

Salehi, Mahdi; Soorestani, Noman Rashidi

## Article

# The effect of audit committee and board of directors characteristics' on audit fees and internal control quality in Iran

Revista de Métodos Cuantitativos para la Economía y la Empresa

## Provided in Cooperation with:

Universidad Pablo de Olavide, Sevilla

*Suggested Citation:* Salehi, Mahdi; Soorestani, Noman Rashidi (2019) : The effect of audit committee and board of directors characteristics' on audit fees and internal control quality in Iran, Revista de Métodos Cuantitativos para la Economía y la Empresa, ISSN 1886-516X, Universidad Pablo de Olavide, Sevilla, Vol. 28, pp. 23-42, <https://doi.org/10.46661/revmetodoscuanteconempresa.2952>

This Version is available at:

<https://hdl.handle.net/10419/286167>

## Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

## Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by-sa/4.0/>



UNIVERSIDAD  
PABLO DE OLAVIDE  
SEVILLA



REVISTA DE METODOS CUANTITATIVOS PARA LA  
ECONOMÍA Y LA EMPRESA (28). Páginas 23-42.  
Diciembre de 2019. ISSN: 1886-516X. D.L.: SE-2927-06.  
www.upo.es/revistas/index.php/RevMetCuant/article/view/2952

## The Effect of Audit Committee and Board of Directors Characteristics' on Audit Fees and Internal Control Quality in Iran

SALEHI, MEHDI

Department of Accounting

Ferdowsi University of Mashhad (Mashhad, Iran)

Correo electrónico: mehdi.salehi@um.ac.ir

RASHIDI SOORESTANI, NOMAN

Department of Accounting

Imamreza International University of Mashhad (Iran)

Correo electrónico: nomanrashidy@yahoo.com

### ABSTRACT

This study investigates the effect of characteristics of board of directors and audit committee strength on audit fees internal control quality.

In this study, 84 companies listed on the Tehran Stock Exchange were evaluated from 2014 to 2016. Panel regression model and panel logistic regression model were used for testing hypotheses related to audit fees and the weaknesses of internal control quality, respectively.

Results showed that there is no significant relationship between the authority of board of directors and audit committee and the independence board and audit committee expertise and internal control quality weakness and also between the board power and audit fees. There is a significant relationship, however, between the board independence and audit committee authority, expertise, as well as the audit fees. Furthermore, results indicated that there is no significant relationship between board effort and audit fees and internal control quality weakness.

**Keywords:** audit fees, internal control quality, board of director, audit committee.

**JEL classification:** D21; G32; L21.

**MSC2010:** 91G50; 91G80; 91G99.

Artículo recibido el 29 de enero de 2018 y aceptado el 9 de agosto de 2018.

# El efecto de las características del Comité de Auditoría y de la Junta Directiva sobre los honorarios de auditoría y la calidad del control interno en Irán

## RESUMEN

Este estudio investiga el efecto de las características de la fortaleza de la junta directiva y del comité de auditoría sobre la calidad del control interno de los honorarios de auditoría.

En este estudio, un total de 84 empresas que cotizan en la Bolsa de Teherán se evaluaron de 2014 a 2016. El modelo de regresión de panel y el modelo de regresión logística de panel se utilizaron para probar hipótesis relacionadas con los honorarios de auditoría y las debilidades de la calidad del control interno, respectivamente.

Los resultados mostraron que no existe una relación significativa entre la autoridad de la junta directiva y el comité de auditoría y la experiencia de la junta de independencia y del comité de auditoría y la debilidad de la calidad del control interno y también entre el poder de la junta y los honorarios de auditoría. Sin embargo, existe una relación significativa entre la independencia de la junta y la autoridad del comité de auditoría, la experiencia y los honorarios de auditoría. Además, los resultados indicaron que no existe una relación significativa entre el esfuerzo de la junta y los honorarios de auditoría y la debilidad de la calidad del control interno.

**Palabras clave:** honorarios de auditoría, calidad de control interno, junta directiva, comité de auditoría.

**Clasificación JEL:** D21; G32; L21.

**MSC2010:** 91G50; 91G80; 91G99.



## 1. Introducción.

Carcello, Hermanson, Neal and Riley (2002) described the audit fee as the reflector of economic costs of competent auditors and declared from the auditor point of view that auditors, by balancing the costs of their available resources (costs of performing more audit) and their future losses due to legal debts, seek for a way to minimize total costs. More auditing process will decrease the chance of probable loss by auditors and represent the volume of audit operation, which minimize the total costs. One of the most important factors affecting the amount of audit fee is the board power. Historically, negotiation on audit fees has always been faced with a concern that auditors are more inclined to play managerial roles instead of supporting the capital market (BRC, 1999; SEC, 2003). Some rules were established to restore the investors' trust to financial statements and the audit committee is directly responsible for the determination of the external auditor fees (SOX, 2002).

However, some auditors reported that management will continue its monitoring role, though the audit committee is legally in charge such a function (Cohen, Krishnamoorthy & Wright, 2010). Therefore, in case we assume that the audit committee has the limit of managerial influence during audit fee negotiation, the current rules may give a false confidence to the investment. We compare the power and influence of the board and audit committee on the audit fees by presenting an approach concerning the urgency of legal liability of audit fee for the audit committee. Moreover, any alteration in fees will be assessed along with the inflation process, in that the influence of audit committee and the board could be realized more easily during this period by an ongoing test. Inflation is introduced as an external shock and, at the same time as an incompatible pressure to audit fees negotiations. Contracts that lead to the decline of economic profit are known as pressure to the decrease of expenses (Cheffers and Whalen, 2011; Christensen, Omer, Sharp & Shelley 2013; Ettredge, Fuerherm & Li, 2014; Reason, 2010a).

In most cases, the decrease of economic profit as a result of increase in the risk of bankruptcy, probable increase of potential earning of management, and decrease of internal controls could heighten the audit risk (Kane, Richardson & Graybeal 1996; ACFE, 2009; Das, Shroff & Zhang, 2009). The high risk of auditing asks for more auditing efforts and this is the indicative of the increasing pressure to heighten the audit fee (Bedard & Johnstone, 2004; Christensen et al., 2013; Doogar, Rowe & Sivadasan, 2013). The bargaining power of the board representative and the audit committee in negotiations for the audit fee is the ability of auditor in salary and insurance or denying the auditor (Moore, Tetlock, Tanlu & Bazerman, 2006). However, the more the bargaining power of each board representative or audit committee member the higher the chance of being accepted. Other features of an audit service applicant, including the size, financial situation, complexity and the like contribute to the audit fee (Simunic, 1980; O'Keefe, Simunic & Stein, 1994; Bédard & Johnstone, 2004). Study investigates how the board and audit committee power could affect the audit fee and uses other effective factors on fee as controlling items in model. Internal controls in firms are related to assessment of reliability of firms' financial statements and assessing the achievement of strategic goals and firm operation and also assess the ability performing the firms' rules. Internal controls at company level comprise the evaluation of financial report reliability, strategic objectives and company operations availability, as well as rules and regulations performance ability. Internal control is an integral section of a company management, which includes programs, methods and procedures of the organization in achieving its mission and its micro and macro goals (Standards for Internal Control in the Federal Government, 1999). Section 404 of Sarbanes-Oxley Act (U.S. House of Representatives, 2002) obligated auditors to comment about the effectiveness of firms' internal controls on financial statements (ICFR) to be ensured that the financial reporting policies and financial statement designing procedures are reliable. The aim of report (ICFR) is to inform the users of financial statements about any faults in firms reporting system for producing financial statements (PCAOB, 2004). Special aspects of corporate governance including institutional ownership, auditor selection and audit committee independence are related to probability of receiving brief internal control comments (Ashbaugh-Skaife, Collins & Kinney, 2007; Krishnan, 2005; Zhang, Zhou & Zhou, 2007).

Lack of study on the variety of boards is surprising, in that the board is on the head of an organizational, monitoring, and controlling system (Fama & Jensen, 1983). Therefore, some board

characteristics may be connected to internal control quality. Since the power of internal control has a significant relationship with management philosophy, biased manager are interested in designing and using of weaker internal control system and abuse weak points of internal control systems to invest in high risk projects (Ogneva, Subramanyam & Raghunandan, 2007). Furthermore, Fernández and Arrondo (2005) reported an indirect relationship between managerial ownership and foreign managers' proportion, which shows the reduction of monitoring function of foreign managers on internal control systems with bias increase. This study investigates how the board power contributes to internal control quality and uses other effective factors as controlling items.

## **2. Theoretical framework, related studies and hypotheses development.**

In past, most managers preferred the foreign auditors and negotiated for the audit fee with them (BRC, 1999). Under such circumstances, the main concern is that if managers control the fees, auditors may not be motivated for an impartial audit. Hence, we need a method and regulations to transfer the controlling responsibility of foreign auditors from management to the audit committee. Since 1990, BRC declared that the audit committee is in charge of foreign auditor but said nothing about the fee (BRC, 1999). In 2000, SOX completed BRC's recommendation and assigned the responsibility of setting companies' audit fee to the audit committee (SOX, 2002, section 301-2). SEC delegated the final responsibility to the audit committee, caused the interests of foreign auditors to be in line with the corporate shareholders, and elevated the trust of stock buyers to auditors' independence (SEC, 2003).

Although SOX revolved the final right of negotiation responsibility and determination of foreign auditors to the audit committee, these rules may not be sufficient to nullify the organizational contracts and the relationship between the auditor and the board (Doty, 2011). Therefore, the board could affect and decide on the audit fee through unscheduled meetings or informal negotiation sessions with the audit committee (Cohen et al., 2010). As a controlling tool in the company, the board combination is the determinant of board power. Thus, board combination is an important factor to explain members' ability to do their duties and to improve company performance. The board combination is measured by the portion of unbounded managers. The unbounded member of the board has no executive position. Unbounded members of the board help the controlling and supervising measures of the executives and decrease company representative costs. Independent boards purchase high quality audit services in order to protect the capital, reputation, avoiding of legal debt, and protecting shareholders interest. Hence, high quality boards seek for high quality audit and increased audit efforts to protect the interests of management and shareholders (Leventis & Dimitropoulos, 2010). By casting a closer look, we can see that internal control is a useful tool to solve many potential problems (Baltaci & Yilmaz, 2006). Primary investigations (Ashbaugh-Skaife et al., 2007) substantiate the relationship between weak points and the characteristics of a company, complexity, organizational changes, size, profitability, and resource investment.

A possible supervisory mechanism is corporate internal control system. McMullen et al. (1996) presented two reasons why internal control report by management can improve internal controls that both reasons could be evaluated with supervision mechanism and could decrease company's Agency cost. Firstly, such an internal control reporting could increase the top management to the internal control of company, which in turn draws the attention of top management toward the internal control system as a whole. Secondly, the internal control reporting could cause a better internal control.

### **2.1. The power of audit committee.**

Galinsky, Magee, Gruenfeld, Whitson and Liljenquist (2008) declared that power is an exclusive feature of penetration, in that it is penetrating into actions or controlling. Some studies concluded that in line with demands for extra efforts of auditors, there is a positive relationship between audit fee and audit committee expertise (Carcello et al., 2002; Abbott, Parker, Peters & Raghunandan, 2003; Vafeas & Waagelein, 2007; Hay, 2013). However, Krishnan and Visvanathan (2009) stated such a relationship is negative and inverse for companies with high earning management risk, which is in accordance with audit committee demand for more attempt to detect the risk. Griffin et al. (2008) and Bedard and

Johnstone (2004) found in common that there is a mutual effect between audit risk and long-term supervisory corporate predictions.

In past, selecting an external auditor and negotiating about audit fee was among the management duties (BRC, 1999). Such a perspective affected auditors' motivation and independence. However, the problem would be about the influence of the board power of on the audit fees.

According to investigations, no study has been conducted on the effect of the board power on audit fee in inflation conditions. Carcello et al. (2002) studied the board characteristics and audit service fees. One of the most important factors affecting the amount of audit fee is the board power. Regarding the negotiation records of audit service fee by management, there is a doubt that instead of being the advocates of the capital market, auditors in most companies are a managerial tool committee (BRC, 1999; SEC, 2003). Dao, Raghunandan and Rama (2012) investigated the effect of shareholders' opinions on auditor selection, audit service fee, and audit quality. Audit Committee has periodical relation with auditors and the board faces longer audit process, instead (Knechel, 2007; Hellman, 2011). Therefore, the financial board could affect the services fee through the confirmation of direct negotiations or formal interactions with audit committee (Cohen et al., 2010). McCracken et al. (2008) concluded that even after the SOX statement, the board continued its penetration whether to choose, retain, or dismiss the auditors.

Cohen et al. (2010), Fiolleau et al. (2013) and Dhaliwal et al. (2014) came to the same conclusion, as well. Harris (2008) and Reason (2010b) carried out studies about the role of the board in determining the audit fee and concerning the board penetration concluded that the board could affect the audit fee using a set planned professional negotiation sessions. Contracts, which cause the economic profit to be decreased were known as pressure for to cut expenses (Cheffers & Whalen, 2011; Christensen et al., 2013; Ettredge et al., 2014; Reason, 2010a). Most of the time, the decrease of economic profit could cause the increase of auditing risk through increasing the risk of bankruptcy, the potential earnings of management, and decreasing the internal control (Kane et al., 1996; ACFE, 2009; Das et al., 2009). The risk of high quality auditing calls for more auditing attempt and this requires more pressure to heighten the audit fees (Bedard & Johnstone, 2004; Christensen et al., 2013; Doogar et al., 2013). By considering the conducted research studies and importance of the board function, we supposed that the more powerful the board, the lower audit cost would be set. So, the first hypothesis is postulated as following:

H1: There is a significant relationship between board member powers' and audit fees.

Tsui et al. (2001) declared that there is a negative relationship between the audit cost and board independence. Chan et al. (2013) investigated the influence of audit committee independence and the board members on audit service fees. Carcello et al. (2002) stated that one of supervisory tools to decrease representative problems between managers and owners is to employ unbounded board members. The unbounded members are professional managers specialized in decision control. Such managers purchase high quality audit services to protect the capital, reputation, their own and shareholders' interest and to avoid legal debts. Furthermore, Ramdani and Witteloostuijn (2010) concluded that the more independent managers could do the managerial supervision tasks more effectively.

Leventis and Dimitropoulos (2010) investigated the pricing system of audit, earning quality and board independence services for 97 companies which the result showed that there is a position relationship between auditing independence and the pricing of audit services. Moreover, there is a positive relationship between the pricing of audit services and earning management and these results are for smaller companies. We expect that the unbounded managers be more inclined toward high quality audits and this would cause the audit service fees to be set at a higher level.

H2: There is a significant relationship between the independence of board members and audit fees.

Hence, by considering the abovementioned probable relationships and effects of the board on audit fee, we can explain the third hypothesis as follows:

H3: There is a significant relationship between the board effort and audit fees.

In late 1990s, BRC suggested that the final power and authority for selecting an independent auditor is the audit committee, but dictated no policy for the audit fees (BRC, 1999). In 2002, SOX modified the BRC's theory and made the audit committee totally responsible for determining audit fees (SOX, 2002). Some regulations were set to restore investor's trust to financial reports and made the audit committee is directly responsible for this purpose (SOX, 2002).

Nevertheless, some auditors express that although the audit committee is legally in charge, management is still active in controlling the auditors' relationship (Cohen et al., 2010). Thus, the current rules may establish a false trust for investors, such that the audit committee has only a restricted penetration along the negotiations on audit cost (Beck & Mauldin, 2014).

SEC governmental regulations has made the audit committee the final respondent for auditors and this would enhance their motivation and independence and could bring about more investors' trust to auditors (SEC, 2003). Zulkarnain et al. (2007) carried out a research on the functions of audit committee and its roles in selecting an external auditor and found that the committee is a medium between internal and independent auditors and is considered as the board of directors. In addition, its activities include assessing auditors' appointment, the general scope of auditing, audit results, internal financial control, and financial information to be published. Furthermore, it establishes an accounting committee in the company and casts a critical supervision on financial reports and accounting processes. In addition to selecting auditors, wage determination and retain or dismiss of auditors are among the functions of an audit committee. Therefore, audit committee reinforces auditor independence. In fact, auditor is more competent, efficient, and independent in case the audit committee is in charge for appointment and wage determination. Beasley et al. (2009) declared that within an interview sessions with audit committee members, about 31% said that most formalities of audit committee are ignored by its structure and 96% said that the audit committee serves its supervisory role. Carcello et al. (2011) said that a more powerful audit committee can decrease the audit costs by low assessment of audit risk or may increase the audit cost by asking the external audit for more attempt. Krishnan and Visvanathan (2009) obtained some documents, which claim that the audit committee is sensitive to risk. Furthermore, Brown and Wright (2008) and DeZoort et al. (2008) concluded that when the audit committee has more power it is likely to back up the auditors' stance. Accordingly, by this hypothesis we focused on the relative effects of audit committee's power on the cost of audit fee and expected that the more power of the audit committee will bring about more support of the external auditor and a higher audit fee.

H4: There is a significant relationship between power of audit committee members and audit fees.

Carcello et al. (2002), Abbott et al. (2003), Vafeas and Waagelein (2007) and Hay (2013) found that there is a positive relationship between audit fee and the specialization of audit committee in line with their request for more efforts. In contrast, Krishnan and Visvanathan (2009) conducted another research, the result of which illustrated that there is a negative relationship between audit fee and audit committee specialization, because their results were in line with low assessment of audit risk. Karim and Moizer (1996) assessed effective criteria on audit fee in Bangladesh and concluded that big companies use famous auditors, because they believe that these institutes use specialist auditors for high quality audits. Therefore, these companies are ready to pay more fees to get a better face in front of from investors.

H5: There is a significant relationship between the specialty of audit committee members and audit fees.

Jensen (1993) expressed that if executive managers induce their power to control the board, then the freedom of thought and action of all members would be influenced unfavorably and process of internal control will face serious obstacles.

The hypothesis of the probability of designing weaker internal control systems and misusing them by biased managers to raise the investment rate in unreliable and risky projects was tested (Chen and Steiner, 1999; Ogneva et al., 2007). Moreover, the hypothesis of higher motivation of experienced and older managers in performing organizational duties, like minimizing the weaknesses of internal control system was assessed, as well (Stevens et al., 1978). Since power of internal control has a significant relationship with management philosophy, biased managers are more inclined toward the establishment and use of weaker internal control systems and misuse this faulty function to invest in risky projects (Ogneva et al., 2007).

H6: There is a significant relationship between power of the board members and the weaknesses of internal control.

Fernández and Arrondo (2005) reported an indirect relationship between managerial ownership and the proportion of external managers, which is indicative of the decline of supervisory performance of external managers on internal control system with a rise in degree of biasing. In the present study, we investigate the relationship between the board specifications and different kinds of weakness points in internal control systems and their severity, which is the main subject of recent studies (Hoitash et al., 2011; Ogneva et al., 2007). Previously, U.S executive managers had special an ability to attract external managers and obedient internal managers in their board (Thomas, 2004).

In this condition, a biased executive manager should compromise with the board capabilities in monitoring managerial decisions. Managerial power theory shows that the power of executive could affect the process of rewarding and the more powerful managers usually get more rewards and shares (Henderson et al., 2010). Finally, Chidambaran et al. (2010) observed that there is a direct relationship between the board communication and CEOs and probability of fraud. We can infer from the data that by decreasing the internal quality control level and corporate monitoring systems, and not using them for powerful CEOs to reach their personal interests is a possible and simple action.

Bedard (2006) conducted a study about interior control obligations related to article 302 and 404 of Sarbanes–Oxley Act of 2002 concerning the improvement of earnings quality using unexpected discretionary accruals as a measuring tool and found that such unexpected discretionary accruals are more in the year the internal control weaknesses were disclosed, because such faulty points increases management opportunism. The financial statements may have some defects for earning management through intentional distortion in discretionary accruals and by comparing the Acts 302 and 404 we could see that that the discretionary accruals are more in 302, but for companies with effective internal control report in 404 this amount was less. Generally, results indicated that the legal regulations of Sarbanes–Oxley Act for internal control could lead to the improvement of earning quality.

Daniel et al. (2008) investigated the reaction of capital market to execution of section 302 and 404 by companies and examined whether the predicted earning and additional expenses have changed after the disclosure of weak points or not. They included that section 302 presents useful information and section 404 has no significant effect on stock (share) price or the investment expenses. Chan et al. (2005) conducted a study entitled, “earning management and corporate collective return which disclose the significance of internal control weaknesses according to section 404 of Sarbanes-Oxley Act”. The purpose of their research was to examine the companies, which disclose their internal control weaknesses according to section 404. Their results showed that, their earning management is more and their return profit is less compared with other companies.

H7: There is a significant relationship between board members’ independence and the weaknesses of internal control quality.

In addition, regarding expressed relationships and probable effects of the board on internal control quality, the eighth hypothesis can be explained as follows:



H8: There is a significant relationship between the board effort and the weaknesses of internal control quality.

Krishnan (2005) studied the period when the SOX act has not been passed and the internal control problems were recorded only in K-8 and were disclosed only for companies with changing auditors. Using collected and recorded information in K-8, he concluded that independent audit committee and audit committee with more financial specialization are more probable to have less internal control problems (Krishnan, 2005). Regarding the importance of internal controls and since internal controls are applied under audit committee's supervision and affect the company functionality, so it is expected that the power and features of audit committee and the board affect the internal controls quality.

H9: There is a significant relationship between the power of audit committee and weaknesses of internal controls quality.

Audit committee quality, certain or more financial expertise particularly, financial or nonfinancial accounting expertise are among the important factors of internal control weaknesses (Zhang et al., 2007). To improve the effectiveness of audit committee, the BRC committee recommended that each audit committee should have at least a member with financial expertise and this could emphasize on the significance of knowledge and expertise of the financial committee. In section 407, the SOX states that companies should disclose the financial expertise of their audit committee members through the periodical reports and if there is no such specialties, they should explain why, because such information is important to confront the complexity of financial reporting (Kalbers & Fogarty, 1993) and to decrease probability of representing financial reports (Abbott, Parker & Peters, 2004). Furthermore, DeZoort and Salterio (2001) concluded that audit committee members with more financial expertise could better understand the auditors' view and support the auditor in his/her confrontation with management opinion on non-expert members of the committee. Zhang et al. (2007) investigated the relationship between audit committee quality, auditor independence, and disclosure of weak points of internal control after the provision of Sarbanes-Oxley act. They classified several samples of companies with internal control defects based on type of industry, size and corporate performance and compared the items with that of companies with no defects, then evaluated each factor of audit committee quality and auditor independence for each company. Their results showed that there is a relationship between audit committee quality, auditor independence, and weaknesses of internal control. Most of the classified companies as companies with weak points of internal control have less experienced audit committee members. Additionally, most classified companies with internal control defects enjoy auditors that are more independent. Most companies that have changed their auditors recently, have weakness points, as well. Therefore, regarding the conducted studies we concluded that the more the audit committees with financial expertise, the higher the quality of the internal control.

H10: There is a significant relationship between the expertise of audit committee members and weakness of internal control quality.

Asthana and Boone (2012) conducted a study about auditing unnatural costs and audit quality (Ge & McVay 2005; Doyle, Ge & McVay, 2006) and concluded that a weak internal control of material is more probable for small, unprofitable, complex and growing corporates. Doyle, Ge and McVay (2007) studied whether such important weak points of internal control are more common in smaller, newly established, financially weak, or growing companies or not. They also evaluated to see whether such factors are different at account or corporate level or not and which suffers from the weak point more. They concluded that internal control problems are more serious in newly established companies, which are financially weak, while weak points of internal control are less at account level and these companies are safer in terms of financial operations. Ge and McVay (2005) found that disclose their major defects in internal control due to the obligations of Sarbanes-Oxley Act are more complicated, smaller, and less profitable. Doyle et al. (2007) confirmed the results of Ge and McVay (2005) also showed that companies with weak internal control are younger, growing, or reorganizing. Ashbaugh et al. (2007) came to the same conclusion showed that companies with major defects in internal control have more complicated operations and have been recognized recently and also the audit risk of these companies

(systematic risk) indicates an increasing trend and they have less financial sources for investment in internal control. Hermanson, Ivancevich and Ivancevich (2008) revealed that market reaction is negative to main defects of internal control, which are disclosed in accordance with the regulations of section 302 of Sarbanes-Oxley Act.

### **3. Research Methodology.**

The aim of present study is to investigate the impact of audit committee power and the board of directors on audit fee and the weakness of internal control quality in companies. Accordingly, some financial variables are diagnosed as to the employed model. The statistical population of present study is listed companies in Tehran stock Exchange from all industries from 2014 to 2016. Sample of the study regarding the title is elimination sampling, through which the selected companies with respect to limitations listed companies on Tehran stock Exchange with the following specifications:

1. Companies should not be affiliated with banks, holdings, financial intermediaries. This is because such companies are different from other companies in terms of nature of activities and the classification of financial statement items.
2. Company's transactions should not be stopped completely during the research period (company's symbol excluded from the exchange).
3. Companies should be listed on the Tehran Stock Exchange at least from 2014.
4. All required data should be accessible during the time of research.
5. Considering the above said conditions, a total of 84 countries were selected, which indicates the actual statistical population.

#### **3.1. Method of data collection and data analysis.**

In this paper, to collect the experimental data and to test the research hypotheses, data related to in/dependent and control variables were gathered from audited financial statements of companies listed on Tehran Stock Exchange and are available at Kadul Website (comprehensive information system for publishers). Other related data were collected from social network of stock exchange and capital market and the official website of Tehran Stock Exchange, and in some cases from informational banks of Tehran Stock Exchange (IranBors, TadbirPardaz, and NovinRahavard Softwares). To make the required computations, the collected data were transferred to Excel Software to finalize the research variables based on the computational formula and to analyze final data in R software version 3,1,1. Before testing the hypotheses and final model fitting, we investigated the descriptive statistics (central and dispersion indices, namely mean, median, standard division of variation range) and research variables.

### **4. The results.**

#### **4.1. Descriptive Statistics.**

Descriptive findings of this research including mean, median, standard of division, minimum and maximum observations are illustrated in the following Table. It is worth mentioning that the number of companies under study presented in Table 1.

Considering the results of the Tables 1 and 2, the mean of internal control quality weakness is 0.33, which means that 33 percent of corporate structures suffer from internal control weakness. Moreover, unbounded managers account for 63 percent of board members. The variable of financial expertise of audit committee members shows that on average, 84 percent audit committee members have financial expertise. Financial restatements indicate that on average, 96 percent of companies represented their financial statements. In addition, 23 percent of companies were audited by famous auditors.

**Table 1. The Descriptive statistics of the study.**

Variable	Year-firm	Symbol	Average	Mean	St.d	Min	Max
The natural log of audit fees	252	LN_FEES	6.746	6.660	0.858	3.780	9.390
Power board	252	POTENCY_CFO	0.202	0.200	0.165	0.000	0.800
Independent board members	252	BD_IND	0.629	0.600	0.226	0.000	1.000
number of meetings of the Board	252	BD_MEET	15.130	13.000	5.458	5.000	45.000
Power Audit Committee	252	POTENCY – AC	3.126	3.000	0.578	3.000	7.000
Financial expert of the Audit Committee	252	AC_ACCT_EXPERT	0.842	1.000	0.170	0.330	1.000
Inflation	252	<i>Inflation</i>	26.933	30.500	8.211	15.600	34.700
Logarithm of total sales	252	LN_SALE	13.215	13.520	1.934	1.890	18.630
Logarithm of total assets	252	LN_ASSET	13.585	13.590	1.601	9.040	19.370
LEVERAGE	252	LEVERAGE	0.707	0.670	0.372	0.200	2.950
Return on assets	252	ROA	0.153	0.110	0.183	-0.330	0.930
Operating cash flow	252	CASH_FLOW	0.047	0.030	0.061	0.000	0.460
Operational Risk	252	AR_INV	0.532	0.540	0.195	0.130	0.890
REPORTLAG	252	REPORTLAG	73.452	72.000	29.078	19.000	177.000
The number of board members	252	BD_SIZE	5.063	5.000	0.351	5.000	7.000
Male members	252	M_GE_BD	4.880	5.000	0.496	2.000	7.000
Female members	252	FEM_GE_BD	0.210	0.000	0.510	0.000	3.000

Source: Own elaboration.

**Table 2. Descriptive statistics of the study.**

Variable	Symbol	Zero		One		Total	
		Number	%	Number	%	Number	%
Quality of internal control weaknesses	CO_W	170	67	82	33	252	100
LOSS	LOSS	230	91	22	9	252	100
Foreign transactions	FOREIGN	33	13	219	87	252	100
Restatement of Financial Statements	RESTATE	0	0	252	100	252	100
Position audit firm	RESIDENCE	104	41	148	59	252	100
Audit size	BIG	194	77	58	23	252	100

Source: Own elaboration.

Model (1): processing model for hypothesis one to five

In this research, the regression method of Beck and Mauldin (2014) was employed to investigate effect of power of audit committee and the board on audit fees as follows:

$$\begin{aligned}
 \ln\_FEES = & \beta_0 + \beta_1 POTENCY\_CFO + \beta_2 BD\_IND + \beta_3 BD\_MEET + \beta_4 POTENCY\_AC \\
 & + \beta_5 AC\_ACCT\_EXPERT + \beta_6 Inflation + \beta_7 \ln\_ASSETS + \beta_8 \ln\_SALE + \beta_9 LEVERAGE + \beta_{10} LOSS + \\
 & + \beta_{11} ROA + \beta_{12} CASH\_FLOW + \beta_{13} AR\_INV + \beta_{14} Ind\_Code + \beta_{15} FOREIGN + \beta_{16} REPORTLAG + \\
 & + \beta_{17} RESTATE + \beta_{18} RESIDENCE + \beta_{19} BIG1 + \beta_{20} BD\_SIZE + \beta_{21} M\_GE\_BD + \beta_{22} FEM\_GE\_BD + \varepsilon
 \end{aligned}$$

Where the independent variable of the above pattern will be defined and identified as follows:

In-FEES: natural logarithm of paid fees to auditors written in finance statements.

POTENCY-CFO: this variable indicates the power of the board. Financial expertise of the board members was considered as the criteria for measuring power and penetration and the more the financial expertise of members, the more is the power and penetration of the board.

BD-IND this variable indicates the percentage of independent board's members to all members.

We obtain such information from disclosed board data showing that several board members are bounded and some are unbounded managers.

BD-MEET: is the number of the board sessions during a fiscal year. We considered it as a criterion for measuring the extent of board efforts.

POTENCY-AC: such a variable indicates the power of audit committee.

The criterion for measuring the power and penetration of audit committee is number of committee members. We supposed that the more the number of committee members, the more its subsequent power.

AC-ACCT-EXPERT: is the number of accounting experts in audit committee, such as managers as independent auditors. The more the numbers of accounting and auditing expert of the audit committee, because of their interest in more accounting efforts, the more the audit fee would be set.

In this paper, some controlling variables are use, as well, which will be defined as follows:

Inflation: This variable indicates the inflation rate obtained from the central bank. We use this variable to indicate how much of changes in fees are resulted from changes in inflation rate.

In ASSETS: Natural logarithm of total assets.

IN SALE: Natural logarithm of total sale of company during the expected year.

LEVERAGE: Division of total debts into total assets.

LOSS: we use this variable to indicate corporate status, and if company is unprofitable and disclosed the issue, it obtains 1, otherwise 0.

ROA: Division of earnings into assets.

CASH-FLOW: A ratio of operating cash flow of company to total assets, calculated according to division of operating cash into assets.

AR-INV: This variable is achieved from sum of current assets, except for cash (accounts receivable and inventory) divided into total assets and shows the operational risk.

CODE-IND: this variable indicates kind of industry, for which the company operates.

FOREIGN: if company has international exchange we attribute one, otherwise we attribute zero.

REPORTLAG: is equal to number of days at the end of fiscal year and date of auditor's signature.

RESTATE: if company represent the financial statements we attribute one, otherwise zero.

RESIDENCE: if audited company and audit firm are in the same city, we attribute 1 otherwise 0. We set this variable because different place of company and firm would lead to the increase of audit fee and could affect the results.

BIG: If a company is audited by the audit organization, we attribute 1 otherwise 0.

BD-SIZE: is the number of board members.

M-GEN-BD: is number of male board members.

Fem-GEN-BD: IS number of female board members.

$\varepsilon_{it}$ : Random error.

#### **4.2. F Limer Test for the model related to hypothesis one to five.**

Since data analysis and hypothesis testing is taken place by the R software, after providing the required identifiable information and incorporating the data, the primary model fitting should be performed using the four common methods. These methods simple OLS method, OLS method by considering the time factor, fixed and random effects panel method. F Limer test is carried out on these four methods to:

1. Define the privileged model between OLS and fixed effects panel data. H0 hypothesis indicates that OLS is superior.

2. Define the privileged model between timed OLS and fixed effects panel method. H0 hypothesis indicates that OLS is superior.

Concerning the abovementioned items, the results of F Limer test are as follows:

**Table 3. The results of F Limer (chow) test for model related to hypothesis one to five.**

Hypothesis H0	F statistic	P - Value	Result
Superiority of OLS model	4.411	0.001>	Panel model is more appropriate
Superiority of timed OLS model	4.338	0.001>	Panel model is more appropriate

Source: Own elaboration.

The results of Flimer test for the model related to research hypotheses show that the related data follow the panel method.

Hausman test for the model related to hypothesis one to five. Having finalized the use of panel data method, we need to specify whether the panel model should have fixed effects or whether it requires random effects. Therefore, we used the Hausman test, the result of which can be seen in Table 4.

**Table 4. The results of Hausman test for the model related to hypothesis one to five.**

Hypothesis H0	Chi-square statistic	P-Value	Result
Superiority of OLS model	108.437	0.001>	Fixed effects panel method is more appropriate

Source: Own elaboration.

Regarding the acceptance of null hypothesis of Hausman test, we could conclude that the method of parameter estimation is the fixed effects model.

LM test for the model related to hypothesis one to five. Prior to fitting of fixed effects model, we need to check whether we can merge time and space factors or not. Hence, we employed Lagrange Multiplier-Breusch- Pagan test (LM), the result of integrability test for the model regarding the values of Chi-square statistics deriving from Lagrange Multiplier-Breusch- Pagan test, we could conclude that the merged method of time factors is appropriate for model fitting.

Evaluating the autocorrelation of residuals. One of the features of evaluation through application of merged panel models is the absence of autocorrelation among the error terms. Breusch-Godfrey test is employed for this purpose. The results of this test on model disturbing elements, based on the R Software, are as follows:

**Table 5. The result of Breusch-Godfrey test for model related to hypothesis one to five.**

Hypothesis H0	Chi-square statistic	P-Value	Result
No serial autocorrelation among error terms	25.381	*** <0/001	serial autocorrelation is existed

Source: Own elaboration.

Since the p-value of Breusch-Godfrey test is less than 0.001, the null hypothesis of this test as to the absence of serial autocorrelation among the disturbing elements is rejected, so error terms have serial autocorrelation. The presence of serial autocorrelation among model residuals could cause a bias in model estimation. PGLM is used to resolve this problem, for better estimation of model parameters, and for the final fitting.

**Table 6. Results of final model fitting related to hypothesis one to five.**

Variable	Symbol	R <sup>2</sup>	Std Dev	t stat	P-value
Intercept	$\alpha_0$	2.509	0.973	2.578	** 0.009
Board power	POTENCY_CFO	0.209	0.243	0.862	0.388
Independent board members	BD_IND	-0.423	0.206	-2.055	*0.039
Number of meetings of the board	BD_MEET	0.005	0.008	0.606	0.544
Audit Committee Power	POTENCY_AC	-0.170	0.075	-2.252	* 0.024
Financial expert of the Audit Committee	AC_ACCT_EXPERT	0.683	0.258	2.646	** 0.008
inflation	INFLATION	-0.016	0.002	-5.857	*** 0.001>
Logarithm of total sales	LN_SALE	0.098	0.035	2.774	** 0.005
Logarithm of total assets	LN_ASSET	0.163	0.047	3.404	*** 0.001
leverage	LEVERAGE	0.097	0.109	0.883	0.377
loss	LOSS	-0.290	0.110	-2.632	** 0.008
Return on assets	ROA	-0.235	0.166	-1.415	0.157
Operating cash flow	CASH_FLOW	0.782	0.538	1.456	0.145
Operational Risk	AR_INV	0.013	0.211	0.063	0.949
Foreign transactions	FOREIGN	-0.073	0.160	-0.456	0.648
REPORTLAG	REPORTLAG	0.002	0.001	1.689	0.091
Restatement of Financial Statements	RESTATE	-0.158	0.244	-0.648	0.517
Position audit firm	RESIDENCE	0.136	0.112	1.219	0.226
Audit size	BIG	0.647	0.116	5.579	0.001>***
The number of board members	BD_SIZE	-0.113	0.299	-0.379	0.704
Male members	M_GE_BD	0.360	0.278	1.296	0.195
Female members	FEM_GE_BD	0.317	0.266	1.189	0.234

Source: Own elaboration.

Model (2) fitting model for hypothesis six to ten.

In this research, logistic regression model of Beck and Mauldin (2014) was used to evaluate the effect of audit committee and the board power on the weakness of internal control quality.

$$Co-w = \beta_0 + \beta_1 POTENCY\_CFO + \beta_2 BD\_IND + \beta_3 BD\_MEET + \beta_4 POTENCY\_AC + \beta_5 AC\_ACCT\_EXPERT + \beta_6 Inflation + \beta_7 ln\_ASSETS + \beta_8 ln\_SALE + \beta_9 LEVERAGE + \beta_{10} LOSS + \beta_{11} ROA + \beta_{12} CASH\_FLOW + \beta_{13} AR\_INV + \beta_{14} Ind-Code + \beta_{15} FOREIGN + \beta_{16} REPORTLAG + \beta_{17} RESTATE + \beta_{18} RESIDENCE + \beta_{19} BIG1 + \beta_{20} BD\_SIZE + \beta_{21} M-GE\_BD + \beta_{22} FEM-GE\_BD + \varepsilon$$

Where:

Co-w: if company shows an important weakness in its reports, we attribute one, otherwise zero. This audit report variable emphasizes on special issues regulated by auditors according to a set of presented checklists by the Stock Exchange for internal controls. In case some significant problems being explored a descriptive clause will be added in this section.

Since the above model is a type of combinational data, its appropriate estimation should be defined using the Akaic criteria (AIC). Thus, we estimate the above Logit pattern using four methods of simple Gln, time-series GLM method (only by considering the time factor), and fixed and random effects panel method and compare the AIC criteria. Each model with smaller AIC will be used as the desired and final model.

**Table 7. Results of AIC statistics for hypothesis six to ten.**

Identification Criteria	Normal Logistic model	Timed Logistic Model	Regression logistic model with fixed effects	Regression logistic model with random effects
AIC Coefficient	337.639	338.642	331.368	331.368

Source: Own elaboration.

By considering the above table and AIC values of each 4 mentioned models, we could conclude that panel logistic regression model with fixed or random effects, because of having the lowest AIC value, is the most appropriate. Since the fitting results of the two models are similar, one of two models is fitted and results were displayed in Table 8.

**Table 8. Results of final fitting of model related to hypothesis six to ten.**

Variable	Symbol	R <sup>2</sup>	Std Dev	t stat	P-value
Intercept	$\alpha_0$	1.363	0.810	1.682	0.092
Board Power	POTENCY_CFO	-0.308	0.215	-1.437	0.151
Independent board members	BD_IND	0.175	0.177	0.988	0.323
Number of meetings of the Board	BD_MEET	-0.001	0.007	-0.177	0.859
Audit Committee Power	POTENCY_AC	-0.022	0.060	-0.369	0.712
Financial expert of the Audit Committee	AC_ACCT_EXPERT	-0.346	0.210	-1.642	0.100
Inflation	INFLATION	0.003	0.003	1.001	0.316
Logarithm of total sales	LN_SALE	-0.032	0.034	0.935	0.345
Logarithm of total assets	LN_ASSET	0.073	0.043	1.662	0.096
Leverage	LEVERAGE	-0.183	0.099	-1.833	0.066
Loss	LOSS	0.037	0.112	0.332	0.739
Return on assets	ROA	-0.240	0.169	-1.423	0.154
Operating cash flow	CASH_FLOW	-0.280	0.544	-0.515	0.606
Operational Risk	AR_INV	0.185	0.197	0.936	0.349
Foreign transactions	FOREIGN	-0.128	0.125	-1.017	0.309
REPORTLAG	REPORTLAG	0.002	0.001	1.622	0.105
Restatement of Financial Statements	RESTATE	-0.735	0.207	-3.551	<0.001***
Position audit firm	RESIDENCE	0.092	0.086	1.069	0.285
Audit size	BIG	-0.149	0.094	-1.595	0.110
The number of board members	BD_SIZE	-0.330	0.251	-1.316	0.188
Male members	M_GE_BD	0.183	0.238	0.772	0.440
Female members	FEM_GE_BD	0.206	0.228	0.903	0.366

Source: Own elaboration.

## 5. Conclusion.

The first hypothesis investigated the relationship between power of the board and audit fee. Since the P-value of this variable is 0.388 and more than the significance level of 0.05, so the hypothesis is rejected and there is no significant relationship these two factors.

The first hypothesis was based on the regression model of Beck and Mauldin (2014). Despite a positive relationship between power of the board and audit fee, there is no significant relationship between these two variables. This conclusion is in conflict with results of Harris (2008), Reason (2010b), and McCracken et al. (2008) who declared that there is a negative relationship between power of the board and audit fee.

On the other hand, lack of significant relationship between power of the board and audit fee is in conflict with the results of Beck and Mauldin (2014), Carcello et al. (2002) and Cohen et al. (2010) who revealed that there is a significant relationship between the board power and audit fee.

The second hypothesis evaluated the relationship between board member Independence (unbounded members) and audit fee. Since the p-value of this variable is 0.039 and less than the significance level of 0.05, so the hypothesis is accepted and is indicative of a significant relationship between board member independence and audit fee. Since the t statistic of board member independence has a negative relationship with audit fee, it means that by increasing the percentage of independence of board members, audit fee will reflect a decreasing trend. The presence of a significant relationship between board member independence and audit fee is in conflict with the results of studies conducted by Boo and Sharpe (2008) and Leventis and Dimitropoulos (2010).

The third assumption assessed the relationship between board effort (criteria for measuring is the number of board sessions) with audit fee. Since the P-value of this variable is 0.544 and is more than the significance level of 0.05, so this hypothesis is rejected. Therefore, there is no meaningful relationship between board effort and audit fee. Lack of significant relationship between board effort and audit fee is in conflict with results of study performed by Yatim (2006).

The fourth hypothesis studied the relationship between audit committee power and audit fee. Since the P-value of this variable is 0.024 and less 0.05 at significance level, so this hypothesis is accepted and there is a significant relationship between audit committee power and audit fee. Since the t statistic of the relationship between audit committee power and audit fee is negative, it means that by increasing the power of audit committee, audit fee will indicate a decreasing trend. Such a result is in line with the results of Brown and Wright (2008), DeZoort et al. (2008), and Krishnan and Visvanathan (2009) in terms of existence of significant relationship between audit committee power and audit fee and is in conflict with them in terms of presence of positive or negative relationship.

The fifth hypothesis investigated the relationship between the financial expertises of audit committee members with audit fee. Since the p-value of this variable is 0.008 and less than the significance level of 0.05, so the hypothesis is accepted. Since the relationship between the financial expertise of audit committee members and audit fees is positive, it means that by increasing financial expertise of audit committee members the audit fees will show an increasing trend. This significant and positive relationship is in line with results of Carcello et al. (2002), Abbott et al. (2003), and Vafeas et al. (2007) but is in conflict with the results Krishnan and Visvanathan (2009) in terms of positive or negative relationship. However, in terms of existence of a relationship, all mentioned studies are in line with the result of this hypothesis.

The sixth hypothesis studied the relationship between the board power and weakness of internal control quality. Since the P-value of this variable is 0.151 and more than the significance level of 0.05, so this hypothesis is rejected. Therefore, there is no significant relationship between the board power and weakness of internal control quality. Despite the presence of a negative relationship between these two variables, no significant relationship was seen between these two variables. Such a result is in conflict with result of Jensen (1993), Stevens et al. (1978) and Ogneva et al. (2007).

The seventh hypothesis evaluated the relationship between board member independence and weakness of internal control quality. Since the P-value of this variable is 0.323 and more than the significance level of 0.05, so this hypothesis is rejected. Therefore, there is no significant relationship between board member independence and weakness of internal control quality. Lack of a significant relationship between these two variables is in conflict with the results of Fernández and Arrondo (2005), Chidambaram et al. (2010), Hoitash et al. (2011) and Ogneva et al. (2007).

The eighth hypothesis investigated the relationship between the board efforts and weakness of internal control quality. The P-value of this variable is 0.859 and more than the significance level of



0.05, so this hypothesis is rejected. Therefore, there is no significant relationship between the board effort and weakness of internal control quality.

The ninth hypothesis evaluated the relationship between audit committee power and weakness of internal control quality. The P-value of this variable is 0.712 and more than the significance level of 0.05. Therefore, this hypothesis is rejected and there is no significant relationship between audit committee power and weakness of internal control quality. This result is in conflict with the results of Krishnan (2005).

The last hypothesis assessed the relationship between financial expertise of audit committee members and weakness of internal control quality. The P-value of this variable is 0.100 and more than significance level of 0.05, so this hypothesis is rejected. Therefore, there is no significant relationship between financial expertise of audit committee members and weakness of internal control quality. This result is in conflict with results of Zhang et al. (2007).

## References

- Abbott, L.J., Parker, S., Peters, G.F., & Raghunandan, K. (2003). The association between audit committee characteristics and audit fees. *Auditing: A Journal of Practice & Theory*, 22(2), 17-32.
- Abbott, L., Parker, S., & Peters, G. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice and Theory*, 23(1), 69-87.
- Ashbaugh-Skaife, H., Collins, D., & Kinney, W. (2007). The Discovery and Reporting of Internal Control Deficiencies Prior to SOX-Mandated Audits. *Journal of Accounting and Economics*, 44, 166-192.
- Association of Certified Fraud Examiners (ACFE) (2009). Occupational Fraud: A Study of the Impact of an Economic Recession. Austin, TX: ACFE.
- Asthana, S.C., & Boone, J.P. (2012). Abnormal audit fee and audit quality. *Auditing: A Journal of Practice & Theory*, 31(3), 1-22.
- Baltaci, M., & Yilmaz, S. (2006). *Keeping an Eye on Sub-national Governments: Internal Control and Audit at Local Levels*. World Bank Institute. Washington. D.C. pp.1-35
- Beasley, M., Carcello, J., Hermanson, D., & Neal, T. (2009). The audit committee oversight process. *Contemporary Accounting Research*, 26(1), 65-122.
- Beck, M.J., & Mauldin, E.G. (2014). Who's Really in Charge? Audit Committee versus CFO Power and Audit Fees. *The Accounting Review*, 89(6), 2057-2076.
- Bedard, J., & Johnstone, K.M. (2004). Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review*, 79(2), 277-304.
- Bedard, J. (2006). Sarbanes Oxley Internal Control Requirements and Earnings Quality. Working paper. Laval University. pp. 1-41.
- Blue Ribbon Committee (BRC). (1999). Report and Recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. Stamford, CT: New York Stock Exchange and National Association of Securities Dealers.
- Boo, E.F., & Sharma, D. (2008). The Associatiin Between Corporate Governance and Audit Fee of Bank Holding Companies. *Corporate governance*, 8(4), 28-45.
- Brown, H., & Wright, A. (2008). Negotiation research in auditing. *Accounting Horizons*, 22(1): 91-109.

- Carcello, J., Hermanson, D., & Ye, Z. (2011). Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions. *Auditing: A Journal of Practice & Theory* 30(3), 1-31.
- Carcello, J., Hermanson, T., Neal, L., & Riley, R. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19 (3), 365-384.
- Chan, A.M. ., Liu, G., & Sun, J. (2013). Independent audit committee members' board tenure and audit fees. *Accounting and Finance*, 53, 1129-1147.
- Chan, K.C., Farrell, B., & Lee, P. (2005). Earnings Management and Return Earnings, Association of Firms Reporting Material Internal Control Weaknesses Under Section 404 of the Sarbanes-Oxley Act. June 15. pp.1-35.
- Cheffers, M., & Whalen, D. (2011). *Audit fees and non-audit fees: An eight year trend*. Audit Analytics May.
- Chen, C.R. & Steiner, T.L. (1999). Managerial ownership and agency conflicts: A nonlinear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy. *The Financial Review*, 34, 119-136.
- Chidambaran, N.K., Kedia, S., & Prabhala, N.R. (2010). CEO Director connections and corporate fraud. Working Paper. Available at SSRN: <http://ssrn.com/abstract=2023030> (accessed September 25, 2013).
- Christensen, B., Omer, T., Sharp, N., & Shelley, M. (2013). *Pork bellies and public company audits: Have audits once again become just another commodity?* Working Paper. Texas: A&M University.
- Cohen, J., Krishnamoorthy, G., & Wright, A. (2010). Corporate governance in the post Sarbanes- Oxley era: Auditor experiences. *Contemporary Accounting Research* 27(3), 751-786.
- Daniel, B., Billings, M., & Hodder, L. (2008). Internal Control Weaknesses and Information Uncertainty. *The Accounting Review*, 83(3), 665-703.
- Dao, M., Raghunandan, K., & Rama, D (2012). Shareholder voting on auditor selection, audit fees, and audit quality. *The Accounting Review*, 87(1), 149-171.
- Das, S., Shroff, P.K. & Zhang, H. (2009). Quarterly earnings patterns and earnings management. *Contemporary Accounting Research*, 26(3), 797-831.
- DeZoort, F. T., Hermanson, D. & Houston, R. (2008). Audit committee member support for proposed audit adjustments: Pre-SOX versus post-SOX judgments. *Auditing: A Journal of Practice & Theory*, 27(1), 85-104.
- DeZoort, F., & Salterio, S. (2001). The effects of corporate governance experience and financial reporting and audit knowledge on audit committee members' judgments. *Auditing: A Journal of Practice and Theory*, 20 (September), 31-47.
- Dhaliwal, D.S., Lamoreaux, P.T., Lennox, C.S., & Mauler, L.M. (2014). Management influence on auditor selection and subsequent impairments of auditor independence during the post-SOX period. *Contemporary Accounting Research*, 32(2), 575-607.
- Doogar, R., Rowe, S., & Sivadasan, P. (2013). Asleep at the wheel (again)? Bank audits during the financial crisis. *Contemporary Accounting Research*, 32(1), 358-391.
- Doty, J.R. (2011). The reliability, role, and relevance of the audit: A turning point. *The CPA Journal* August: 31-36.

- Doyle, J., Ge, W., & McVay, S. (2006). Determinants of weaknesses in internal control over financial reporting. Working paper, University of Utah, University of Michigan and New York University.
- Doyle, J., Ge, W., & McVay, S. (2007). Accruals Quality and Internal Control over Financial Reporting. *The Accounting Review*, 82(5), 1141-1170.
- Ettredge, M., Fuerherm, E., & Li, C. (2014). Fee pressure and audit quality. *Accounting, Organizations and Society*, 39(4), 247-263.
- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-326.
- Fernández, C. & Arrondo, R. (2005). Alternative internal controls as substitutes of the board of directors. *Corporate Governance: An International Review*, 13, 856-866.
- Fiolleau, K., Hoang, K., Jamal, K., & Sunder, S. (2013). How do regulatory reforms to enhance auditor independence work in practice? *Contemporary Accounting Research*, 30(3), 864-890.
- Galinsky, A., Magee, J., Gruenfeld, D., Whitson, J., & Liljenquist, K. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95(6), 1450-1466.
- Ge, W., & McVay, S. (2007). The Disclosure of Material Weaknesses in Internal Control after the Sarbanes-Oxley Act. *Accounting Horizons*, 19(3), 137-158.
- Ge, W., & McVay, S. (2005). The Disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act. *Accounting Horizon*, 19 (3), 137-158.
- General Accounting Office (GAO), (1992), Letter from Donald H. Chapin, Assistant Comptroller General, GAO, to Robert L. May, Chairman, Committee of Sponsoring Organizations of the Treadway Commission. (October 30), Journal of Accountancy, 1993.
- Griffin, A., Lont H., & Sun, Y. (2008). Agency Problems and Audit fees: Further Tests of the Free cash Flow Hypothesis. *Journal of Finance*, 1, 1-35.
- Harris, R. (2008). How to ax your auditor. CFO January 28. Accessed at <http://www.cfo.com/printable/article.cfm/10595337>
- Hay, D. (2013). Further evidence from meta-analysis of audit fee research. *International Journal of Auditing*, 17, 162-176.
- Hellman, N. (2011). Chief financial officer influence on audit planning. *International Journal of Auditing*, 15, 247-274.
- Henderson, B.C., Masli, A., Richardson, V.J., & Sanchez, J.M. (2010). Layoffs and CEO compensation: Does CEO power influence the relationship? *Journal of Accounting, Auditing and Finance*, 25, 673-707.
- Hermanson, D.R., Ivancevich, D.M., & Ivancevich, S.H. (2008). Tone at the Top: Insights from Section 404. *Strategic Finance*, 90(5), 39-45.
- Hoitash, U., Hoitash, R., & Johnstone., K. (2011). Internal Control Material Weaknesses and CFO Compensation, Working paper, 57, pp.1-31. Madison: University of Wisconsin.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 831-880.

- Kalbers, L., & Fogarty, T. (1993). Audit committee effectiveness: An empirical investigation of the contribution of power. *Auditing: A Journal of Practice & Theory* (Spring), 24-49.
- Kane, G.D., Richardson, F.M., & Graybeal, P. (1996). Recession-induced stress and the prediction of corporate failure. *Contemporary Accounting Research*, 13(2), 631-650.
- Karim, A., & Moizer, P. (1996). Determinants of audit fees in Bangladesh. *International Journal of Accounting*, 31(4), 497-509.
- Knechel, W.R. (2007). The business risk audit: Origins, obstacles and opportunities. *Accounting, Organizations and Society*, 32(4-5), 383-408.
- Krishnan, G., & Visvanathan, G. (2009). Do auditors price audit committee's expertise? The case of accounting vs. non-accounting financial experts. *Journal of Accounting, Auditing & Finance*, 24(1), 115-144.
- Krishnan, J. (2005). Audit committee financial expertise and internal control: An empirical analysis. *The Accounting Review*, 80(2), 649-675.
- Leventis, S., & Dimitropoulos, P.E. (2010). Audit Pricing, quality of earning and board independence: The Cose of the Athens stock exchange. *International Journal of Cardiology*, 26, 325-332.
- McCracken, S., Salterio, S., & Gibbins, M. (2008). Auditor-client management relationships and roles in negotiating financial reporting. *Accounting, Organizations and Society*, 33, 362-383.
- McMullen, D.A., Raghunandan, K., & Rama, D.V. (1996). Internal control reports and financial reporting problems. *Accounting Horizons*, 10, 67-75.
- Moore, D. A., Tetlock, P. E., Tanlu, L., & Bazerman, M. H. (2006). Conflicts of interest and the case of auditor independence: Moral seduction and strategic issue cycling. *Academy of Management Review*, 31(1), 10-29.
- Ogneva, A., Subramanyam, K. R., & Raghunandan, K. (2007). Internal Control Weakness and Cost of Equity: Evidence from SOX Section 404 Disclosures. *The Accounting Review*, 82(5), 1255-1297.
- O'Keefe, T., Simunic, D., & Stein, M. (1994). The production of audit services: Evidence from a major public accounting firm. *Journal of Accounting Research*, 32, 241-261.
- Public Company Accounting Oversight Board (PCAOB). (2004). Auditing Standard No.2-An audit of internal control over financial reporting performed in conjunction with an audit of financial statements.
- Ramdani, D., & Witteloostuijn, A.V. (2010). The Impact of Board Independence and CEO Duality on Firm Performance: A Quantile Regression Analysis for Indonesia, Malaysia, South Korea and Thailand. *British Journal of Management*, 21, 607-626.
- Reason, T. (2010a). Auditing your auditor. CFO (April): 36-42.
- Reason, T. (2010b). Fees still falling, though not as dramatically. CFO (September). Accessed at <http://ww2.cfo.com/accounting-tax/2010/09/fees-still-falling-but-not-as-dramatically/>.
- Securities and Exchange Commission (SEC). (2003). Standards related to listed company audit committees. Accessed at <http://www.sec.gov/rules/final/33-8220.htm>
- Simunic, D. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*, 18 (1), 161-190.
- SOX (2002). The Sarbanes-Oxley Act. Available at: <https://www.dau.edu/cop>

- Standards for Internal Control in the Federal Government, (1999), United States General Accounting Office (GAO), November, pp.1-4.
- Stevens, J.M., Beyer, J.M., & Trice, H.M. (1978). Assessing personal role, and organizational predictors of managerial commitment. *Academy of Management Journal*, 18, 74-81.
- Thomas, R.S. (2004). Explaining the international CEO pay gap: Board capture or market driven? *Vanderbilt Law Review*, 57,1171-1267.
- Tsui, J.S.L., Jaggi, B., & Gul, F.A. (2001). CEO domination, growth opportunities, and their impact on audit fees. *Journal of Accounting, Auditing and Finance*, 16(3), 189-208.
- U.S. House of Representatives (2002). The Sarbanes-Oxley Act of 2002. Public Law 107-204. Washington, D.C.: Government Printing Office.
- Vafeas, N., & Waagelein, J.F. (2007). The association between audit committees, compensation incentives, and corporate audit fees. *Review of Quantitative Finance and Accounting*, 28, 241-255.
- Yatim, P. (2006). Internal Governance Structures, Board Ethnicity, and External Audit Fees of Malaysian Listed Firms. Dissertation for the degree of Doctor of Philosophy.
- Zhang, Y., Zhou, J., & Zhou, N. (2007). Audit Committee Quality, Auditor Independence, and Internal Control Weaknesses. *Journal of Accounting and Public Policy*, 26(3), 300-327.
- Zulkarnain, S.M., Hamid, M.A.A., Saad, S.S.M., & Jonathan, G.E. (2007). Audit Committee Authority and Effectiveness: The Perceptions of Malaysian Senior Managers. *Journal of Finance and Economics*, 8(1), 41-56.