the survey was 91.80. Internal auditors

and finance and accounting departments thought the survey was relevant (mean=92.30, 94.80) respectively. The board of directors (mean=92.40) believed that the questions were appropriate to study the current market.

Hypotheses Test Result

We used the R i36.15.1 to run the regression and test the hypotheses. The result of the **H1** is presenting below in table 1.

Table 1: Analysis of covariance of IIA and IFA

| | Sum Sq | Mean Sq | F Value | Pr(>F) |
|------------------|---------|---------|---------|--------|
| IIA | 0.09128 | 0.09128 | 0.4985 | 0.5310 |
| IFA | 0.33419 | 0.33419 | 1.8251 | 0.2696 |
| IIA:IFA | 0.48429 | 0.48429 | 2.6448 | 0.2024 |
| Residuals | 0.54932 | 0.18311 | | |

Source: from the data analysis in R

The F statistic of the analysis in table 1 is 1.656 and p-value is 0.3443, which clearly indicated that there is a strong and significant relationship which exists between IIA and IIA. And the multiple R^2 is 0.6253 and adjusted R^2 is 0.247, so the variables in the regression are positively correlated.

Table 2: Analysis of covariance of IIA and CG

| | Sum Sq | Mean Sq | F Value | Pr(>F) |
|------------------|---------|---------|---------|---------|
| IIA | 0.09128 | 0.09128 | 0.7770 | 0.44296 |
| CG | 0.83620 | 0.83620 | 7.1180 | 0.07582 |
| IIA:CG | 0.17917 | 0.17917 | 1.5252 | 0.30474 |
| Residuals | 0.35243 | 0.11748 | | |

Source: from the data analysis in R

Next, we analyzed the independence of internal audit and corporate governance (H2) and obtained results in table 2. We found a strong and positive correlation between IIA and CG, which supported the results of multiple R^2 (0.7585) and the adjusted R^2 (0.5169). And the F statistic of the analysis of table 2 is 3.14, whereas p-value is 0.1862. Here, F-statistic is too high and p-value is more than 0.05, so in this case again we say that H2 has been accepted. We also tried to measure the relationship between the independence of finance & accounting departments and corporate governance and see whether these can protect the existing and prospective investors. The following table contains the results of the analysis.

Table 3: Analysis of covariance of IFA and CG

| | Sum Sq | Mean Sq | F Value | Pr(>F) |
|------------------|--------|---------|---------|---------|
| IFA | 0.3101 | 0.3101 | 3.097 | 0.1766 |
| CG | 0.8140 | 0.8140 | 8.128 | 0.0650 |
| IFA :CG | 0.0343 | 0.03437 | 0.3432 | 0.59915 |
| Residuals | 0.3004 | 0.10015 | | |

Source: from the data analysis in R

The F statistic value of the analysis is 3.856, whereas the p-value is 0.1484. The result portrays that p-value is more than 0.05 and F-statistic value is more than 1. It indicates that the relationship between the independence of finance and accounting departments and corporate governance are strongly related and significant. The multiple R^2 is 0.7941 and the adjusted R^2 is 0.5882. Therefore, the variables are positively correlated. Finally, we analyzed the multiple regression that has one dependent variable and that is IP (Investors Protection) and three independent variables which are: independence of internal auditors (IIA), independence of finance and accounting department (IFA) and corporate governance (CG). Table 4 presents the result of the regression analysis.

Table 4: Analysis of covariance of IIA, IFA &CG

| | Sum Sq | Mean Sq | F Value | Pr(>F) |
|------------------|---------|---------|---------|---------|
| IIA | 0.09128 | 0.09128 | 0.8288 | 0.42974 |
| IFA | 0.33419 | 0.33419 | 3.0342 | 0.17989 |
| CG | 0.70319 | 0.70319 | 6.3844 | 0.08567 |
| Residuals | 0.33043 | 0.11014 | | |

Source: from the data analysis in R

The F-statistics value of the multiple regression analysis is 3.146 and p-value is 0.17. It indicates that the independent variables are not only strongly but also significantly related to each other. Multiple R^2 value of the analysis is 0.7735 and adjusted R^2 is 0.5471. Thus, independent variables are highly and positively correlated with each other.

DISCUSSION AND CONCLUSION

The main focus of the paper is to explore the independence of the internal auditors, competence of the auditors and how strong their voice is in the management so that they can protect the existing and prospective investors by preparing an independent and error free audit report. We also tried to investigate the independence and competence of the finance and accounting department of an organization. How truly and error freely they prepare the financial statements for the company. Lastly, we also explored the board of directors' attitudes towards the internal audit committee and finance and accounting department while preparing the audit report and financial statements. And how cooperative they are in implementing the corporate governance (corporate charter) in their organizations.

There are four hypotheses which have been used to find out whether existing and prospective investors can be protected by the independence of internal auditors, independence finance and accounting departments and corporate governance practiced by the board of directors. All the hypotheses have been accepted and independent variables of the study are significantly related with each others. And they are positively correlated too. Graphical representations of correlation and residuals, leverage, fitted values are provided in the annexure.

Apart from the analysis, we put 9 (nine) questions about the qualification, independence, competence and integrity of internal auditors in the investors question survey. We asked the investors to answer the questions in “Yes” or “No” format. Surprisingly 65% said that companies do not follow the proper corporate charter and 59% believed that companies do not follow the participatory management approach. On the other hand, 62% strongly believed that none of the departments of the organizations can work independently. Among the participants, 70% firmly believed that the internal audit committee and the finance and accounts department have been pressurized to manipulate the reports/statements. More than 69% feel that internal audit departments should have the necessary freedom to prepare an independent audit report. And finally 89% of the respondents strongly believe that if the internal auditors and finance and accounting departments can work independently and effectively, their investments in the organizations will be more protracted. Graphical representations have been put in the annexure.

We approached the internal auditors, finance and accounting departments and the board of directors of the 25 companies that have manipulated their financial statements in 2010 share scam in DSE, mentioned in Dr. Ibrahim Khalid probe report. We did not receive any complete questionnaires from these companies. Therefore, the data we have gathered may not reflect the true scenario about the investors’ protection in Dhaka Stock Exchange (DSE). Future research can be conducted on focusing on the independence of the auditors (internal and external), finance and accounting departments and corporate governance practice by the board of directors of these 25 companies. It could provide more insights about the investors’ protection. And we did not consider the roles, objectives and independence of external auditors in our study. Prospective researchers can add independence of external auditors as independent variables with the existing model and see how external auditors perform to protect the existing and protective investors in an economy.

REFERENCES

- [1] Abbott, L. J., Parker, S., Peters, G. & Raghunandan, K. (2003), ‘The association between audit committee characteristics and audit fees’, *Auditing: A Journal of Practice & Theory*, Vol. 22, No. 2, pp. 17–32.
- [2] Agrawal, A. & Chadha, S. (2005), ‘Corporate governance and accounting scandals’, *Journal of Law and Economics*, Vol. 48, pp. 371–406.
- [3] Ahmad, Z. and Taylor, D. (2009), ‘Commitment to independence by internal auditors: the effects of role ambiguity and role conflict’, *Managerial Auditing Journal*, Vol. 24, No. 9, pp. 899–925.
- [4] Alam, S. G. S. (2012), ‘Recent Trends in Capital Market of Bangladesh: Critical Evaluation or Regulation’, *School of Management, Asian Institute of Technology*, Thailand.
- [5] American Institute of Certified Public Accountant-AICPA (1991), *The Auditor’s Consideration of the Internal Audit Function in an Audit of Financial Statements*. Statement on Auditing Standards No. 65. New York: AICPA.
- [6] Allegrini, M., D’Onza, G., Melville, R., Paape, L. & Sarens, G. (2006), ‘The internal audit profession in Europe: a literature review’, *Managerial Auditing Journal*, Vol. 21, pp. 845–53.
- [7] Bailey, Jr., A. D., Gramling, A. A. & Ramamoorti, S. (2003), ‘Research Opportunities in Internal Auditing, Altamonte Springs, FL’, *The Institute of Internal Auditors Research Foundation*.
- [8] Beasley, M., Carcello, J. & Hermanson, D. (1999), ‘Fraudulent Financial Reporting: 1987–1997, An Analysis of U.S. Public Companies’, Committee of Sponsoring Organizations of the Treadway Commission.
- [9] Beasley, M. S., Carcello, J. V., Hermanson, D. R. & Lapides, P. D. (2000), ‘Fraudulent financial reporting: consideration of industry traits and corporate governance mechanisms’, *Accounting Horizons*, Vol. 14, No. 4, pp. 441–54.
- [10] Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees-BRC (1999), *Report and Recommendations of Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees*, New York and Washington, DC: NYSE and NASD.
- [11] Brody, R. G., Golen, S. P. & Reckers, P. M. (1998), ‘An empirical investigation of the interface between internal and external auditors’, *Accounting and Business Research*, Vol. 28, No. 3, pp. 160–72.
- [12] Cooper, B., Leung, P. & Wong, G. (2006), ‘The Asia Pacific literature review on internal auditing’, *Managerial Auditing Journal*, Vol. 21, No. 8, pp. 822–34.
- [13] Dechow, P. M., Sloan, R. G. & Sweeney, A. P. (1996), ‘Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC’, *Contemporary Accounting Research*, Vol. 13, No. 1, pp. 1–36.
- [14] D’Silva, K. & Ridley, J. (2007), ‘Internal auditing international contribution to governance’, *International Journal of Business Governance and Ethics*, Vol. 3, No. 2, pp. 113–26.

- [15] Dittenhofer, M. (1997), 'Behavioural aspects of internal auditing revisited', *Managerial Auditing Journal*, Vol. 12 No. 1, pp. 23-7.
- [16] Elliot, R. K. & Korpi, A. R. (1978), 'Factors affecting audit fees', in Shakun, M. (ed.), *Cost-Benefit Analysis of Auditing: Commission on Auditors' Responsibility Research Study No. 3*, New York: AICPA.
- [17] Elliott, R. K. & Jacobson, P. D. (1994), 'Costs and benefits of business information disclosure', *Accounting Horizons*, Vol. 8, No. 4, pp. 80-96.
- [18] Felix, W. L., Gramling, A. A. & Maletta, M. J. (2001), 'The contribution of internal audit as a determinant of external audit fees and factors influencing this contribution', *Journal of Accounting Research*, Vol. 39, No. 3, pp. 513-525.
- [19] Glover, S. M., D. F. Prawitt, and D. A. Wood, 2008, Internal audit sourcing arrangement and the external auditor's reliance decision, *Contemporary Accounting Research* Vol. 25, pp. 193-213.
- [20] Goodwin, J. & Yeo, T. Y. (2001), 'Two factors affecting internal audit independence and objectivity: evidence from Singapore', *International Journal of Auditing*, Vol. 5, No. 2, pp. 107-125.
- [21] Goodwin, J. (2003), 'The relationship between the audit committee and the internal audit function: Evidence from Australia and New Zealand', *International Journal of Auditing*, Vol. 7, No. 3, pp. 263-278.
- [22] Gramling, A. A., Maletta, M. J., Schneider, A. & Church, B. K. (2004), 'The role of the internal audit function in corporate governance: a synthesis of the extant internal auditing literature and directions for future research', *Journal of Accounting Literature*, Vol. 23, pp. 194-243.
- [23] Hass, S., Abdolmohammadi, M. J. & Burnaby, P. (2006), 'The Americas' literature review on internal auditing', *Managerial Auditing Journal*, Vol. 21, No. 8, pp. 835-44.
- [24] Harrington, C. (2004), 'Internal audit's new role', *Journal of Accountancy*, Vol. 198, No. 3, pp. 65-70.
- [25] Holt, P. T., and DeZoroot, T. (2009), 'The Effects of Internal Audit Report Disclosure on Investor Confidence and Investment Decisions', *International Journal of Auditing*, Vol. 13, pp: 61-77
- [26] IIA (1999), 'Definition of internal auditing', Institute of Internal Auditors, available at: www.theiia.org/guidance/standards-and-guidance/ippf/definition-of-internal-auditing/ (accessed October, 2009).
- [27] IIA (2009a), 'International standards for the professional practice of internal auditing', Institute of Internal Auditors, available at: www.theiia.org/guidance/standards-and-guidance/ippf/standards/ (accessed October, 2009).
- [28] IIA (2009b), 'Code of ethics', Institute of Internal Auditors, available at: www.theiia.org/guidance/standards-and-guidance/ippf/code-of-ethics/ (accessed October, 2009).
- [29] IIA (2009c), 'Practice advisories', Institute of Internal Auditors, available at: www.theiia.org/guidance/standards-and-guidance/ippf/practice-advisories/ (accessed October, 2009).
- [30] IIA (2009d), 'IIA position paper: the role of internal audit in enterprise-wide risk management', Institute of Internal Auditors, available at: [www.theiia.org/guidance/standards and guidance/ippf/standards/standardsitems/index.cfm?i%48269](http://www.theiia.org/guidance/standards-and-guidance/ippf/standards/standardsitems/index.cfm?i%48269) (accessed January, 2009).
- [31] IIA (2006), International Standards for the Professional Practice of Internal Auditing, The Institute of Internal Auditors, Altamonte Springs, FL.
- [32] ISA 610, 2009, International standard on auditing 610: the auditor's consideration of the internal audit function. Available: <http://www.ifac.org> (last accessed July 2009).
- [33] International Standards for the Professional Practice of Internal Auditing (ISPPA), 2006
- [34] James, K. (2003), 'The effects of internal audit structure and perceived financial statement fraud intervention', *Accounting Horizons*, Vol. 17, No. 4, pp. 315-27.
- [35] Johnson, S., Boone, P., Breach, A., Friedman, E., (2000), 'Corporate governance in the Asian 'Financial crisis', *Journal of Financial Economics*, Vol. 58, pp: 141-186.
- [36] Khalik, A., Snowball, A., & Wragge, H., (1983), 'The Effects of Certain Internal Audit Variables on the Planning of External Audit Programs.' *The Accounting Review* (April 1983): pp. 215-27.
- [37] Kinney, W. (2000), 'Information Quality Assurance and Internal Control', Boston, MA: Irwin McGraw-Hill.
- [38] Klein, A. (2002), 'Audit committee, board of director characteristics, and earnings management', *Journal of Accounting and Economics*, Vol. 33, No. 3, pp. 375-400.
- [39] Krishnan, J. (2005), 'Audit committee quality and internal control: An empirical analysis', *The Accounting Review*, Vol. 80, No. 2, pp. 649-75.
- [40] La Porta, R., Lopez-De-Silanes, F., Schleifer, A. & Vishny, R. W. (1997), 'Legal determinants of external finance', *Journal of Finance*, Vol. 52, pp. 1131-50.
- [41] La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1998. 'Law and Finance', *Journal of Political Economy*, vol. 106, pp: 1113-1155.

- [42] Leung, P., Cooper, B. J. & Robertson, P. (2004), *The Role of Internal Audit in Corporate Governance and Management*, Melbourne: RMIT Publishing.
- [43] Levine, R., Loayza, N., Beck, T. (2000), 'Financial intermediary development and economic growth: causality and causes', *Journal of Monetary Economics*, Vol. 46, pp: 31-77.
- [44] Mitchell, A. & Sikka, P. (2005), 'Taming the Corporations', Basildon: Association for Accountancy and Business Affairs'.
- [45] Malaysian Institute of Accountants (MIA) (2000), 'Malaysian Approved Standards on Auditing', Kuala Lumpur: Malaysian Institute of Accountants and Malaysian Institute of Certified Public Accountants (MICPA).
- [46] Maletta, M. J. (1993), 'An examination of auditors, decisions to use internal auditors as assistants: The effect of inherent risk', *Contemporary Accounting Research*, Vol. 9, No. 2, pp. 508-25.
- [47] Mercer, M. (2004), 'How do investors assess the credibility of management disclosures?' *Accounting Horizons*, Vol. 18, No. 3, pp. 185-96.
- [48] Moazzem, K. G. & Rahman, M. T. (2012), 'Stabilizing the capital market of Bangladesh: Addressing the Structural, Institutional and Operational Issues', *Center for Policy Dialogue (CPD)*, Working Paper 95
- [49] Mutchler, J.F. (2003), 'Independence and Objectivity: A Framework for Research Opportunities in Internal Auditing', *The Institute of Internal Auditors*, Altamonte Springs, FL.
- [50] O'Leary, C. and Stewart, J. (2007), 'Governance factors affecting internal auditors' ethical decision-making: an exploratory study', *Managerial Auditing Journal*, Vol. 22 No. 8, pp. 787-808.
- [51] Oversight Systems (2005), 'The 2005 Oversight Systems Financial Executive Report on Sarbanes-Oxley'. <http://www.oversightsystems.com/survey>.
- [52] Paape, L., Scheffe, J. & Snoep, P. (2003), 'The relationship between the internal audit function and corporate governance in the EU – a survey', *International Journal of Auditing*, Vol. 7, No. 3, pp. 247-62.
- [53] PricewaterhouseCoopers (2012), 'A study examining the future of internal auditing and the potential decline of a controls-centric approach'.
- [54] Probe Committee Report submitted to the Ministry of Finance (MoF). Available at: http://www.mof.gov.bd/en/index.php?option=com_content&view=article&id=169&Itemid=1
- [55] Public Company Accounting Oversight Board (PCAOB) (2007), 'An Audit Internal Control over Financial Reporting that is Integrated With An Audit of Financial Statements', *Auditing Standard No. 5*. Washington, DC: PCAOB.
- [56] Prawitt, D. F., Smith, J. L. & Wood, D. A. (2009), 'Internal audit quality and earnings management', *The Accounting Review*, Vol. 84, No. 4, pp. 1255-80.
- [57] Ramamoorti, S. (2003), 'Internal auditing: History, evolution, and prospects.
- [58] D., Gramling, A. A. & Ramamoorti, S. (eds), *Research Opportunities in Internal Auditing*, Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation, pp. 1-23.
- [59] Rezaee, Z. (2010), 'The Importance of Internal Audit Opinions', The HA's Practice Guide and proposed standards on providing internal audit opinions can be found in the 'Guidance' section of www.theiia.org.
- [60] SAS 65, 'The Auditor's Consideration of the Internal Audit Function in an Audit of Financial Statements'
- [61] Sarbanes-Oxley Act, (2002), Available from <http://f11.findlaw.com/news.findlaw.com/hdocs/docs/gwbush/sarbanesoxley072302.pdf> (accessed 19 November 2009).
- [62] Sarens, G. & De Beelde, I. (2006a), 'Internal auditors' perception about their role in risk management: comparison between Belgian and US companies', *Managerial Auditing Journal*, Vol. 21, pp. 63-80.
- [63] Sarens, G. & De Beelde, I. (2006b), 'The relationship between internal audit and senior management: an analysis of expectations and perceptions', *International Journal of Auditing*, Vol. 10, pp. 219-41.
- [64] Sawyer, L.B. and Dittenhofer, M.A. (1996), 'Sawyer's Internal Auditing: The Practice of Modern Internal Auditing', The Institute of Internal Auditors, Altamonte Springs, FL.
- [65] Schinder, A. (1985), 'The Reliance of External Auditors on the Internal Audit Function', *Journal of Accounting Research*, Vol. 23, No. 2. Pp. 911-919
- [66] Securities and Exchange Commission (SEC) (2003), Report Pursuant to Section 204 of the Sarbanes-Oxley Act of 2002. Washington, DC: US Government Printing Office.
- [67] Smith, S. R. (2003), 'Audit Committees – Combined Code Guidance', Report to the Financial Reporting Council, London.
- [68] Srinivasan, S. (2005), 'Consequences of financial reporting failure for outside directors: evidence from accounting restatements and audit committee members', *Journal of Accounting Research*, Vol. 43, No. 2, pp. 291-334.

- [69] Vanasco, R.R. (1994), 'The IIA code of ethics: an international perspective', *Managerial Auditing Journal*, Vol. 9 No. 1, pp. 12-22.
- [70] Wang, J. (2006), 'Examination of Audit Fee Premiums and Auditor Switching Pre and Post the Demise of Arthur Andersen and the Enactment of Sarbanes-Oxley Act', *Journal of Accounting Research*, Vol:44, No. 3, pp. 619-56.
- [71] Wallace, W. A., (1984), 'A Time Series Analysis of the Effect of Internal Audit Activities on External Audit Fees', Altamonte Spring, FL: The Institute of Internal Auditors.
- [72] Ward, D. D., and Robertson J. C., (1980), 'Reliance on Internal Auditors.' *Journal of Accountancy*, pp. 62-73.
- [73] Zain, M.M., Subramaniam, N. & Stewart, J. (2006), 'Internal Auditors' Assessment of their Contribution to Financial Statement Audits: The Relation with Audit Committee and Internal Audit Function Characteristics', *International Journal of Auditing*, Vol. 10, No. 1, pp. 1-18.

Appendix

Covariance of IP, IIA, IFA and CG

| | IP | IIA | IFA | CG |
|-----|----------|-------------|------------|------------|
| IP | 0.157550 | 0.00419000 | 0.0436500 | 0.1295900 |
| IIA | 0.004190 | 0.17731667 | -0.0262150 | 0.03558833 |
| IFA | 0.043650 | -0.02621500 | 0.0989275 | 0.0041550 |
| CG | 0.129595 | 0.03538833 | 0.0041550 | 0.14313667 |

Correlation of IP, IIA, IFA and CG

| | IP | IIA | IFA | CG |
|-----|-----------|------------|-------------|------------|
| IP | 1.0000000 | 0.0250686 | 0.34963631 | 0.86298569 |
| IIA | 0.0250686 | 1.0000000 | -0.19793225 | 0.22213136 |
| IFA | 0.3496363 | -0.1979323 | 1.0000000 | 0.03491701 |
| CG | 0.8629857 | 0.2221314 | 0.03491701 | 1.0000000 |

Coefficients between IIA and IFA

| | Estimate | Std. Error | t value | Pr(> t) |
|-------------|----------|------------|---------|----------|
| (Intercept) | 31.138 | 19.977 | 1.559 | 0.217 |
| IIA | -11.780 | 7.464 | -1.578 | 0.213 |
| IFA | -12.196 | 8.000 | -1.525 | 0.225 |
| IIA:IFA | 4.869 | 2.994 | 1.626 | 0.202 |

Residual standard error: 0.4279, Multiple R-squared: 0.6235, Adjusted R-square: 0.247, F-statistic: 1.656, p-value: 0.3443

Coefficients between IIA and CG

| | | Estimate | Std. Error | t value | Pr(> t) |
|--------------------|--------|-----------------|-------------------|----------------|--------------------|
| (Intercept) | 10.235 | 9.323 | | 1.098 | 0.353 |
| IIA | -5.262 | 4.293 | | -1.226 | 0.308 |
| CG | -3.328 | 3.599 | | -0.925 | 0.423 |
| IIA:CG | 2.036 | 1.649 | | 1.235 | 0.305 |

Residual standard error: 0.3427, Multiple R-squared: 0.7585, Adjusted R-square: 0.5169, F-statistic: 3.14, p-value: 0.1862

Coefficients of IFA and CG

| | | Estimate | Std. Error | t value | Pr(> t) |
|--------------------|--------|-----------------|-------------------|----------------|--------------------|
| (Intercept) | 9.221 | 20.088 | | 0.459 | 0.677 |
| IFA | -3.749 | 7.439 | | -0.504 | 0.649 |
| CG | -3.827 | 8.303 | | -0.461 | 0.676 |
| IFA:CG | 1.801 | 3.075 | | 0.586 | 0.599 |

Residual standard error: 0.3165, Multiple R-squared: 0.7941, Adjusted R-square: 0.5882, F-statistic: 3.856, p-value: 0.1484

Coefficients of IIA, IF and CG

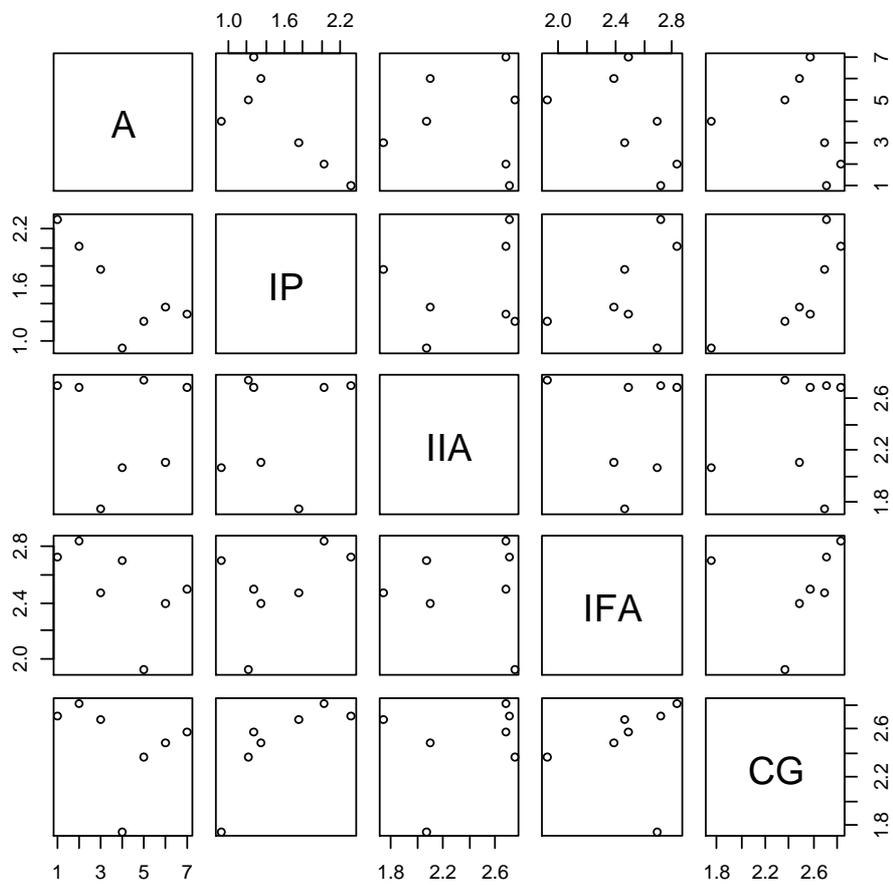
| | | Estimate | Std. Error | t value | Pr(> t) |
|--------------------|----------|-----------------|-------------------|----------------|--------------------|
| (Intercept) | -2.65166 | 1.53108 | | -1.732 | 0.1817 |
| IIA | 0.06964 | 0.34853 | | 0.200 | 0.8544 |
| IFA | 0.61195 | 0.45280 | | 1.351 | 0.2694 |
| CG | 1.00795 | 0.30891 | | 2.527 | 0.0857 |

Residual standard error: 0.3319, Multiple R-squared: 0.7735, Adjusted R-square: 0.5471, F-statistic: 3.416, p-value: 0.17

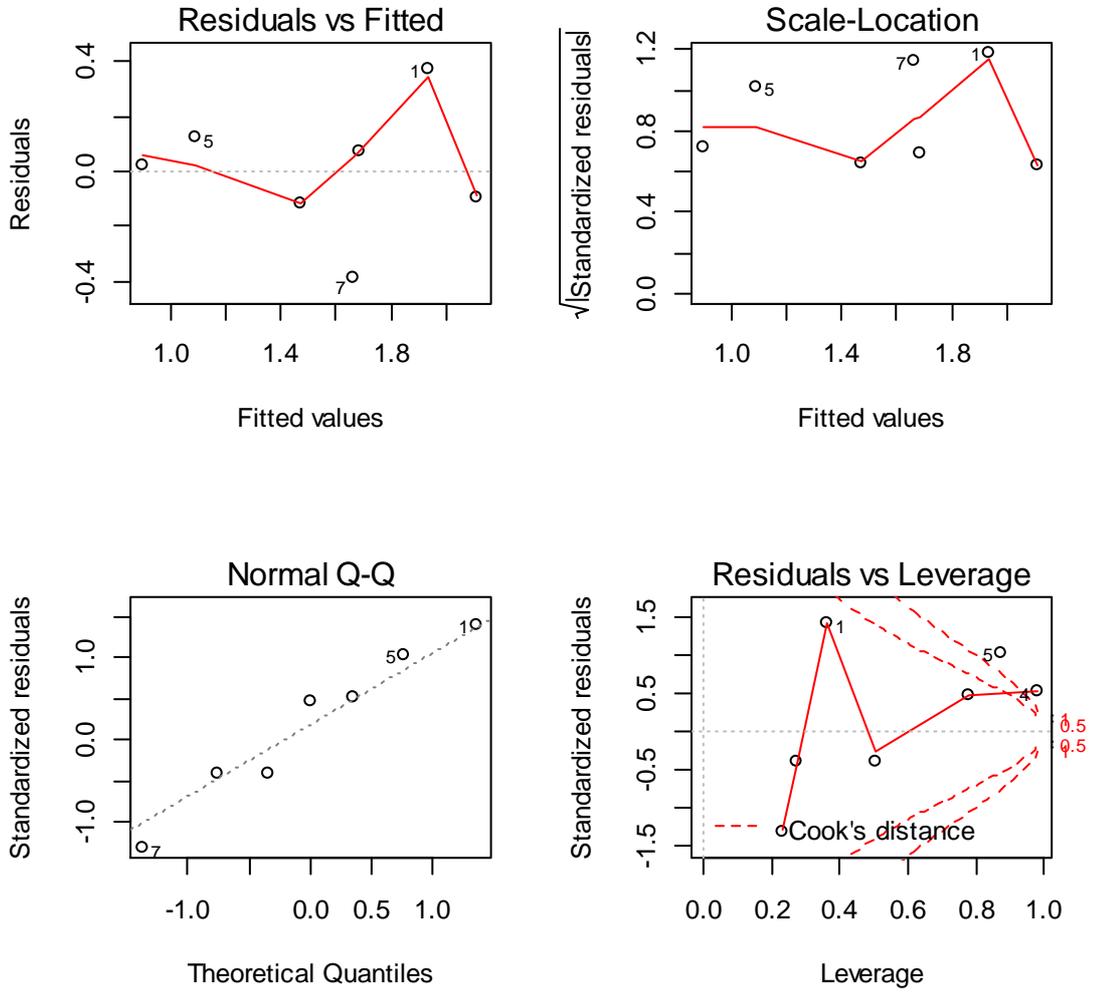
Summary of ANCOVA

| | Intercept | IA | FA | CG |
|-----------|------------|-------------|-------------|-------------|
| Intercept | 2.3442046 | -0.2269919 | -0.48788026 | -0.22696409 |
| IIA | -0.2269919 | 0.1214752 | 0.01689707 | -0.04259695 |
| IFA | -0.4878803 | 0.01689707 | 0.20502507 | -0.02655461 |
| CG | -0.2269641 | -0.04259695 | -0.02655461 | 0.15913306 |

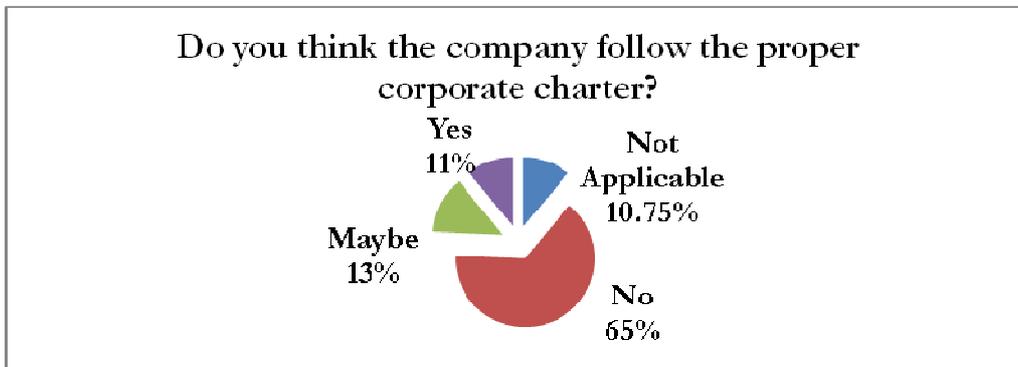
Covariance Graph of IP, IIA, IFA and CG



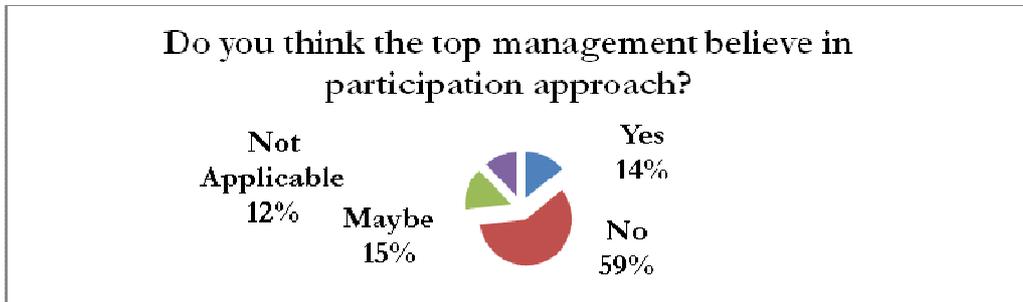
ANCOVA Graph of IP, IIA, IFA and CG



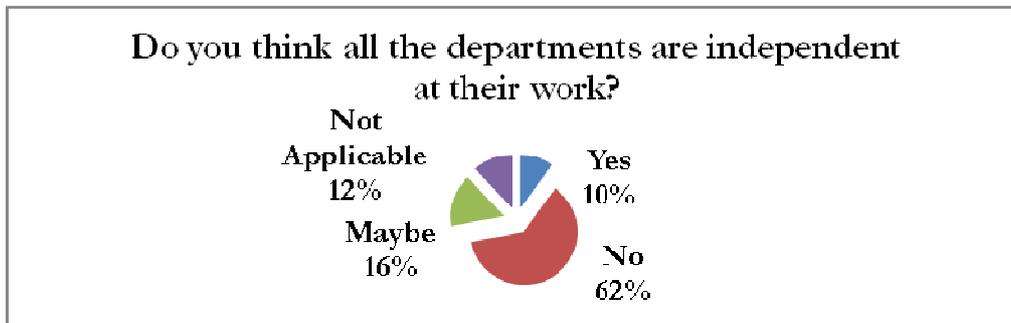
Graph 1:



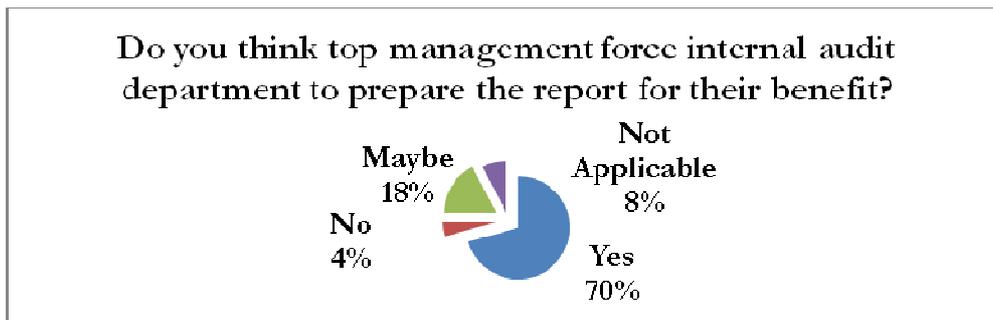
Graph 2



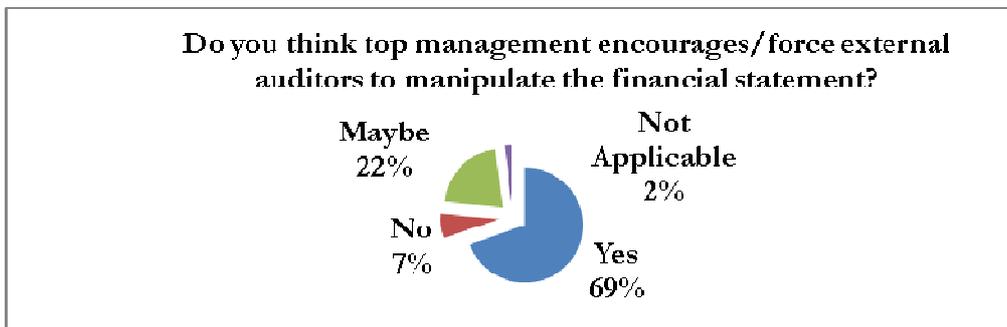
Graph 3



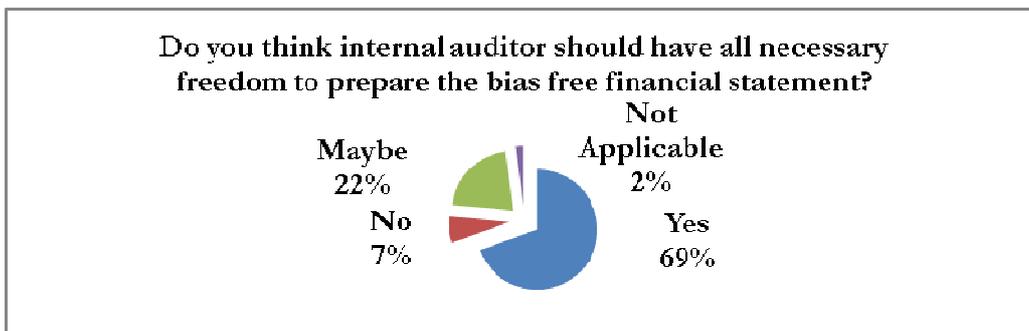
Graph 4



Graph 5



Graph 6



Graph 7

