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JOINT AUDITOR PAIR, JOINT AUDITOR TENURE AND CORPORATE BEHAVIOR: EVIDENCE FROM KUWAIT

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ABSTRACT

This paper investigates the effect of joint auditor pair and joint auditor tenure on corporate behavior. Using a sample of 208 year-observations of public companies traded on the Kuwait stock exchange (KSE) over the period of 2008 to 2009, evidence indicates a positive association between the choice of Big 4-Big 4 (BB) auditor pair and the level of corporate behavior. This result is consistent across the three aspects of corporate behavior (i.e. trading history, communication and disclosure). However, the choice of other auditor pairs has no impact on the company's behavior. In addition, corporate behavior is positively related to joint auditor tenure when joint auditor tenure is measured in a continuous form. Using binary indicators for joint auditor tenure, the results, in general, indicate that corporate behavior in terms of trading history and communication improves after the fifth year of auditor engagement.

Keywords: *Kuwait corporate behavior, auditor tenure, joint audit*

INTRODUCTION

The purpose of this paper is to examine the effect of auditor pair choice and joint auditor tenure on corporate behavior of companies listed on Kuwait stock exchange (KSE) during the years 2008-2009[1]. Corporate behavior

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1 Joint audit is defined as two independent audit firms share audit effort, sign single audit report, and have joint liability when performing an audit service. It implies also mutual quality controls and cross reviews procedures. It should be noted that joint audit is different from dual or double audit, where the latter indicates that each audit firm examines different sets of financial statements and expresses different audit opinions (see, Ratzinger, Audousset, Kettunen & Lesage, 2012).

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refers to the attitude to adopt the best business practices to reduce governance risk and create less risky investment environment.[2] Corporate behavior is important because of its effect on corporate market value (Durnev & Kim, 2005; Black, Jang & Kim, 2006). Companies trading sporadically and in shallow volumes, lacking a structure of corporate communication and disclosing weak financial and accounting reports exhibit poor corporate governance. Such a behavior raises a major concern over the quality and credibility of information and constitutes a high risk investment environment.

The credibility and reliability of corporate behavior is enhanced when it is subject to a form of independent, third-party audit. An audit service ensures that the practiced corporate behavior produces information according to the accepted accounting standards, and give an opinion on whether these information is free from material misstatements. By becoming familiar with clients, auditors can get a sense for the appropriateness of the practices made by the client in producing its information and issuing its interim reports.

Auditors have an important role to play in promoting and reinforcing trust and confidence in corporate practices. Auditors can check on the quality and reliability of the information produced as a result of corporate practices, and give their opinion on whether the financial statements are stated in accordance with accepted accounting standards. Because higher quality audits enhance information quality and credibility, higher quality audits should provide better check on the information aspects of the corporate behavior.

In Kuwait, joint audit has been mandatory since 1994. This requirement comes to restore trust in financial reporting after a series of major financial scandals and national threat events that shook the entire country's capital market and financial infrastructure such as Al-Manakh crisis in 1982, the massive losses of Kuwait Investment Office (KIO) in the Spanish corporate group (Grupo Torras) in 1992 due to fraud schemes, and the Iraqi invasion to Kuwait in 1990[3]. Although the joint audit Act has been enacted for more than twenty years, it is yet to address the auditor rotation. In Kuwait, calls in the media for auditor rotation have been expressed following the Enron-

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2 Testing whether the improvement in corporate behavior leads to a decrease in governance risk is beyond the scope of this paper.

3 Many local audit firms lost their audit files due to the Iraqi invasion.

Anderson era scandal and the enforcement of the U.S Sarbanes-Oxley Act (Alanba, 2014)[4]. These events and calls have triggered concerns about the quality of the external auditors.

DeAngelo (1981) states that "the quality of audit services is defined to be the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach." DeAngelo (1981) argues that the size of audit firm is a surrogate for audit quality. A large body of accounting literature shows that larger auditors (e.g. Big 4 international audit firms) provide higher audit quality than smaller auditors (e.g. non-Big 4 audit firms) (Memis & Cetenak, 2012; Chen, Hsu, Huang & Yang, 2013; Kanagaretnam, Krishnan, Lobo & Mathieu, 2011; Clinch, Stokes & Zho, 2010; Lee, Mande & Son, 2009; Behn, Choi & Kang, 2008; Francis, 2004; Watkins, Hillison, & Morecroft 2004; DeAngelo, 1981). Applying DeAngelo's (1981) size-quality scheme to Kuwait, Big 4-Big 4 auditor pair should provide the highest level of audit quality, whilst non-Big 4- non-Big 4 auditor pair provides the lowest level of audit quality. Between these two limits, audits supplied by a Big 4-non-Big 4 auditor pair should fall in.

The controversy still hinges on whether long auditor tenure impairs or maintains audit quality. Auditor tenure is the duration of the auditor-client business relationship. Academic studies show mixed results as to whether audit quality is lower in longer auditor tenure. Some studies show no impact of long auditor tenure on audit quality (e.g. Gul, Jaggi & Krishnan, 2007; Johnson, Khuranna & Reynolds, 2002); others find that audit quality decreases with long tenure (e.g. Chu, Church & Zang, 2012; Dao, Mishra & Raghunandan, 2008; Davis, Soo & Trompeter, 2009; Raghunathan, Lewis & Evans, 1994); and others report that long tenure improves audit quality (e.g. Srinidhi, Leung & Gul, 2010; Myers, Myers & Omer, 2003).

In this paper, three corporate practices are addressed as suggested by the joint report of the National Investor (*TNI*) and the Institute for Corporate Governance (*Hawkama*): trading history (i.e. stock volatility, length of trading history, liquidity and structure of shareholding), corporate communication (i.e. to what extent a company communicates with its

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4 http://www.alanba.com.kw/ar/economy-news/437048/13-01-2014

shareholders and the market) and disclosure transparency (i.e. access to corporate information and disclosure quality).[5]

Corporate behavior is measured using a proxy (hereafter, *BASIK*) developed by *TNI* and *Hawkamah*.[6] *BASIK* is "a corporate scoring methodology to assess nonfinancial risks often associated with regional stock market investments" (TNI Market Insight 2008: 4). It is a composition measure of three categories (trading history, communication, and disclosure), where each category consists of several parameters.

Several reasons motivate this paper. First, despite the long history of Kuwait stock exchange (KSE), Kuwait still falls behind other GCC (Gulf council countries) in improving corporate practices (Task force report, 2007), which inversely affects the investment environment. In Kuwait, the regulatory structure is still underdeveloped, and the KSE's inspection, investigation and surveillance powers are yet to be strong and apparently lack of defined processes. In the absence of developed and strong regulatory structures, the choice of joint auditor pair may be seen as one possible means of promoting companies' best practices. In addition, because auditor litigation is relatively absent and lawsuits against auditors are confidentially undisclosed in Kuwait, it is difficult to say that audit firms are motivated to provide differential audit quality.

Third, the joint audit regulatory requirement is a feature of the Kuwait market that is not commonly observed in all industry sectors of other GCC markets, in specific, or in most other countries, in general. To the author's best knowledge, a few studies carried out in Kuwait on auditor pair effect (Al-Shammari, 2013; Alanezi & Alfaraih, 2012; Al-Shammari, Yaqout & Hussaini, 2008; Alanezi, Alfaraih, Alrashaid & Albolushi, 2003). However, more studies are still needed to explore further on the issue of joint auditor

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5 *TNI* is a private investment management and advisory firm located in Abu Dhabi. It has three principal business lines: asset management, investment banking and private equity. *Howkamah* is a private corporate governance institute deals with corporate governance reforms. It was founded by international organizations (e.g., OECD, IFC, and the World Bank) and regional organizations (e.g., the Union of Arab Banks and the Dubai International Financial Center).

6 *BASIK* stands for Behavioral Assessment Score for Investors and Corporation.

choice, given the importance of this issue regionally and globally[7]. The current study uses larger sample and different measure of corporate behavior. It also explores the impact of auditor tenure on the level of corporates' best practices.

Furthermore, many local audit firms in Kuwait seek a joint venture with big international audit firms such as the big four to increase audit quality (Al-Mudhaf, 1990) and market share. However, investors view most concurrent associations as fictitious and purely established for marketing and promoting activities (Aljoman, 2008).[8] Many question whether these associations can improve corporate behavior and thus of meaningful value to investors. Lastly, there is a tendency among the auditors to believe that public firms in Kuwait require audit service to fulfil the formality requirement only (Alhusaini, 2000). For example, in response to an inquiry whether clients are interested in computerized audit services, a manager in Coopers & Lybrand in Kuwait indicates that most public clients show no concerns over audit quality. Rather, clients require audit service to comply with local reporting regulations (Al-Hajji, 1993).

The author reports a positive association between the choice of *BB* auditor pair and the level of corporate behavior. Clients hiring two Big 4 auditors experience an increase in the corporate behavioral level. This result seems consistent across the three dimensions of corporate behavior. That is, the clients of Big 4-Big 4 pair exhibit better patterns of trading history, greater communication, and higher disclosure transparency. However, the choice of *BS*/*SS* auditor pairs has no impact on the company's behavior. The rationale for these results is that interactions between Big 4 auditors are rather highly coordinated, more technological efficient and increase incentives to produce an adequate effort for Big 4 pairs. This explanation, however, seems unlikely with other auditor pairs.

Evidence also shows that auditor tenure, measured in a continuous form, is positively related to the level of corporate behavior. Measuring auditor tenure in a dichotomous form, longer tenure is positively associated

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7 Following the global financial crisis, questions and concerns have been raised about the quality of audit firms. The European Commission (EC) issued the Green Paper "Audit Policy: Lessons from the Crisis" (EC, 2010), which suggested several institutional mechanisms, among them the joint audit.

8   http://www.alraimedia.com/articles.aspx?id=57460

with the level of corporate behavior, and this association is evident in the company's trading history and communication. That is, joint auditor tenure has a positive effect on a company's communication and disclosure after the fifth year of the two auditors' engagement. Short client-auditor relationship (i.e. two to three years), however, has no effect on the corporate behavior level. Thus, longer joint auditor-client relation, in general, leads to a greater improvement in the client's behavior.

In addition, results indicate that auditor tenure of the choice of two Big 4 auditors has no effect on the level of corporate behavior. This evidence is consistent when auditor tenure is measured in continuous and dichotomous forms. On the other hand, the auditor tenure of the choice of other auditor pairs (i.e. *BS*/*SS*) tends to have a negative effect on the *DISCLOSURE* parameter only. Again, this result is consistent using continuous and dichotomous forms of auditor tenure.

This paper extends the literature on the quality of external audits in a joint setting, a subject that tends to be one of the most debated in the GCC and Europe after the global financial crisis. It also explores the impact of joint auditor choice and tenure on corporate practices of companies operating in a secretive environment (Kamla & Roberts, 2010), where publicly available information is often limited and is not always easily accessible.

The structure of the paper is as follows. The next section addresses the background and develops the hypotheses. Section 3 describes the research design, data sources and sample selection. Empirical results and analysis are reported in section 4. Section 5 concludes the paper.

BACKGROUND AND HYPOTHESES DEVELOPMENT

Auditing in Kuwait

Article 161 of year 1994 requires all Kuwaiti public firms to have two audit firms acting as a joint auditor[9]. The regulation, however, does not apply to non-Kuwaiti firms listed on the KSE or to IPOs. Unlike France, Kuwait

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9 On January 8th, 1994, Law No. 51 of year 1994 added a paragraph to article No. 161 of Commercial Companies Law No. 15 of the year 1960, which requires KSE-listed companies to have two external auditors from two separate audit firms.

has no legislation that regulates the allocation of working hours between both auditors. The law also does not require public traded companies to have two Big 4 auditors and specifies no time limit for auditor rotation. Auditors are selected by shareholders during the annual meeting of shareholders. Audit and non-audit fees are set by the board of directors and not disclosed in the company's annual report.

To practice auditing, external auditors must be licensed by the Ministry of Commerce. All public companies must submit audited financial statements within a period of three months of the company's year end to the ministry of commerce, KSE and the general meetings of stakeholders. In addition to the annual audited financial statements, public traded companies must submit reviewed interim financial statements on quarterly basis to the above-named authorities. The financial statements of KSE-listed firms are prepared according to the International Financial Reporting Standards (IFRS), and audited in conformity with the International Standards on Auditing (ISA). Besides the IFRS and ISA, independent external auditors are jointly required to form an opinion on the company's compliance by applying the Companies Law in Kuwait, the Ministerial Resolutions and Instructions and the Resolutions and Instruction issued by the Central Bank of Kuwait and the Capital Markets Authority. The independent auditor's report must have the signature of the two auditors, which makes them jointly liable for the given opinion.

Structure of Joint Audit

In their theoretical paper, Deng, Lu, Simunic and Yee (2014) compare the audit quality between joint audit and single audit. They argue that the total evidence precision achieved by two big audit firms (*BB*) in a joint audit setting is the same as that achieved by one big audit firm (*B*) in a single audit setting due to the advantage of similar technological efficiency. Also, each big audit firm bears one half of the misstatement costs. In a joint audit setting therefore, each big auditor exerts an equal share of the effort that would have been exerted by one big auditor in a single audit setting.

On the other hand, the total evidence precision achieved jointly by one big auditor and small auditor (*BS*) is less than the total evidence precision achieved solely by one big auditor (*B*). This is because big auditors have

the advantage in auditing technology which makes their marginal costs of evidence precision lower than those of small auditors. In addition, the choice of *BS* pair may lead to a potential "free-rider dilemma", where small auditors depend on the efforts of big auditors. Small audit firms lack the required and sufficient resources to conduct a proper audit for complex and internationalized clients, leaving a significant audit portion to big audit firms (Ratzinger, Audousset, Kettunen & Lesage, 2012). Also, in a joint audit setting, big auditors bear lager proportion of litigation risk and reputation loss costs than small auditors (Deng, Lu, Simunic & Yee, 2014).

However, it is not enough to have no differences in technological efficiency between the two big auditors. Cooperation should shape the relationship between the two big auditors in a joint audit setting. In a cooperative structure, the goal is shared equally between the two auditors. A cooperative team structure can establish and enhance the means of communication, thereby increasing the team productivity (Tjosvold & Jonhson, 2000), especially in tasks where coordination is required (Stanne & Johnson, 1999). Cooperation between the two big auditors should fasten issue resolution, shorten examination procedures, find more streamlined facts, and follow more effective compliance. In a cooperative scheme, further areas of collaboration can be identified and improved and various audit methodologies and analyses can be recognized and learned. Moreover, efficient and effective results can be accomplished if a proper planning is set and well-defined processes are followed.

Conversely, a joint venture between direct competitors is likely to be unsuccessful (Park & Russo, 1996). In a competitive structure setting, the two big auditors strive against each other for a goal that each auditor hopes to achieve solely. Less communication and insufficient information exchange may result due to the difficulty of the two competitive auditors to closely work with each other during the audit conduct (Zerni, Haapamäki, Järvinen & Niemi, 2012). Therefore, weak coordination, task conflicts, and poor performance are more likely to occur between the two big auditors. Based on a sample of 89 Big 4 audit and consulting teams, Gardner (2010) shows that collective performance is poor when several team members perceive themselves as leaders.

The Effect of Auditor Pair Choice on Corporate Behavior

As noted earlier, corporate behavior is important because of its effect on the firm value. This effect is more obvious in countries with insufficient regulations and cultural constraints to monitor corporate actions (Black, 2001). Evidence in Black (2001) shows a positive link between corporate behavior and corporate value for a small sample of Russian companies. Black, Jang and Kim (2006) report that the market value of the Korean public firms are increasing with greater corporate behavior. Dowell, Hart and Yeung (2000) claim that the capital market places a lesser value on companies with no or little strict employment to global governance standards. In Klapper and Love (2002), investment risk is higher in inefficient corporate structures and weak legal infrastructure.

In Kuwait where no specific and clear regulations addressing on corporate behavior, investors may place heavy weight on variations in the corporate behavior of public companies to make their investment decisions. Therefore, it is in the best interest of these companies to improve their corporate behavior. Audits are one way to improve and enhance the behavior of companies. If Big 4 auditors are perceived to produce high quality audits, it seems reasonable to argue that two Big 4 auditors provide higher quality audits than a Big 4 auditor paired with another non-Big 4 auditor, and/or than two non-Big 4 auditors. Francis, Richard, and Vanstraelen (2009) show that companies hiring two Big 4 auditors exhibit smaller income-increasing abnormal accruals than those hiring one Big 4 auditor, paired with non-Big 4 auditor, and then those hiring non-Big 4 pairs. Zerni, Haapamäki, Järvinen and Niemi (2012) also examine the effects of joint audit on audit quality for a sample of Swedish public and private companies listed between 2000 and 2006. They find that companies with two Big 4 auditors enjoy lower abnormal accruals, higher level of earnings conservatism, better credit ratings, and lower chance of insolvency risk within the next year. Alanezi and Alfaraih (2012) use a sample of 163 firms listed on the KSE in 2006 to test whether the level of compliance with the *IFRS*-required disclosures among these companies vary with the choice of auditor pair. They show that companies audited by two Big 4 auditors comply more with the *IFRS*-required disclosures than those audited by a Big 4 and non-Big 4 auditor pair, and obviously than two non-Big 4 auditors.

Therefore, if larger auditors produce greater quality audits, as indicated by prior literature, and *if* cooperation shapes the structure of the joint audit team, where better coordination and greater communication are expected, the role of a *BB* auditor pair should lend more confidence and higher credibility to a company's behavior. [10]

On the other hand, if the joint audit group is structured competitively, where weaker coordination and poorer performance are likely to occur between the two distinct auditors, then the role of a *BB* auditor pair may inversely or have no impact on corporate behavior. This result would be consistent with Lobo, Paugam, Zang and Casta (2014), who find companies audited by a *BB* pair to be less likely to report an impairment, and report a smaller impairment when signs of low performance indicate greater impairment likelihood. They also show that a *BB* pair are more likely to reduce impairment disclosures when they report impairment. In addition, Marmousez (2009) reports that conditional conservatism, measured by Basu's asymmetric timeliness proxy, is absent for *BB* pair's clients.

Given the above-competing theories and discussion on opposing views and evidence on the role of *BB* auditor pair, the first hypothesis is presented in null form with no direction:

H₁: Companies audited by a *BB* auditor pair do not differ in corporate behavior than companies audited by a *BS* (or *SS*) auditor pair.

The Effect of Joint Auditor Tenure on Corporate Behavior

The association between auditor tenure and audit quality is controversial and still unresolved. Proponents of mandatory rotation of auditors claim that longer client-audit firm relation lead to impaired independence, reduced objectivity and increased complacency. On the other hand, the opponents argue that auditor tenure should lead to higher quality audit as auditors become familiar with the client's business activities, internal control and reporting matters.

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10 Cooperation may also shape the work of *BS* auditor pair as well as *SS* auditor pair. However, two issues may rise. First, the level of quality audit produced by each pair is more likely to be lower than that produced by the *BB* auditor pair. Second, the free-rider problem is likely in a *BS* auditor pair setting, where the non-Big 4 auditor lacks the experience, expertise, and required resources.

Many studies show a positive relation between the auditor tenure and audit quality. For instance, Carcello and Nagy (2004) conclude that the incidence of fraudulent reporting is lower in tenure, and Ghosh and Menon (2005) show that ERCs are higher in tenure. Myers, Myers and Omer (2003) report that longer client-auditor relation reduces absolute discretionary and current accruals. In Mansi, Maxwell and Miller (2004), auditor tenure has a negative impact on cost of debt. Libby and Frederick (1990) show that experienced auditors have better understanding of accounting errors and lower rates of error frequency.

However, Myers, Myers, Palmrose and Scholz (2005) show that income-increasing misstatements is more likely to occur in a longer client-auditor relation. In Chi and Huang (2005), audit quality declines as auditor tenure exceeds 5 years. Carey and Simnett (2006) show that longer client-auditor relationship leads to lower tendency to issue a going-concern opinion and just beating (missing) earnings targets. Moreover, evidence of Dao, Mishra and Raghunandan (2008) suggests that shareholders view longer auditor tenure as an impairment to audit quality. Others show that the bid-ask spread (a proxy of information asymmetry) has a U-shaped association with auditor tenure (e.g. Almutairi, Dunn & Skantz, 2009).

Like in a single audit setting, the effect of auditor tenure on audit quality in a joint audit scheme suggests mixed views. In a joint audit setting, the disruption caused by auditor rotation is minimized since it allows for individual auditor rotation while retaining firm-specific knowledge (Ittonen & Tronnes, 2015). In addition, the individual auditor rotation is more likely to minimize collusion among the three parties (i.e. auditor one, auditor two, and managers). Also, the impact of long tenure on auditor independence and objectivity is likely to be lower since audit and consulting fees will be proportionally distributed between two different auditors. Moreover, both auditors jointly can resist any pressure from managers and large shareholders to form a favorable audit opinion (Zerni, Haapamäki, Järvinen & Niemi, 2012). Lastly, because it is too costly to bribe two different auditors (e.g. Big 4/Big 4 or Big 4/non-Big 4), long client-auditor relationship is less likely to lower the likelihood of auditors' truthful reporting.

On the other hand, long auditor tenure in a joint audit may inversely affect the audit quality. Deng, Lu, Simunic and Yee (2012) claim that joint

audit compromises auditor independence, leading to higher level of earnings management. They explain that a client company has an opportunity of internal opinion shopping from its two auditors.

Thus, if auditor tenure maintains audit quality, it should have a positive influence on the corporate behavior level. Corporate behavior may improve and get better over time as both auditors watch closely the corporate practices and verify the credibility of information produced by these practices. Conversely, if joint auditor tenure impairs audit quality, then auditor tenure should have a negative or no effect of the level of corporate behavior. Over years, both auditors get familiarized with their client's practices and gradually see these practices as a routine. Consequently, the auditors' objectivity and professional skepticism of information resulted from these practices are more likely to be minimized. Based on the above opposite views and mixed-evidence shaping the association between auditor tenure and audit quality, the second hypothesis is stated in null form with no direction:

H$_2$: There is no relationship between corporate behavior and joint audit firm tenure.

RESEARCH DESIGN

Variables and Models

To measure the corporate behavior, this paper uses a corporate scoring measure, known as *BASIK*, developed by the National Investor (*TNI*) and the Institute for Corporate Governance (*Hawkamah*). It measures 43 parameters across three dimensions: trading history, communication, and disclosure, and it assesses liquidity, volatility and transparency of public companies[11].

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11 While *BASIK* components are equally weighted, each (trading history, corporate communication and disclosure) has a different number of parameters. *Trading history* consists of nine parameters (stock volatility, market volatility, trading history, trading frequency, average daily turnover, bid/ask spread, number of shareholders, possibility of foreign ownership and proportion of foreign ownership). *Corporate communication* also contains nine parameters: history of publicly available accounts, availability of a corporate website, availability of the recent annual report on the corporate website, availability of investor relations contact details, pre-announcements of the results publication dates, holding of analyst meetings and conference calls, AGM pre-announcement dates, AGM's notice period in days, and EPS computation. As for the *disclosure* dimension, it contains twenty-five parameters. These parameters are number of shareholders, whether or not foreign ownership allowed, percentage of foreign ownership allowed, annual reports in English, disclosure typed, disclosures in non-alterable format, complete interim results disclosures, and eighteen annual report items (e.g., management and chairmen report, summary of operations, board sub-committees, governance policies…etc.),

BASIK is a number between zero and ten, where a higher score indicates a better corporate behavior. In other words, companies with higher *BASIK* number are higher in liquidity, greater in transparency and lower in volatility.

BB, *BS* and *JTENURE* indicate the independent variables, which are the main interest of this paper. *BB* represents an indicator variable that is equal to one if the clients' two auditors are Big 4, and zero otherwise. *BS* is also an indicator variable equals to one if a client is audited by one Big 4 audit firm and one non-Big 4 audit firm, and zero otherwise. *JTENURE* is the average consecutive number of years of the joint auditor pair-client relationship.

This paper also controls some variables that may have an impact on corporate behavior. To capture the effect of the first year engagement of both auditors, the author includes *JCHANGE*, which is an indicator variable that is equal to one if the tenure of auditor one and auditor two is equal to one, and zero otherwise. *SIZE* is the natural logarithm of market capitalization, and is included because larger companies are more likely to have better corporate behavior than smaller companies.[12] *LEVERAGE* is the total assets scaled by the total liabilities. Because they are watched closely by the creditors, highly levered companies are more likely to show better behavior. *ROA* is the company's annual net income deflated by total assets, a measure of performance. Better performing companies are more likely to exert better behavior. *AGE*, company age, is the number of operating years since the foundation year of the company. Companies are expected to have greater corporate behavior, as they get older. This variable is included to control the positive link between audit firm tenure and firm age (Myers, Myers & Omer, 2003; Carcello & Nagy, 2004; Ghosh & Moon, 2005). To capture the effect of variation in years and industry sectors, *YEAR* and *INDUSTRY* are included in the regression models. *YEAR* is a binary value that is equal to one if the year is 2008, and zero otherwise. *INDUSTRY* is five binary numbers that represent the six KSE industry sectors (see Table 1 for variables definition).

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12 Measuring *SIZE* as the natural logarithm of market capitalization does not change the reported results.

Table 1: Variables Definition

Dependent Variables:		
BASIK	=	A number between zero and ten, where a higher score represents better corporate governance behavior.
TRADING HISTORY	=	An evaluation measure of volatility, length of trading history, liquidity and shareholding structure on a scale between zero and ten.
COMM	=	Corporate communication measures the extent to which a company communicates with its shareholders and the broader market on a scale between zero and ten.
DISCLOSURE	=	Corporate disclosure evaluates access to, and quality of, public corporate information on a scale between zero and ten.
Independent Variables:		
BB	=	An indicator variable that is equal to one if both of the company's auditors are Big4, and equal to zero otherwise.
BS	=	An indicator variable that is equal to one if one of the company's auditors is a Big4, and equal to zero otherwise.
JTENURE	=	The average consecutive number of years of joint auditors-client relationship.
SHORT	=	A binary variable that is equal to one if the tenure of the joint auditor pair is ≥ 2 years and ≤ 3 years, and zero otherwise.
MEDIUM	=	A binary variable that is equal to one if the tenure of the joint audit auditor pair is ≥ 4 years and ≤ 5 years, and zero otherwise.
LONG	=	A binary variable that is equal to one if the tenure of the joint auditor pair is ≥ 6 years, and zero otherwise.
Control Variables:		
JCHANGE	=	A binary equal to one if the tenure of auditor one and auditor two is equal to one, and zero otherwise.
SIZE	=	The natural logarithm of total assets.
LEVERAGE	=	The total liabilities scaled by the total assets.
ROA	=	Annual net income deflated by the total assets.
AGE	=	The number of years since the foundation year of the company.
YEAR	=	A binary variable that is equal to one if the year is 2008, and zero otherwise.
INDUSTRY	=	Four binary variables that represent the five market industries.

Therefore, to test the impact of the choice of the joint auditor pair and the tenure of joint auditor pair on corporate behavior, the following *Tobit* regression model is presented:[13]

$$BASIK = \mu_0 + \mu_1 BB + \mu_2 BS + \mu_3 JTENURE + \mu_4 JCHNAGE + \mu_5 SIZE + \mu_6 LEVERAGE + \mu_7 ROA + \mu_8 AGE + \mu_9 YEAR + \mu_{10\text{-}14} INDUSTRY + e \tag{1}$$

As mentioned in footnote 8, because *BASIK* is based on three equally weighted categories (trading history, communication, and disclosure), each category consists of a different number of parameters. This means that these categories are unequally weighted. Therefore, the author examines whether the choice of joint auditor pair and joint auditor tenure vary across each *BASIK*'s category.

$$TRADING\ HISTORY = \theta_0 + \theta_1 BB + \theta_2 BS + \theta_3 JTENURE + \theta_4 JCHNAGE + \theta_5 SIZE + \theta_6 LEVERAGE + \theta_7 ROA + \theta_8 AGE + \theta_{10} YEAR + \theta_{10\text{-}14} INDUSTRY + \bar{e}. \tag{2}$$

$$COMM. = \alpha_0 + \alpha_1 BB + \alpha_2 BS + \alpha_3 JTENURE + \alpha_4 JCHNAGE + \alpha_5 SIZE + \alpha_6 LEVERAGE + \alpha_7 ROA + \alpha_8 AGE + \alpha_9 YEAR + \alpha_{10\text{-}14} INDUSTRY + \tag{3}$$

$$DISCLOSURE = \beta_0 + \beta_1 BB + \beta_2 BS + \beta_3 JTENURE + \beta_4 JCHNAGE + \beta_5 SIZE + \beta_6 LEVERAGE + \beta_7 ROA + \beta_8 AGE + \beta_9 YEAR + \beta_{10\text{-}14} INDUSTRY + e. \tag{4}$$

Similar to *BASIK*, the dependent variables: *TRADING HISTORY*, *COMM* and *DISCLOSURE* are all a scale from zero to ten.[14]

Data Sources and Sample Selection

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13 The author uses Tobit regression models because the dependent variables in all equations are between 0 and 10.

14 Following prior literature (e.g., Almutairi, Dunn and Skantz, 2009; Carcello and Nagy, 2004), the author uses binary variables to proxy for auditor tenure. The second and third year of the joint auditor-client relation is classified as *SHORT* (i.e., $2 \leq tenure \leq 3$), and tenure more than five years as *LONG* (i.e., $tenure \geq 6$). Medium tenure (i.e., $4 \leq tenure \leq 5$) is set as a benchmark group in all regression models employing binary variables for tenure.

Data on audit firms are obtained from the KSE's department of public companies. The department of public companies started collecting the data on auditors since 2000. Table 2 panel-A shows that most KSE-listed companies employ one Big 4 and one non-Big 4 (i.e. *BS*). Panel-B of the same table indicates that 20.5 percent of the companies listed during the period 2000-2010 hire two Big 4 audit firms. During the sample period, approximately 83 percent of the public companies employ one Big 4 and one non-Big 4 audit firms, and about 17 percent of listed companies employ two non-Big 4 auditors. This suggests that the vast majority of KSE-listed companies tend to have higher audit quality provided by at least one of the Big 4 auditors. Panel-B also indicates that tenures of auditor one and auditor two are about 3.7 years and 3.4 years, respectively. On average, 26 (29) percent of the listed companies hire new first (second) auditor. Companies tend to replace their second auditor more than their first auditor by 3 percent. About 23 percent of the public companies maintain their first auditor for more than five years, while 20 percent of listed companies keep their second auditor for the same number of years of audit engagement.

Table 2: Data Sources

Panel-A: Frequency of Joint Auditor Pairs by Year				
YEAR	**BB**	**BS**	**SS**	**TOTAL**
2000	21	30	7	58
2001	23	49	8	80
2002	24	55	9	88
2003	23	50	7	80
2004	28	71	17	116
2005	31	91	24	146
2006	28	104	24	156
2007	27	108	26	161
2008	28	106	35	169
2009	29	105	38	169
2010	26	103	38	167

Panel-B: Descriptive Statistics For Joint Auditor Pair For The Period 2000-2010					
Variable	**N**	**Mean**	**Std Dev**	**Min**	**Max**
Tenure of auditor one	1390	3.681	2.629	1	11
Change of auditor one	1390	0.260	0.439	0	1
Short tenure of auditor one	1390	0.315	0.465	0	1
Medium tenure of auditor one	1390	0.192	0.394	0	1
Long tenure of auditor one	1390	0.232	0.422	0	1
Tenure of auditor two	1390	3.445	2.529	1	11
Change of auditor two	1390	0.290	0.454	0	1
Short tenure of auditor two	1390	0.321	0.467	0	1
Medium tenure of auditor two	1390	0.191	0.393	0	1
Long tenure of auditor two	1390	0.199	0.399	0	1
Big4 & Big4 auditors	1390	0.205	0.404	0	1
Big4 & non-Big4 auditors	1390	0.832	0.374	0	1
Non-Big4 & non-Big4 auditors	1390	0.168	0.374	0	1

Two data files are obtained through *TNI* public website, which contain score numbers on *BASIK* and its three parameters for all *GCC* publicly traded companies for the period of 2008 to 2009. Financial data is retrieved from *Reuters* database. The study sample is restricted to Kuwaiti public traded companies in the KSE for three reasons. First, all Kuwaiti KSE-listed companies are required to be audited by two auditors. This requirement, however, is imposed partially on certain industries in the other GCC exchange markets (e.g. banking sector in Saudi Arabia). Second, not all GCC public traded companies follow the international financial reporting standards (*IFRS*), which makes comparison difficult for results interpretation. Lastly, financial data and audit firm information are not available for the other *GCC* public companies.

Table 3: Sample Selection

Number of firms in the BASIK file	186
Number of firms after deleting those with missing financial data	183
Number of firms after deleting those with missing auditor data	175
Number of firms after deleting IPOs, redundant, banks, insurance and non-Kuwaiti firms	120
Number of firms after deleting those with outliers	110

Table 3 shows the sample selection procedure. After excluding other *GCC* firms from the *BASIK* files, the author ended up with 186 companies listed on the KSE market. Three companies with missing financial data and 8 companies with missing audit firms' information are excluded. Also, 55 companies are dropped from the sample because they either first-year IPOs, banks or non-Kuwaiti firms. To minimize the effect of the outliers, the top and bottom of one percent of continuous variables are winsorized. In total, there are 208 firm-year observations from 110 unique companies for the period of 2008 to 2009.

EMPIRICAL RESULTS AND ANALYSIS

Descriptive Statistics

Table 4 shows the descriptive statistics of the variables used in the regression models. The mean of *BASIK* is 2.73, indicating that KSE-listed companies, on average, have poor corporate behavior. The mean numbers of *TRADING HISTROY*, *COMM* and *DISCLOSURE* is 5.53, 2.21 and 2.13, respectively. While these public companies exhibit relatively higher level of trading history, they have weak communication with their shareholders and the market, and poor quality disclosure. This could explain that the poor behavior of KSE public companies, as indicated by *BASIK*, could be due to the weaker corporate communication and poorer disclosure transparency of KSE-listed companies. About 12 percent of the company-year observations are associated with a *BB* pair, and about 80 percent (20 percent) are associated with a *BS* pair (*SS* pair).[15] Jointly and individually, the auditors have about five years of audit engagement with the client. More

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15 The accounting literature shows audit fees of the Big 4 auditors are higher than those of non-Big 4 auditors. Therefore, hiring two Big 4 auditors is likely to be costlier.

specifically, on average, 18 percent of the company-year observations have a joint auditor-client relationship of two to three years (*SHORT*), 15 percent have a joint-auditor-client relationship of four to five years (*MEDIUM*), and 27 percent have a joint auditor-client relationship of six years or longer (*LONG*). Approximately, 13 (16) percent of company-year observations represent joint (single) auditors in their first year with a client.

Table 4: Descriptive Statistics for the Sample Period 2008-2009

Variable	N	Mean	Median	Min	Max	Std. Dev.
BASIK	208	2.727	2.040	1.320	5.030	1.144
TRADING HISTORY	208	5.533	5.480	3.910	7.740	0.797
COMM.	208	2.207	1.330	0.000	5.560	1.639
DISCLOSURE	208	2.138	1.280	0.900	4.620	1.291
Big4 & Big4 auditors	208	0.120	0.000	0.000	1.000	0.326
Big4 & non-Big4 auditors	208	0.803	1.000	0.000	1.000	0.399
Non-Big4 & non-Big4 auditors	208	0.197	0.000	0.000	1.000	0.399
Average tenure of joint auditor pair	208	4.788	4.500	1.000	10.000	2.657
Tenure of auditor one	208	4.875	4.000	1.000	10.000	2.897
Tenure of auditor two	208	4.702	4.000	1.000	10.000	2.790
Short tenure of joint auditor pair	208	0.178	0.000	0.000	1.000	0.383
Short tenure of auditor one	208	0.264	0.000	0.000	1.000	0.442
Short tenure of auditor two	208	0.226	0.000	0.000	1.000	0.419
Medium tenure of joint auditor pair	208	0.149	0.000	0.000	1.000	0.357
Medium tenure of auditor one	208	0.207	0.000	0.000	1.000	0.406
Medium tenure of auditor two	208	0.279	0.000	0.000	1.000	0.450
Long tenure of joint auditor pair	208	0.274	0.000	0.000	1.000	0.447
Long tenure of auditor one	208	0.389	0.000	0.000	1.000	0.489
Long tenure of auditor two	208	0.341	0.000	0.000	1.000	0.475
Change of joint auditor pair	208	0.130	0.000	0.000	1.000	0.337
Change of single auditor	208	0.163	0.000	0.000	1.000	0.371
Total assets (KWD Millions)	208	175.318	89.742	5.198	1784.173	262.637
Firm leverage	208	0.477	0.481	0.012	0.939	0.230
Return on Assets	208	-0.009	0.011	-0.307	0.195	0.089
Firm age	208	22.798	25.000	4.000	49.000	12.125
Year	208	2008.5	2009	2008	2009	0.50
Sector	208	4.36	5.00	2.00	7.00	1.62

The mean (median) total assets of the companies in the sample is about KWD 175 (90) million, with the 25th (75th) percentile equal to 36.2 million (219 KWD million). Thus, the sample includes a wide range of company sizes. On average, company leverage (*LEVERAGE*) and performance (*ROA*) of the company-year observations are about 48 percent and -1 percent. Last, approximately, the age of the companies in the sample ranges between 4 and 49 years with an average business life of 23 years.

Table 5 shows a *t*-test analysis between the clients of *BB* and those of *BS/SS*. Results indicate that clients of *BB* have better corporate behavior than clients of *BS and SS*, as indicated by *BASIK*. The results are consistent across all the three categories of *BASIK*. The *BB* auditor pair-client relationship is about the same as of the *BS* (*SS*) pair-client relationship. The clients of the *BB* auditor pair seem to be larger and older than clients of other joint auditor pairs. Lastly, the companies audited by the *BB* pair slightly outperform those audited by either *BS* or *SS* auditors.

Table 5: Comparison between Clients of BB and BS/SS

VARIABLE	*BB*		*BB/SS*		Difference in Mean	*t*-V	*p*-V
	N	Mean	N	Mean			
BASIK	25	3.812	183	2.579	-1.233	-5.730	<.0001
TRADING HISTORY	25	6.129	183	5.452	-0.677	-3.940	0.001
COMM.	25	3.634	183	2.012	-1.621	-5.510	<.0001
DISCLOSURE	25	3.267	183	1.984	-1.283	-5.270	<.0001
JTENURE	25	4.180	183	4.872	0.692	1.110	0.275
SHORT	25	0.200	183	0.175	-0.025	-0.290	0.773
MEDIUM	25	0.080	183	0.159	0.079	1.270	0.211
LONG	25	0.360	183	0.262	-0.098	-0.950	0.352
JCHANGE	25	0.240	183	0.115	-0.125	-1.390	0.177
SIZE	25	19.46	183	18.097	-1.365	-7.650	<.0001
LEVERAGE	25	0.509	183	0.472	-0.037	-0.830	0.411
ROA	25	0.019	183	-0.013	-0.032	-1.870	0.071
AGE	25	31.00	183	21.678	-9.322	-3.540	0.001

The results of Pearson correlation coefficients are reported in Table 6. *BASIK* has a strong association with its first parameter (*TRADING HISTROY*, corr. = 0.47), but stronger association with the second parameter (*COMM*, corr. = 0.94) and the third parameter (*DISCLOSURE*, corr. = 0.98). Moreover, evidence indicates that *BASIK* is positively related to the choice of joint auditor pair, and this relationship is more pronounced for clients of the *BB* pair. In addition, the three categories of *BASIK* are more significantly related to the choice of *BB* pair than to the choice of *BS* pair. This preliminary evidence suggests that there is a positive association between corporate behavior and the choice of joint auditor, and this association is more pronounced for clients of *BB* auditor pair.

Table 6 also shows that in the first year of joint auditor engagement (*JCHANGE*), joint audit tenure is not related to *BASIK*. It is, however, positively correlated with the trading history parameter (*TRADING HISTORY*). In addition, the same table indicates a strong positive relationship between joint auditor tenure, measured in a continuous form, (*JTENURE*) and *BASIK*. Across the *BASIK* categories, however, *JTENURE* has a positive impact on *COMM* and *DISCLOSURE* only. Measuring joint tenure in a dichotomous form, a short time period of audit engagement (*SHORT*) is not associated either with *BASIK* or with the three practices of the corporate behavior. However, the correlation between joint auditor tenure and corporate behavior shows a significant decline in the fourth and fifth years (i.e., *MEDIUM*) of an engagement and a subsequent reversal of that decline in the sixth year and above (*LONG*). This trend also seems consistent across the three components of *BASIK*. These preliminary results may suggest that the market perceive a lower probability of corporate behavior in early years of joint auditor engagement and this perception changes later in the joint auditors' tenure. Early in the auditors' tenure, auditors are unfamiliar with the companies' business operations and lack of knowledge of their clients' industry, which may cause delay in information delivery to the market (Habib & Bhuiyan, 2011) and lead to information inefficiency (Lee, Mande & Son, 2009). In later years of joint auditor-client relationship, however, auditors become more effectively as they become more familiar with their clients' operations and industry (Lee, Mande & Son, 2009).

Moreover, *SIZE* and *LEVERAGE* are statistically and positively correlated with *BASIK*, *TRADING HISTORY*, *COMM* and *DISCLOSURE*.

Larger companies and higher leveraged companies tend to behave better in terms of corporate behavior than their encounters. The *ROA* is negatively related to *BASIK* and *TRADING HISTORY*. Companies with lower performance exhibit lower level of corporate behavior, especially in terms of trading history. Lastly, *YEAR* is negatively correlated with *BASIK*, *COMM*, and *DISCLOSURE*. Clearly, the global financial crisis in 2008, on average, has a negative impact on the corporate behavior.

Regression Results

Table 7 exhibits the results of Tobit regression models 1 through 4. Column (a) of Table 7 shows the results of the *BASIK* regression model (e.g. equation 1). Results indicate that *BB* has a significant and positive association with *BASIK* (*p*-value <0.000). On the other hand, *BS* is not related to *BASIK*. Thus, clients of *BB* tend to exert higher level of corporate behavior. The coefficient on joint auditor tenure, *JTENURE*, is positive and statistically significant (*p*-value = 0.03). This result shows that corporate behavior is greater in joint auditor tenure. *SIZE* is positively and significantly related to *BASIK* (*p*-value= <0.000). Larger firms are likely to follow better corporate behavior than smaller ones. Control variables, firm performance (*ROA, p*-value=0.019) and firm age (*AGE, p*-value= 0.027) inversely affect *BASIK*. This is different from the prior expectations. Companies with lower performance may show better corporate behavior to restore shareholders' confidence, and companies in later stages of their business cycle may encounter complexity in business, which affects their corporate behavior. *JCHANGE* and *LEVERAGE* are positive and negative, respectively, but statistically insignificant. The insignificant result of *JCHANGE* could be attributed to the insignificant correlation between *BASIK* and it is two parameters (*COMM* and *DISCLOSURE*) as shown in Table 6. *LEVERAGE* carries an opposite sign and insignificant. This is due to the collinearity with *SIZE*, as Table 6 shows a strong correlation between these two variables (corr. = 0.53, *p*-value = < 0.000). Lastly, the coefficient on *YEAR* is statistically negative, indicating the impact of the 2008 global financial crisis on the KSE-listed firms' behavior.

Columns (b), (c) and (d) of Table 7 show the results of regression models 2, 3 and 4 (i.e., *TRADING HISTORY*, *COMM* and *DISCLOSURE*). *BB* is positive and statistically significant at *p*-values less or equal to

0.001. On the other hand, *BS* is insignificant across all three components of *BASIK*. *JTENURE* is significantly and positively associated with *TRADING HISTORY*, *COMM* and *DISCLOSURE*. Results for all other control variables, except for *JCHANGE*, are in-line with those reported under the *BASIK* model.

Columns (e) through (h) of Table 7 show results of auditor tenure measured in a binary form along with other variables. *LONG* has a positive impact on *BASIK* (*p*-value = 0.03), *TRADING HISTORY* (*p*-value = 0.009), and *COMM* (*p*-value = 0.06). However, it has no impact on *DISCLOSURE* (*p*-value = 0.118). This is the evidence of improvement in the level of corporate behavior, especially in terms of trading history and communication, when joint auditor pair-client relationship exceeds five years. No indication of relationship, however, exists between *BASIK* and *SHORT*. This indicates that corporate behavior is not influenced by short auditor tenure. Results for all other independent variables (*BB* and *BS*) and control (*JCHANGE*, *SIZE*, *LEVERAGE*, *ROA*, *AGE* and *YEAR*) variables seem consistent with those reported in columns (a) through (d) of the same table.

In sum, results reported in Table 7 indicate that the choice of *BB* auditors positively affects the corporate behavior level, whilst the choice of other types of joint auditor pair has no effect on corporate behavior. That is, companies hiring two Big 4 auditors exhibit improvement in corporate behavior while companies hiring other types of joint auditor pair experience no improvement in corporate behavior. This result is consistent across all three parameters of *BASIK*. Clients of *BB* auditors are better in trading history, communication and disclosure transparency than clients of *BS* and *SS*. Therefore, the first null hypothesis (*H1)* is rejected. In other words, corporate behavior of companies audited by a *BB* auditor pair is different from that of companies audited by a *BS* auditor pair or by an *SS* auditor pair.

The results also suggest that the general behavior of public companies improves with joint auditor tenure, when measured in a continuous form. This improvement is also evident in all three practices of public companies (i.e. trading history and communication). Measuring joint auditor tenure in a dichotomous form, long auditor tenure leads to higher improvement in corporate behavior, and this improvement is evident in the client's trading

history and communication practices. Therefore, evidence on joint auditor tenure rejects the null hypothesis H_2. In other words, there is a relationship between joint auditor tenure and corporate behavior and this relationship tends to be positive.

Lastly, the first year of joint auditor-client relationship has strong and positive impact on the client's trading history practice. Clearly, when a company hires two new auditors, it possibly perceives its selection as a commitment to better evaluation of its trading patterns in terms of volatility, liquidity and shareholding structure.

Table 6: Pearson Correlation Coefficients, N = 208

	A BASIK	B TRADING HISTORY	C COMM.	D DISCLOSURE	E BB	F BS	G JTENURE	H SHORT	I MEDIUM	J LONG	K JCHANGE	L SIZE	M LEVERAGE	N ROA	O AGE	P YEAR
A	1.00	0.472 <.0001	0.943 <.0001	0.980 <.0001	0.351 <.0001	0.164 0.018	0.160 0.021	-0.097 0.163	-0.154 0.027	0.227 0.001	0.019 0.787	0.564 <.0001	0.268 <.0001	-0.133 0.056	0.056 0.419	-0.157 0.024
B			0.339 <.0001	0.338 <.0001	0.277 <.0001	0.157 0.024	0.074 0.291	-0.071 0.307	-0.134 0.054	0.185 0.008	0.158 0.023	0.503 <.0001	0.239 0.001	-0.187 0.007	0.066 0.343	0.101 0.148
C				0.898 <.0001	0.323 <.0001	0.157 0.023	0.147 0.034	-0.093 0.180	-0.152 0.028	0.211 0.002	0.003 0.962	0.519 <.0001	0.262 0.000	-0.102 0.142	0.042 0.551	-0.147 0.034
D					0.324 <.0001	0.142 0.041	0.158 0.023	-0.087 0.213	-0.131 0.059	0.204 0.003	-0.009 0.892	0.508 <.0001	0.237 0.001	-0.113 0.103	0.049 0.482	-0.193 0.005
E						0.183 0.008	-0.085 0.223	0.021 0.759	-0.072 0.304	0.071 0.307	0.121 0.081	0.353 <.0001	0.052 0.458	0.117 0.093	0.251 0.000	0.018 0.793
F							0.184 0.008	-0.086 0.219	0.004 0.957	0.115 0.099	-0.168 0.015	0.180 0.009	0.226 0.001	0.010 0.891	-0.101 0.146	0.056 0.425
G								-0.413 <.0001	-0.056 0.424	0.787 <.0001	-0.552 <.0001	0.125 0.071	0.119 0.087	-0.062 0.374	-0.001 0.987	-0.090 0.198
H									-0.195 0.005	-0.286 <.0001	-0.180 0.009	-0.093 0.182	-0.096 0.169	-0.003 0.961	0.000 0.994	0.042 0.545
I										-0.257 0.000	-0.162 0.020	-0.093 0.180	-0.003 0.966	-0.028 0.693	-0.059 0.398	0.018 0.802
J											-0.237 0.001	0.175 0.012	0.102 0.142	-0.037 0.597	0.012 0.863	-0.091 0.191
K												0.041 0.555	-0.060 0.388	-0.010 0.891	0.133 0.056	0.018 0.796
L													0.516 <.0001	-0.027 0.695	0.237 0.001	0.014 0.838
M														-0.263 0.000	0.059 0.396	0.029 0.677
N															0.000 0.996	-0.012 0.865
O																-0.014 0.836

p-values are shown in smaller font

Table 7: Multivariate Models Explaining Corporate Governance Behavior

	(a) BASIK		(b) TRADING HISTORY		(c) COMM.		(d) DISCLOSURE		(e) BASIK		(f) TRADING HISTORY		(g) COMM.		(h) DISCLOSURE	
	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value
BB	4.000	0.000	2.340	0.020	3.350	0.001	3.620	0.000	3.700	0.000	2.000	0.047	3.100	0.002	3.400	0.001
BS	0.220	0.824	1.000	0.319	0.040	0.967	0.010	0.993	0.360	0.722	1.170	0.241	0.150	0.885	0.110	0.912
JTENURE	2.190	0.030	1.960	0.051	1.850	0.067	1.750	0.082								
SHORT									-0.040	0.969	0.860	0.389	-0.040	0.968	-0.170	0.869
LONG									2.140	0.033	2.630	0.009	1.890	0.061	1.570	0.118
JCHANGE	0.890	0.373	2.970	0.003	0.890	0.374	0.280	0.782	0.170	0.862	2.930	0.004	0.320	0.751	-0.400	0.687
SIZE	6.900	0.000	6.090	0.000	5.690	0.000	5.880	0.000	6.930	0.000	6.080	0.000	5.700	0.000	5.920	0.000
LEVERAGE	-0.640	0.521	-0.750	0.455	-0.040	0.972	-0.570	0.567	-0.640	0.520	-0.690	0.494	-0.040	0.971	-0.580	0.560
ROA	-2.360	0.019	-3.280	0.001	-1.570	0.119	-1.900	0.058	-2.430	0.016	-3.280	0.001	-1.620	0.106	-1.970	0.050
AGE	-2.180	0.030	-1.840	0.067	-2.320	0.021	-1.880	0.062	-2.060	0.041	-1.750	0.081	-2.210	0.028	-1.770	0.078
YEAR	-3.050	0.003	1.670	0.096	-2.770	0.006	-3.530	0.001	-3.060	0.002	1.700	0.091	-2.770	0.006	-3.550	0.000
INDUSTRY	INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED	
Pseudo R^2	0.18		0.19		0.11		0.14		0.18		0.19		0.11		0.14	
N	208		208		208		208		208		208		208		208	

Robustness Tests

The author checks the variance-inflation factors (VIF) for the independent variables in all Tobit models to make sure that the results are not influenced by multi-collinearity. The author finds (results no tabulated) that all VIF values are less than 10. Because Neter, Kutner, Nachtsheim and Wasserman (1996) shows that multi-collinearity is not a concern for VIF values less than 10, the author does not expect the reported results to be driven by multi-collinearity. Next, the author re-runs all models after dropping out *SIZE*. Results (not tabulated) show *LEVERAGE* with a negative sign at *p*-values less than or equal to 0.001.

The author also examines the impact of the interaction of *BB* and *JTENURE* (*BB_JTENURE*), and *BS* and *JTENURE* (*BS_JTENURE*) on *BASIK* and three parameters: *TRADING HISTORY*, *COMM* and *DISCLOSURE*. The goal is to see whether the association between corporate behavior and joint auditor tenure will differ for *BB* and *BS*. Table 8 columns (a) through (d) document the effect of the interaction of joint auditor pair and joint tenure, measured in a continuous form, on corporate behavior. Evidence shows no impact of *BB_JTENURE* on *BASIK* and its three parameters.

However, the coefficient of *BS_JTENURE* carries a negative sign under the *BASIK* model, suggesting that corporate behavior is inversely influenced by the tenure of the *BS* auditor pair. As for the three categories of corporate behavior, only *DISCLOSURE* is negatively associated with *BS_JTENURE*. Similar results are reported when auditor tenure is measured in a dichotomous form (see Table 8 columns (e) through (g)). The level of disclosure transparency declines when clients have a long business relationship with a *BS* auditor pair.

Table 8: Multivariate Models Explaining Corporate Governance Behavior Using the Interaction Effects

	(a) BASIK		(b) TRADING HISTORY		(c) COMM.		(d) DISCLOSURE		(e) BASIK		(f) TRADING HISTORY		(g) COMM.		(h) DISCLOSURE	
	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value	t-Value	p-Value
BB	1.860	0.064	0.810	0.418	2.550	0.012	1.230	0.221	2.860	0.005	1.310	0.191	2.910	0.004	2.470	0.014
BS	1.650	0.101	0.140	0.885	0.110	0.909	2.270	0.024	0.450	0.654	0.780	0.433	-0.150	0.878	0.420	0.678
JTENURE	2.580	0.011	0.340	0.733	1.180	0.240	2.840	0.005								
BB × JTENURE	0.460	0.645	0.630	0.530	-0.800	0.422	0.900	0.368								
BS × JTENURE	-1.800	0.074	0.520	0.603	-0.200	0.840	-2.530	0.012								
SHORT									-0.940	0.350	0.040	0.971	-0.570	0.573	-0.990	0.324
LONG									2.290	0.023	0.990	0.326	1.080	0.284	2.360	0.019
BB × SHORT									-1.080	0.282	-0.680	0.500	-0.890	0.375	-0.890	0.372
BB × LONG									0.300	0.767	0.570	0.568	-0.840	0.402	0.530	0.595
BS × SHORT									1.300	0.194	0.600	0.551	0.770	0.441	1.270	0.205
BS × LONG									-1.610	0.108	-0.070	0.948	-0.270	0.791	-1.950	0.052
JCHANGE	1.270	0.206	2.820	0.005	0.880	0.379	0.690	0.492	0.080	0.940	2.780	0.006	0.070	0.942	-0.420	0.673
SIZE	6.950	0.000	6.120	0.000	5.660	0.000	6.180	0.000	7.120	0.000	6.120	0.000	5.760	0.000	6.110	0.000
LEVERAGE	-0.790	0.430	-0.800	0.425	0.070	0.945	-0.870	0.383	-1.090	0.278	-0.850	0.396	-0.140	0.885	-1.080	0.283
ROA	-2.230	0.027	-3.280	0.001	-1.580	0.116	-1.720	0.088	-2.480	0.014	-3.28	0.001	-1.640	0.103	-2.020	0.045
AGE	-2.370	0.019	-1.660	0.098	-2.420	0.016	-2.020	0.044	-2.210	0.029	-1.670	0.097	-2.340	0.021	-1.930	0.055
YEAR	-3.140	0.002	1.680	0.096	-2.760	0.006	-3.820	0.000	-3.230	0.001	1.580	0.116	-2.860	0.005	-3.710	0.000
INDUSTRY	INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED		INCLUDED	
Pseudo R²	0.19		0.19		0.11		0.15		0.19		0.20		0.12		0.14	
N	208		208		208		208		208		208		208		208	

CONCLUSION

In this paper, the impact of joint auditor pair and joint auditor tenure on corporate behavior is examined using a sample of companies listed on Kuwait stock exchange (KSE) during the years of 2008 to 2009. The importance of corporate behavior stems from its perceived effect on firm value (Durnev & Kim, 2005; Black, Jang & Kim, 2006). This is obvious in countries where regulations and cultural constraints are insufficient to govern corporate behavior (Black, 2001). Corporate behavior is measured based on a proxy developed by *TNI* and *Hawkamah*. This proxy, *BASIK*, is composed of three groups (trading history, communication and disclosure), where each group is based on unequal weighted parameters.

Results indicate that the choice of *BB* auditor pair positively affects the level of corporate behavior. Clients of the Big 4-Big 4 auditor pair exhibit an increase in trading history, communication and disclosure transparency. The interactions between the Big 4 auditors are possibly highly coordinated, more technological efficient and increase incentives to produce an adequate effort for Big 4 pairs. This explanation, however, seems unlikely with other auditor pairs. The choice of other auditor pairs, however, shows no effect on corporate behavior.

The results also indicate that joint auditor tenure, measured in a continuous form, has a positive and significant association with the level of corporate behavior. Measured in a dichotomous form, longer tenure is positively related to the level of corporate behavior, and this association is evident in the company's trading history and communication. In other words, joint auditor tenure has a positive effect on a company's communication and disclosure after the fifth year of the two auditors' engagement. Short client-auditor relationship (i.e. two to three years), however, has no effect on corporate behavior level. In general, therefore, a longer joint auditor-client relation improves the level of corporate behavior.

Nonetheless, results show that auditor tenure of the choice of two Big 4 auditors has no effect on the level of corporate behavior. This evidence is consistent when auditor tenure is measured in continuous and dichotomous forms. On the other hand, auditor tenure of the choice of other auditor pairs (i.e. *BS*/*SS*), tends to have a negative effect on the *DISCLOSURE*

parameter only. Once again, this result is consistent using continuous and dichotomous forms of auditor tenure. Lastly, the first year of joint auditor-client relationship has strong and positive impact on the client's trading history. When a company hires two new auditors, it possibly perceives its choice as a commitment to better evaluation of its trading patterns in terms of volatility, liquidity and shareholding structure.

The results of this paper should be useful to investors, corporations, regulators, and academics. Investors should be aware that the choice of joint auditor pair provides useful insights to the behavior of public firms, in terms of trading patterns, communication and disclosure transparency. Corporations could benefit from the choice of auditor pair in identifying the areas and activities for improvement and restructuring. In addition, stronger behavior could unlock the access to other GCC and international capital markets. Regulators should understand that investors take both the choices of auditor pair and auditor tenure into account when evaluating corporate behavior. Future researches investigating the area of corporate behavior where joint audit is regulated should be cognizant of the impact of the choice of auditor pair and joint auditor tenure on corporate behavior.

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