

BOARD COMPOSITION AND AUDIT FEE: EVIDENCE FROM RUSSIA

*Maria Prokofieva**, *Balachandran Muniandy***

Abstract

In the recent years the Russian Government has undertaken serious steps to improve corporate governance practices by introducing the Corporate Code of Governance (CCG) and strengthening the role of corporate boards to monitor top management performance. This paper investigates whether these measures have stimulated positive changes by increasing the demand for higher quality audit. We test our hypotheses using 147 non-listed companies to examine whether board composition influences audit fee in the Russian capital market. Our findings support the demand-side perspective of audit services and suggest that audit fees are associated positively with the presence of an independent chairman, higher proportion of independent directors and State representatives on the board.

Keywords: Audit fee, board of directors, corporate governance, Russia

* *Corresponding author*

Centre for Strategic Economic Studies

School of Accounting and Finance, Victoria University

PO Box 14428, Melbourne, Victoria 8001, Australia

Telephone: 61 03 9919 4039

Fax: 61 03 9919 5417

** *School of Accounting, La Trobe University, Australia*

We are grateful for the helpful comments and suggestions of John Hillier and Russell Craig.

1. Introduction

This study examines the empirical relationship between board composition and audit fees in the Russian capital market. Board composition is defined by the existence of an independent chairman on the board, the proportion of independent directors and State representatives on the board. Recent studies in audit pricing research have examined the impact of various corporate governance mechanisms on corporate reporting, audit quality and level of audit fees (Gul, 2006; Abbott et al., 2003; Tsui et al., 2001; Carcello et al., 2002; Gul and Tsui, 1998). These studies examine the relationship between audit fees and corporate governance based on the agency theory notion that the quality of reported accounting numbers is affected by the separation of ownership and control (Mitra et al., 2007). Agency theory views managers and owners as separate. Managers are regarded as having incentive to act in their own interests and to misreport financial results for opportunistic reasons (Jensen and Meckling, 1976). Prior research on the association between corporate governance and audit fees has focused primarily on developed capital

markets (e.g. USA, UK and Australia). Little research has been conducted in countries with emerging capital markets (Lifschutz et al., 2010). No such studies have been conducted in the context of the Russian capital market.

The motivation for this study is twofold. First, numerous studies examine the relationship between audit fees and corporate governance characteristics in settings where companies have freedom to determine the composition of boards of directors and the State has limited power to appoint representatives to the board. In Russia, the composition of a board of directors is strictly regulated by legislation and listing rules requirements. These set a minimum quota for independent directors on boards and prohibit CEO duality. The large proportion of State shareholding also allows the State to exercise a high degree of interference in board operations by including its representatives as outside directors. The above mentioned factors create the unique corporate governance environment, explored here.

Second, there have been limited studies exploring the relationship between corporate governance and audit fees in emerging economies

where the disclosure of audit fees is not mandatory. This study examines the association between board composition and audit fees in the context of Russian capital market.

Weak corporate governance is perceived as one of the reasons for recent corporate scandals (Bremer and Elias, 2007). Thus, it seems important to examine the association between the recent introduction of a corporate governance code in Russia and audit fees in that country. Prior studies have argued that audit fees are determined from either a supply-side or demand-side perspective. Studies by Carcello et al. (2002) and Abbott et al. (2003) produced evidence consistent with the demand-side perspective: that is, that governance mechanism requiring high-quality audits to reduce agency costs lead to higher audit fees being charged. Additionally, there is some evidence from the supply-side perspective that corporate governance mechanisms mitigate agency problems in financial reporting and reduce the risk of accounting misstatements or irregularities (e.g. Gul and Tsui, 1998; Tsui et al., 2001). In our study we use board composition to examine the relationship with audit fees from a demand-side perspective. We argue that the presence of a higher proportion of independent directors and the existence of an independent chairman on the board leads to higher demand for audit work, and that this is reflected in higher audit fees. Second, we examine whether the presence of representatives of the State on the board leads to an increase in perceived inherent risk.

The key findings are that there are positive associations between audit fees and presence of an independent chairman on the board, between audit fees and the proportion of independent directors, and between audit fees and the number of State representatives on the board. Our results reveal that having an independent chairman and higher proportion of independent directors on the board are associated with stronger corporate governance mechanisms. This requires additional assurance from auditors and is reflected in higher audit fees. Additionally, the results show that the presence of State representatives on the board lowers the level of corporate governance, increases the perceived inherent audit risk, and leads to higher audit fees.

The remainder of the study is organized as follows. In Section 2 we discuss the corporate governance environment in Russia, review the theoretical background and develop hypotheses. In Section 3 we describe the research design, sample selection and data collection. Section 4 tests the pricing model. Section 5 contains the summary and conclusion including limitations and suggestions for further research.

2. Theory and hypotheses development

Two factors influence an auditor's fee structure (Bell et al., 2001): the risk characteristics of the client and the extent of the audit work demanded by the client to obtain greater assurance about the presentation of information in the financial statements. These factors influence the extent of the audit work and the risk premium in the quoted fee (Mitra et al., 2007). An audit firm will make a fee-increasing adjustment in situations of high liability exposure (Simunic, 1980), mostly through a higher level of audit efforts than a pure price premium. Bell et al. (2001) conclude that audit fees increase as an engagement partner's assessment of business risk increases. They observe that an increase in audit fees arises due to an increase in planned audit hours, and is indicative of greater audit efforts (Mitra et al., 2007). These prior studies indicate that audit fees will be higher from the demand-side perspective when the scope of audit work increases due to client demand. Additionally, the demand-side perspective suggests a positive association between corporate governance characteristics and audit fees (e.g. Goodwin-Stewart and Kent, 2006; Abbott et al., 2003; Carcello et al., 2002). The audit fee charged by the audit firm will be higher when firms with strong corporate governance structure demand additional assurance to preserve their reputation and avoid potential litigation (Abbott et al., 2003; Carcello et al., 2002).

2.1. Russian corporate governance environment

Russia is one of the largest emerging market economies, the eleventh largest economy in the world by nominal value, and a world superpower in terms of reserves of mineral and energy resources (Kokoshin, 2002).

Drastic economic and political reforms at the beginning of 1990s put Russia on the path of radical changes in all spheres of life. One of the aims of those changes was to transform Russian enterprises (which were all State-controlled) into independent participants in the market economy. The revival of privately owned enterprises in Russia started in 1990 with approval of Regulations of the Council of Ministers of USSR (Nos 590 and 601) and the Federal Law on Enterprises and Entrepreneurial Activities those gave legal definition of companies and entrepreneurship.

The application of corporate governance practices in Russia is regulated by the Federal Law on Joint-Stock Companies (adopted in 1995) and the Corporate Code of Governance (CCG) (introduced in 2002). Originally, the CCG did not have any legal binding force but could issue recommendations. One of the positive outcomes of the CCG was the introduction of board committees

at firm-level. However, in most cases such committees were not established until late 2003 due to lack of proper enforcement mechanisms (Peng et al., 2003). Additional steps to improve application of the corporate governance regime were taken in 2006, when audit committees became a mandatory requirement for listed companies (Russian Federal Service on Financial Markets, 2002).

One of the distinctive features of corporate governance in Russia from the time of the privatization reforms in the 1990s has been insiders' control (Yakovlev, 2004). Lately, there has been growing attention to steps taken by the Russian Government to overcome it, including strengthening the role of the board to monitor top management performance.

Prior to 2004 a traditional structure of a Russian board of directors was one that includes representatives of the main shareholder and top executive management (Filatov et al., 2005). To change this, the Federal Law set requirements for the minimum number of directors on the board to depend on the number of voting shares [1]. All directors are elected for a one year term at a regular shareholder meeting. A board chairman is elected by the directors, approved at a shareholder meeting, by a simple majority. One of the distinctive characteristics of Russian boards of directors is their comparatively severe restrictions regarding managers assuming board memberships (Iwasaki, 2008). A CEO cannot serve as board chairman, and senior management cannot occupy more than one-fourth of the seats on the board.

The exact board composition at leading companies depends on the size of the company, its strategic significance to the Russian government, and the size of the State's holding of the share capital (Filatov et al., 2005). Despite the general belief that Russian corporate boards are heavily insider-dominated, nearly half of board directors come from outside companies (Iwasaki, 2008). However, not all outside directors are independent. Apart from independent directors, State representatives are also included on boards as outside directors. Additionally, in Russian practice independent directors are defined broadly; in particular, they include minority shareholders' nominees (Appendix A).

Russian laws do not require companies to have independent directors. However, the CCG mandates that boards of directors of joint-stock companies should include at least three independent directors who account for no less than one-fourth of the board membership (Appendix A). Vernikov (2007) argued that this leads to the situation in which most Russian companies appoint independent directors just to satisfy listing and law requirements or to increase the borrowing capacity of the company. Without 'independent directors' they will be unable to borrow from capital markets

at reasonable cost or to offer shares successfully to investors outside Russia.

Other outside directors on the board are representatives of the State. The majority of middle-scale and large-scale enterprises in Russia are privatized enterprises. Many of those still have some State ownership and representatives on their boards (Iwasaki, 2008). This is despite the OECD recommending that representatives of the State not be members of the board of directors in order to avoid conflicts of interest (OECD, 2002). Prior studies have shown that the State can have a direct or indirect ownership interest in an enterprise (e.g. Filatov et al., 2005). With direct State ownership it is common for large enterprises to have officers from the Presidential Administration or ministers and their deputies on boards of directors. For example, the board of directors of Inter RAO Unified Energy System of Russia, the largest company in the power generation and supply industry, is dominated by State representatives. In 2010 outside directors on their board included the deputy chairman of the Russian government, I.I. Sechin, the Minister of Energy of Russia, S.I. Shmatko; and the Head of the Federal Agency for State Property Management, Y.A. Petrov. At companies the State owns indirectly through other enterprises, the board would usually have representatives of the parent company as well as public officers to give the perception of an increased proportion of State members as directors.

2.2. Audit in Russia

Historically, the auditing functions in the former Soviet Union were conducted by the revision system which was a state-financed system of financial control put in place to ensure proper use of state resources and to prevent the misappropriation of assets at state-owned entities (Enthoven et al., 1998; McGee and Preobragenskaya, 2005). The development of the Western-style auditing started only in the late 1980s spurred on by an increase of foreign investment in the Russian economy and a growing demand for auditing in the developing private sector. However, an increase in local audit firms was not supported by the development of a regulatory base. This promoted ambiguity regarding the scope of audit services, and the roles and objectives of auditing (Samsonova, 2007), and led to an increase in fraud and corruption. At this time, big audit firms entered the Russian market and brought with them Western audit practices. The promotion of international audit rules was further supported by the expansion of supranational institutions (e.g. World Bank, WTO, OECD, etc.) and thus led to the adoption of Western practices by numerous local audit firms (Samsonova, 2009).

Currently, auditing in Russia is governed by the Federal Law on Auditing (2008). To a large degree this aligns Russian audit practice with International Standards on Auditing and reinforces mandatory audit of annual financial reports of entities of a particular public interest, including those whose securities are traded on a stock exchange. According to the Russian Department of Finance (2007), at the end of 2006 there were more than 7,000 licensed audit firms in Russia with 40% of them in Moscow. Big 4 firms controlled 31% of the market with the rest serviced by local Russian companies.

Financial reporting in Russia is governed by the Federal Law on Accounting (1996) that mandates companies prepare their annual reports in accord with Russian Accounting Standards. However, the Russian Federal Service for Financial Markets imposes an additional requirement for listed companies: that is to disclose their financial information according to either IFRS or US GAAP. In the meantime, the disclosure of audit-related information is regulated only to a certain extent. For example, disclosure of audit fees is not mandatory for Russian companies. Additionally, neither IFRS nor US GAAP prescribes the disclosure of audit fees directly. Thus, the additional requirement of compliance with IFRS/US GAAP does not require companies to disclose audit fee information. In other countries such disclosure is regulated by local versions of accounting standards (e.g. AASB101 in Australia) or Federal law (e.g. Sarbanes-Oxley Act in USA). However, such disclosure in Russia is voluntary. Thus, the interest of this study is primarily to investigate the relationship between board composition and audit fee in the context of voluntary disclosure of audit-related information.

2.3. Board composition

Board composition in this study is proxied by the existence of an independent chairman on the board, the proportion of independent directors on the board, and the proportion of State representatives on the board. Under agency theory, the board of directors is an important and feasible element of effective corporate control. A critical function of the board of directors is to monitor managers' performance (Fama, 1980; Fama and Jensen, 1983). Monitoring safeguards the investments of shareholders and protects the interests of various stakeholders against management's self-interest.

Numerous studies have investigated those characteristics that enable boards to increase their efficiency and firm performance (e.g. Baysinger and Butler, 1985; Rechner and Dalton, 1991; Finkelstein and D'Averi, 1994; Rediker and Seth, 1995). The results of these previous studies are

mixed, however. Most list independent directors and dual leadership as important factors.

The role of independent directors on the board is to provide the objectivity necessary to properly ratify and monitor decisions of the firm's managers. The importance of effective board composition has been discussed extensively in the literature. Fama and Jensen (1983) found that independent directors are more efficient in facilitating the governance functions of the board. Beasley (1996) showed that the proportion of independent directors on the board is significantly and negatively associated with financial statement fraud. O'Sullivan (2000) investigated the relationship between audit fees and board independence for a sample of UK listed companies and found that having a greater proportion of independent directors is associated with more expensive audits.

The Cadbury Committee Report (1992) and the OECD Guidelines on Corporate Governance (2004) emphasized the role of non-executive directors who should bring a broader view to the company's activities and greater independence and objectivity to board decisions, and the importance of an independent chairman. The role of the chairman is to monitor and evaluate the performance of the CEO and executive directors on the board. However, this process might be impeded when the same person occupies the position of chairman and CEO.

The importance of having an independent chairman and threats of CEO duality were also discussed by Jensen (1993). He argued that corporate officers who report to the CEO cannot be effective in monitoring and evaluating CEO performance. Furthermore, Pi and Timme (1993) found that firms with separated functions outperform firms where CEO duality exists.

Russian Corporate Law "On Joint Stock Companies" follows best corporate governance practice by prohibiting a CEO from holding the position of chairman. However, it is common for boards of directors in Russia to have an executive director as a chairman, leading to chairman duality. The presence of independent directors on the board increases demand for quality audit services from the external auditor (Lifschutz et al., 2010) so as to give additional assurance and confidence to shareholders. Hence, this will result in higher audit fees as the scope of audit work increases. Based on the preceding discussion, we propose the following hypotheses:

H1: Audit fees are associated positively with the proportion of independent directors on the board.

H2: The presence of an independent chairman on the board has a positive association with audit fees.

Prior studies have used the presence of State representatives on the board as one of the proxies for political connections of the firm (Gul, 2006). Firms in countries with more State involvement in the economy are perceived to speed the recognition of good news and to slow the recognition of bad news in earnings of firms in countries with less political involvement in the economy (Bushman and Piotroski, 2006). Politically connected firms are believed to be associated with higher inherent risk, resulting in an increase in the scope of audit work and higher audit fees. Prior studies have found that there is positive association between audit fees and politically connected firms (Gul, 2006). This leads us to the following:

H3: There is a positive association between the proportion of representatives of the State on the board and audit fees.

3. Research design

3.1. Sample

Our sample is comprised of the top 147 non-finance companies listed on Russian Trading System (RTS) stock exchange who disclose the information regarding their audit fees. As Table 1 shows, our sample includes companies from a wide cross-section of industries.

Table 1. Industry representation of companies in the sample

Industries	%
Mining and exploration	4%
Engineering	4%
Metallurgy	4%
Development	5%
Energy	7%
Oil and gas	20%
Chemical	4%
Food	5%
Telco	11%
Transport and logistics	14%
Retail	13%
Other	10%

In accordance with the Federal Law on Joint Stock Companies, companies need to prepare annual reports and have them audited. Listed companies are also required to comply with the requirements of the CCG (Appendix B) and disclose their financial information according to either IFRS or US GAAP. For the purpose of consistency, we use financial reports prepared according to IFRS/US GAAP in our study.

3.2. Variables

3.2.1. Dependent variable

We use an OLS regression model to estimate the predictive importance of the independent variables by comparing beta weights. The audit fee model is evaluated using 2008 fiscal-year data. Year 2008 is chosen as it reflects a relatively stable application of the CCG introduced in 2002 and changes in the listing rules of Russian stock exchanges in 2006 that are related to the composition of boards of directors (RTS, 2006; MICEX, 2006).

The data are obtained from the Osiris database and hand collection from publicly available Russian annual reports, financial

statements and company announcements. Consistent with Simunic (1980) we use the natural log of audit fees to avoid problems of heteroscedasticity.

3.2.2. Experimental variables

To test hypotheses H1, H2 and H3, we examine three variables that reflect the hypothesized relationships between chairman independence, board members independence, presence of a representative of the State as board members, and audit fees. The variables of interest are the proportion of independent directors on the board (INDBD), proportion of representatives of the State (STATEBD) and the dummy variable INDC that shows independence of the chairman of the board:

1. Chairman independence (INDC): measures the effect of the presence of an independent chairman on audit fees. INDC is set equal to 1 if a chairman of the board is an independent director, 0 otherwise.
2. Proportion of independent directors on the board (INDBD): reflects the effect of independent

directors on the board on audit fees. INDBD is defined as the proportion of independent directors on the board to the total number of members on the board.

3. Proportion of State representatives on the board (STATEBD): defines the effect of the presence and proportion of representatives of the State as board members on the board. It is measured as the proportion of State representatives on the board to the total number of board members.

3.2.3. Control variables

The other variables in the model are size, proportion of shares owned by directors, Big 4 auditors, current ratio, market to book value of equity, return on equity, leverage, proportion of foreign subsidiaries and loss incurrence. These variables were identified from prior literature with preference for recent research [2] as shown in Table 2).

Table 2. Control variables

Variable	Acronym	Predicted sign	Measurement	Reason	Prior studies
Size	LnTA	+	Natural log of client's total assets at year end to avoid problems of heteroscedasticity	Total assets are used as proxy. Large companies require more audit work due to larger amount of transactions, account balances, greater importance of disclosure	Simunic (1980), Francis (1984), Simon et al. (1986), Low et al (1990), Simon et al (1992), Chan et al (1993), Johnson et al (1995), Collier and Gregory (1996), Naser and Nuseibeh (2007)
Current ratio	CRE	-	Current assets divided by total liabilities	Short-term solvency proxy	Simunic (1980)
Return on equity	ROE	+	EBIT divided by total equity	The higher a client profitability, the higher the audit risk and audit fees	Simunic (1980), Tsui et al. (2001)
Leverage	DEBT	+	Total liabilities divided by total equity	Long-term solvency proxy	Simunic (1980),
Foreign subsidiaries	FOR	+	Proportion of foreign subsidiaries to total subsidiaries	Companies with greater proportion of foreign subsidiaries/branches require more audit work as companies need to comply with reporting requirements in the countries where they operate.	Taylor and Baker (1981), Collier and Gregory (1996), Sandra and Patrick (1996), Chan et al. (1993)
Loss	LOSS	-	Dummy variable, 1 if loss occurred during the year, 0 otherwise	Auditors charge lower fees to distressed clients to improve goodwill and mitigate the effect of client risk	Simunic (1980), Firth (1985), Chung and Lindsay (1988), Low et al (1990), Craswell et al. (1995), Gul and Tsui, (1998), Gul (1999), Tsui et al. (2001)
Big 4 auditor	AUDITOR	+	Dummy variable, 1 if the firm audited by a Big 4 audit firm, 0 otherwise	Big 4 audit firms possess a higher level of industry skills and expertise and charge higher fees.	Simunic (1980), Francis (1984), Craswell et al. (1995), Gul and Tsui, (1998), Gul (1999), Tsui et al. (2001)

3.3. Regression Model

This study uses the traditional audit fee model adapted from prior research by Simunic (1980) and Craswell et al. (1995).

$$\text{LnAF} = b_0 + b_1\text{INDC} + b_2\text{INDBD} + b_3\text{STATEBD} + b_4\text{AUDITOR} + b_5\text{LnTA} + b_6\text{CRE} + b_7\text{ROE} + b_8\text{DEBT} + b_9\text{FOR} + b_{10}\text{LOSS} + e$$

Variables:

Dependent variable

LnAF = natural log of audit fees charged to the client

Experimental variables

INDC = '1' if chairman of the board is independent director, '0' otherwise

INDBD = proportion of independent directors on the board

STATEBD = proportion of representatives of the State on the board

Control variables

AUDITOR = '1' if the firm audited by a Big 4 audit firm, '0' otherwise

LnTA = natural log of client's total assets at year end

CRE = current ratio

ROE = EBIT divided by total equity

DEBT = total liabilities divided by total equity

FOR = proportion of foreign subsidiaries to total subsidiaries

LOSS = '1' if loss incurred during the year, '0' otherwise

4. Results and discussion

4.1. Descriptive statistics

The descriptive statistics for both dependent and independent variables are shown in Table 3.

Table 3. Descriptive statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
Raw data				
AuditFEE (US\$000)	15.84	64,000.00	7,193.70	10,476.67
INDC	0.00	1.00	0.48	0.50
INDBD	0.00	1.00	0.40	0.20
STATEBD	0.00	0.50	0.02	0.08
AUDITOR	0.00	1.00	0.81	0.39
ASSETS (US\$000 000)	13.70	20,823.00	1,943.87	2,785.29
CRE	0.17	37.13	1.94	3.99
ROE	0.00	28.14	1.93	4.08
DEBT	0.00	1.39	0.38	0.24
LOSS	0.00	1.00	0.25	0.44
FOR	0.00	0.88	0.04	0.14
Transformed data				
LnAF	10.00	18.00	15.25	1.58
LnTA	16.00	24.00	20.59	1.42

Dependent variable:

AuditFEE (US\$000) = audit fee
 LnAF = natural log of audit fees charged to the client

Independent variables:

INDC = dummy variable, 1 if chairman of the board is independent director, 0
 STATEBD = proportion of representative of the State on the board
 INDBD = proportion of independent directors on the board

Control variables:

AUDITOR = dummy variable, 1 if the firm audited by a Big 4 audit firm, 0 otherwise
 ASSETS (US\$000) = total assets
 LnTA = natural log of client's total assets at year end
 CRE = current ratio
 ROE = return on equity
 DEBT = total liabilities divided by total assets
 FOR = number of foreign subsidiaries
 LOSS = dummy variable, 1 if loss occurred during the year, 0 otherwise

Table 3 shows the audit fees (AuditFEE) for the listed Russian companies vary from US\$15,840 to US\$64,000,000 with a mean of US\$7,193,700. Total assets used as a proxy for firm size (FSIZE) range from US\$13.7 million to US\$20.8 billion with a mean US\$1.94 billion. As anticipated earlier, the audit fees and total assets variables are skewed positively. We have reduced this skewness by using the natural log for those variables.

The chairman is an independent director (INDC) for 48% of firms. Independent directors (INDBD) constitute 40% of boards of directors. Representatives of the State (STATEBD) constitute 2% of board members, on average. Auditors from

the Big 4 (AUDITOR) worked with 81% of the firms. The proportion of firms that recorded a loss for the sample period is 25%.

4.2. Correlations

Table 4 represents the results of the bivariate Pearson correlation test between all the variables. The results show that the log of audit fees (LnFA) is correlated significantly and positively with LnTA, AUDITOR, INDC, INDBD, STATEBD and LOSS. INDBD is correlated positively with LnTA, AUDITOR and CRE. STATEBD is correlated positively with INDBD, LnTA and CRE

Table 4. Pearson correlation coefficients

	LnAF	INDC	STATEBD	INDBD	AUDITOR	LnTA	CRE	ROE	DEBT	FOR	LOSS
LnAF	1.000										
INDC	0.234**	1.000									
STATEBD	0.317**	0.067	1.000								
INDBD	0.480**	0.183*	0.281**	1.000							
AUDITOR	0.338**	0.053	-0.100	0.333**	1.000						
LnTA	0.634**	0.126	0.321**	0.452**	0.349**	1.000					
CRE	0.154	0.060	0.172*	0.162*	0.097	0.152	1.000				
ROE	-0.013	0.065	-0.080	-0.156	-0.021	-0.250**	0.002	1.000			
DEBT	0.090	-0.038	-0.026	0.156	-0.065	0.023	-0.275**	-0.211**	1.000		
FOR	0.060	0.138	-0.094	-0.011	0.118	0.149	-0.048	-0.105	0.245**	1.000	
LOSS	-0.273**	-0.090	-0.158	-0.087	0.002	-0.233**	-0.129	-0.173*	0.140	0.052	1.000

**Significant at the 0.01 level (2-tailed).

*Significant at the 0.05 level (2-tailed).

Variables:

LnAF = natural log of audit fees charged to the client

INDC = dummy variable, 0 if chairman of the board is independent (non-executive) director, 1 otherwise

INDBD = proportion of independent directors on the board

STATEBD = proportion of representative of the State on the board

AUDITOR = dummy variable, 1 if the firm audited by a Big 4 audit firm, 0 otherwise

CRE = current ratio

ROE = return on equity

DEBT = total liabilities divided by total assets

FOR = number of foreign subsidiaries

4.3. Regression analysis

Table 5 reports the results of the multivariate linear regression analysis of the audit fee models.

Table 5. Multiple regression results

Control Variables	coefficient	t-value	p-value
(Constant)	2.911	1.732	0.086
LnTA	0.524	6.141	0.000
CRE	0.016	0.618	0.538
ROE	0.054	2.137	0.034
DEBT	0.902	2.078	0.040
FOR	-0.488	-0.688	0.493
LOSS	-0.397	-1.713	0.089
AUDITOR	0.579	2.096	0.038
Experimental variables:			
INDC	0.387	1.994	0.048
INDBD	1.169	2.009	0.047
STATEBD	1.661	1.755	0.081
F-statistic (p-value)	< 0.0001		
Adjusted R²	0.49		

Variables:

INDC	= dummy variable, 0 if chairman of the board is independent (non-executive) director, 1 otherwise
INDBD	= proportion of independent directors on the board
STATEBD	= proportion of representative of the State on the board
AUDITOR	= dummy variable, 1 if the firm audited by a Big 4 audit firm, 0 otherwise
LnTA	= natural log of client's total assets at year end
CRE	= current ratio
ROE	= return on equity
DEBT	= total liabilities divided by total assets
FOR	= number of foreign subsidiaries
LOSS	= dummy variable, 1 if loss occurred during the year, 0 otherwise

As shown in Table 5 the model is highly significant at $p < 0.001$. The explanatory power reflected by its adjusted R^2 of 0.49 is consistent with prior studies (Bliss et al., 2007; Wang et al., 2009). To examine potential multicollinearity in the regression model, we regressed all the explanatory variables on LnAF. The results indicate that the variance inflation factor (VIF) is below 1.6 and tolerance levels are above 0.6 for all the explanatory variables. This suggests that multicollinearity between the explanatory variables is not likely to pose a serious problem in interpretation of the regression results.

The coefficients for ROE, LnTA, INDC, INDBD, AUDITOR, DEBT and STATEDB are significant at 0.01, 0.05, or 0.1 levels and positive. The coefficient for CRE is not significant, although it has a positive sign. The coefficient for LOSS is significant at 0.1 and negative. The coefficient for

FOR is not significant, although it has a negative sign, consistent with our hypothesis. Our experimental variables follow the predicted behaviour. The coefficients for INDC, INDBD, and STATEDB are significant and positive.

The results support hypotheses H1, H2 and H3. The higher level of corporate governance within a firm will lead to demand for high quality audit assurance and will result in higher audit fees. These results are consistent with studies by Carcello et al. (2002) and Abbott et al. (2003), among others. Also, the results show that a high proportion of State representatives on the board is associated with high audit fees. This supports the hypothesis that the increased inherent risk in politically connected firms will result in higher audit fees (Gul, 2006; Bushman and Piotroski, 2006).

5. Summary and conclusions

We find that audit fees are associated positively with the presence of an independent chairman, the higher of proportion of independent directors and State representatives on the board. These results are consistent with the demand-side perspective of audit services where good corporate governance practices demand for a higher level of audit assurance and result in higher audit fees.

The results support the view that the reforms of the Russian government have had a positive effect on the application of the corporate governance regime. It is perceived that Russia as a past communist State is linked to high level corruption and immaturity of corporate governance structures. The introduction of the CCG was a big step to align Russia with effective corporate governance practices in the international community. Many politicians argue that regulations to prevent CEO duality and increase the number of independent directors on the board have had a superficial effect rather than trigger any radical changes at the corporate level. However, our results suggest that the above mentioned measures have increased the demand for higher quality audit and, thus, have stimulated positive changes in the quality of the financial information disclosure.

This study raises an important question about the role of State representatives on boards of directors. Do they actually safeguard State property and ensure transparency as their role implies? Or do they promote corruption and fraud? The positive association between the proportion of State representatives and audit fees suggests some ideas for further investigation. It shows positive association with inherent audit risk and leads indirectly to a conclusion about negative effects of State representatives on corporate management.

The results have implications for regulatory bodies in Russia. They show areas that require further improvement. It seems critical to ensure the appointment of independent directors who have appropriate knowledge and experience, and capable of adhering to the best practices of information transparency and disclosure, and of ensuring a high level of corporate governance at State-owned enterprises.

The results should be considered in the light of several limitations. First, the sample is limited to 2008 year data of public listed non-finance companies who disclose their audit fee data voluntarily. Second, the focus of this study is on board composition variables. This imposes further limitations to the generalizability of the results. Future research could consider other corporate governance variables which may affect the perceived inherent riskiness of Russian companies.

References

1. Abbott, L.J., Parker, S., Peters, G.F. and Raghunandan, K. (2003), "The association between audit committee characteristics and audit fees", *Auditing: A Journal of Practice & Theory*, Vol. 22 No. 1, pp. 17-32.
2. Baysinger, B.D. and Butler, H.N. (1985), "Corporate governance and the board of directors: Performance effects of changes in board composition", *Journal of Law, Economics, and Organization*, Vol. 1 No. 1, pp. 101-124.
3. Beasley, M. S. (1996), "An empirical analysis of the relation between the board of directors composition and financial statement fraud", *Accounting Review*, Vol. 71 No. 4, pp. 443-465.
4. Bell, T.B., Landsman W.R. and Shackelford D.A. (2001), "Auditors' perceived business risk and audit fees: Analysis and evidence", *Journal of Accounting Research*, Vol. 39 No.1, pp. 35-43.
5. Beiner, S., Drobetz, W., Schmid, F. and Zimmermann, H. (2004), "Is board size an independent corporate governance mechanism?" *Kyklos*, Vol. 57 No. 3, pp. 327-356.
6. Black, B. (2001), "The corporate governance behavior and market value of Russian firms", *Emerging Markets Review*, Vol. 2 No 2, pp. 89-108.
7. Bliss M., Muniandy B. and Majid A. (2007), "CEO duality, audit committee effectiveness and audit risks". *Managerial Auditing Journal*, Vol. 22 No. 7, pp. 716-728.
8. Bremer, J. and Elias, N. (2007), "Corporate governance in developing economies – the case of Egypt", *International Journal of Business Governance and Ethics*, Vol. 3 No. 4, pp. 430-445.
9. Brickley, J.A., Coles, J.L. and Terry, R.L. (1994), "Outside directors and the adoption of poison pills", *Journal of Financial Economics*, Vol. 35 No. 3, pp. 371-390.
10. Bushman, R., and Piotroski, J. (2006), "Financial reporting incentives for conservative accounting: The influence of legal and political institutions", *Journal of Accounting and Economics*, Vol. 42 No. 1-2, pp. 107-148.
11. Cadbury Committee, The. (1992), *Report on the financial aspects of corporate governance*, Gee and Company, London.
12. Chan P., Ezzamel M. and Gwilliam D. (1993), "Determinants of audit fees for quoted UK companies", *Journal of Business Finance & Accounting*, Vol. 20 No. 6, pp. 765-783.
13. Carcello, J.V., Hermanson, D.R., Neal, T.L. and Riley, R.A. (2002), "Board characteristics and audit fees", *Contemporary Accounting Research*, Vol. 19 No. 3, pp. 365-84.
14. Chan, P., Ezzamel, M. and Gwilliam, D. (1993), "Determinants of audit fees for quoted UK companies", *Journal of Business Finance and Accounting*, Vol. 20 No.6, pp.765-773.
15. Chen, J. (2001), "Ownership structure as corporate governance mechanism: evidence from Chinese listed companies", *Economics of Planning*, Vol. 34 No. 1-2, pp. 53-72.
16. Chung, D. and Lindsay, W. (1988), "The pricing of audit services: the Canadian perspective", *Cotemporary Accounting Research*, Vol. 5 No.3, pp.19-46.
17. Cohen, J. and Hanno, D. (2000), "Auditors' consideration of corporate governance and management control philosophy in preplanning and planning judgments", *Auditing: A Journal of Practice & Theory*, Vol. 19 No. 2, pp.133-46.
18. Cohen J., Krishnamoorthy G. and Wright A.M. (2002), "Corporate governance and the audit process", *Contemporary Accounting Research*, Vol. 19 No. 4, pp. 573-594.
19. Collier, P., and Gregory, A. (1996), "Audit committee effectiveness and the audit fee", *The European Accounting Review*, Vol. 5 No. 2, pp. 177-198.
20. Craswell, A., Francis, J. and Taylor, S. (1995), "Auditor brand name reputations and industry specializations", *Journal of Accounting and Economics*, Vol. 20 No. 3, pp. 297-322.
21. Department of Finance of Russian Federation (2007), *Main characteristics of the audit market of Russian Federation for 2006*, viewed 31 January, 2011, <http://www.minfin.ru/common/img/uploaded/library/2007/09/pokaz170907.pdf> (in Russian).
22. Dolgopyatova, T. (2004), "Property and corporate control in Russian companies", *Russian Management Journal*, Vol. 2 No. 2, pp. 3-26 (in Russian)
23. Enthoven, A., Sokolov, Y., Bychkova, S., Kovalev, V. and Semenova, M. (1998), *Accounting, Auditing and Taxation in the Russian Federation*, University of Texas, Dallas, Richardson, Texas.
24. Fama, E.F. (1980), "Agency problems and the theory of the firm", *Journal of Political Economy*, Vol. 88 No. 2, pp. 288-307.
25. Fama, E.F. and Jensen, M.C. (1983), "Separation of ownership and control", *Journal of Law and Economics*, Vol. 26 No. 2, pp.301-325.
26. Fan, J., Wong., T. and Zhang, T. (2007) "Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms", *Journal of Financial Economics*, Vol. 84 No. 2, pp. 330-357.
27. Federal law "On enterprises and entrepreneurial activities" 1990 (Russia) (in Russian)
28. Federal law "On joint-stock companies" 1995 (Russia) (in Russian)
29. Federal Service on Financial Markets, "Approving regulations on information disclosure by issuers of securities", 2006, No. 06-117/pz-n, (in Russian)
30. Federal Service on Financial Markets, "The code of corporate conduct", 2002 (in Russian)
31. Federal Service on Financial Markets, "The approval of the provision regarding trading arrangements on the securities market", 2004, No. 04-1245/pz-n (in Russian)
32. Filatov A., Tutkevich V. and Cherkaev D. (2005), "Board of directors at State-owned enterprises (SOE) in Russia", OECD, Paris.
33. Finkelstein, S. and D'Aveni, R. A. (1994), "CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command". *Academy of Management Journal*, Vol. 37 No. 5, pp. 1079-1108.

34. Firth, M. (1985), "An analysis of audit fees and their determinants in New Zealand", *Auditing, A Journal of Practice and Theory*, Vol. 4 No.2, pp.23-37.
35. Francis, J.R. (1984), "The effect of audit firm size on audit prices: A study of the Australian market", *Journal of Accounting and Economics*, Vol. 6 No. 2, pp. 133-151.
36. Francis, J. and Stokes, D. (1986), "Audit prices, product differentiation and scale of economies: further evidence from the Australian market", *Journal of Accounting Research*, Vol. 24 No. 2, pp. 383-393.
37. Goodwin-Stewart, J. and Kent, P. (2006), "The relation between external audit fees, audit committee characteristics and internal audit", *Accounting and Finance*, Vol. 46 No. 3, pp. 387-404.
38. Gul, F.A. (1999), "Audit price, product differentiation and economic equilibrium", *Auditing: A Journal of Practice & Theory*, Vol. 18 No. 1, pp. 90-100.
39. Gul, F.A. (2006), "Auditors' response to political connections and cronyism in Malaysia", *Journal of Accounting Research*, Vol. 44 No.5, pp.931-63.
40. Gul, F.A. and Tsui, J.S.L. (1998), "A test of the free cash flow and debt monitoring hypothesis: evidence from auditing pricing", *Journal of Accounting and Economics*, Vol. 24 No. 2, pp. 219-37.
41. Hay, D., Knechel, W. and Wong, N. (2006), "Audit fees: a meta-analysis of the effect of demand and supply attributes", *Contemporary Accounting Research*, Vol. 23 No.1, pp.141-91.
42. Hellman J.S., Jones G., Kaufman D. and Schankerman M. (2000), "Measuring governance, corruption, and state capture. How firms and bureaucrats shape the business environment in transition countries", *World Bank Policy Research Paper No. 2312*.
43. Ivashkovskaya, I., Raschupkin, A. and Osipov Y. (2008), "Board of directors and corporate effectiveness in transition economy: study based on Expert RA rating", in *Corporate governance and sustainable development of business: strategic role of boards of directors*, Moscow: Europe.
44. Iwasaki, I. (2008), "The determinants of board composition in a transforming economy: Evidence from Russia", *Journal of Corporate Finance*, Vol. 14 No. 5, pp. 532-549.
45. Jensen, M.C. (1993), "The modern industrial revolution, exit, and the failure of internal control systems", *Journal of Finance*, Vol. 48 No. 3, pp. 831-880.
46. Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No.4, pp. 305-60.
47. Johnston, E., Walker, K. and Westergaard, E. (1995), "Supplier concentration and pricing of audit services in New Zealand", *Auditing, A Journal of Practice and Theory*, Vol. 14 No.2, pp.74-89.
48. Kokoshin A. (2002), "What is Russia: a superpower, a great power or a regional power?" *International Affairs*, Vol. 48 No. 6, pp. 100-125.
49. Kostyuk, A.N. and Koverga, V. (2006), "Board size and composition: the main tradeoffs", *Corporate Board journal*, Vol. 2 No. 1, pp. 48-54.
50. La Porta R., López-de-Silanes F., Shleifer A. and Vishny R. (1999), "Corporate ownership around the world", *Journal of Finance*, Vol. 54 No. 2, pp. 471-520
51. Lazareva, O., Rachinsky, A. and Stepanov, S. (2007), "A survey of corporate governance in Russia", working paper No. 103, Centre for Economic and Financial Research, New Economic School, Moscow.
52. Li, J. (1994), "Ownership structure and board composition: A multi-country test of agency theory predictions", *Managerial and Decision Economics*, Vol. 15 No. 4, pp 359-368
53. Li, Y., Eddie, I. and Liu, J. (2010), "Board characteristics, audit committee, external auditor and earnings management: Chinese evidence", *Corporate Ownership & Control*, Vo. 8 No. 1, pp. 197-210.
54. Lifschutz, S., Jacobi, A. and Feldshtein, S. (2010), "Corporate governance characteristics and external audit fees: a study of large public companies in Israel", *International Journal of Business and Management*, Vol. 5 No. 3, pp. 109 – 116.
55. Low, L., Tan, P. and Koh, H. (1990), "The determination of audit fees: an analysis of the Singapore context", *Journal of Business Finance & Accounting*, Vol. 17 No.2, pp.285-95.
56. McGee, R.W. and Preobragenskaya, G.G. (2005). *Accounting and Financial System reform in a transition economy: a case Study of Russia*, Springer, New York, NY.
57. Mitra, S., Hossain, M. and Deis, D.R. (2007), "The empirical relationship between ownership characteristics and audit fees", *Review of Quantitative Finance and Accounting*, Vol. 28 No. 3, pp.257-85.
58. MSCI International equity indices 2009, viewed 31 January, 2011, <http://www.transparency.org>
59. Naser, K. and Nuseibeh, R. (2007), "Determinants of audit fees: empirical evidence from an emerging economy", *International Journal of Commerce and Management*, Vol. 17 No. 3, pp. 239-255.
60. O'Sullivan, N. (2000), "The impact of board composition and ownership on audit quality: Evidence from large UK companies", *British Accounting Review*, Vol. 32 No. 4, pp. 397-414
61. Organisation for Economic Cooperation and Development, "White paper on corporate governance in Russia", 2002, viewed at 31 January, 2011, <http://www.oecd.org/dataoecd/10/3/2789982.pdf>
62. Pi, L. and Timme, S.G. (1993), "Corporate control and bank efficiency", *Journal of Banking & Finance*, Vol. 17 No. 2-3, pp. 515-30.
63. Peng, M.W., Buck, T. and Filatotchev, I. (2003), "Do outside directors and new managers help improve firm performance? An exploratory study in Russian privatization", *Journal of World Business*, Vol. 38 No. 4, pp. 348-360

65. Rashid, A. (2010), "CEO duality and firm performance: evidence from a developing country", *Corporate Ownership & Control*, Vol. 8 No. 1, pp. 163-176.
66. Rechner, P.L. and Dalton, D.R. (1991), "CEO duality and organizational performance: a longitudinal analysis", *Strategic Management Journal*, Vol. 12, No. 2, pp. 155-160.
67. Redike, K. and Seth, A. (1995). "Boards of directors and substitution effects of alternative", *Governance Mechanisms: Strategic Management Journal*, Vol 16 No. 2, pp. 85-99.
68. Samsonova A. (2007), "Regulation and trust in auditing in Russia". In: Quick R, Turley S, Willekens M, editors. *Auditing, trust and governance: developing regulation in Europe*. London: Routledge. pp. 223-242.
69. Samsonova A. (2009), "Local sites of globalisation: A look at the development of a legislative framework for auditing in Russia", *Critical Perspectives on Accounting*, Vol. 20 No.1, pp. 528-552.
70. Sandra, W.M.H., and Patrick, P.H.N. (1996), "The determinants of audit fees in Hong Kong: An empirical study", *Asian Review of Accounting*, Vol. 4 No. 1, pp. 32-50.
71. Simon, D., Ramanan, R. and Dugar, A. (1986), "The market for audit services in India: An empirical examination", *International Journal of Accounting Education and Research*, Vol. 21 No.1, pp. 27-35.
72. Simon, D., Teo, S. and Trompeter, G. (1992), "A comparative study of the market for audit services in Hong Kong, Malaysia, and Singapore", *International Journal of Accounting Education and Research*, Vol. 27 No.3, pp. 234-240.
73. Simunic, D. (1980), "The pricing of audit services: theory and evidence", *Journal of Accounting Research*, Vol. 18 No.1, pp. 161-190.
74. Simunic, D. and Stein, M.T. (1987), "Product differentiation in auditing: Auditor choice in the market for unseasoned new issues", Canadian Certified General Accountants' Research Foundation, Vancouver.
75. Tang, Y., Chow, L. and Cooper, B. (1996), *Accounting and finance in China: A review of current practice*, 3rd ed., Pearson Professional, Hong Kong.
76. Tsui, J.S.L., Jaggi, B. and Gul, F.A. (2001), "CEO domination, growth opportunities, and their impact on audit fees", *Journal of Accounting, Auditing and Finance*, Vol. 16 No. 3, pp. 189-208.
77. Taylor, M. and Baker, R. (1981), "An analysis of external audit fees", *Accounting & Business Research*, Vol. 12 No. 5, pp.55-60.
78. Vernikov A. (2007), "Evolution of corporate governance in Russian banks", paper presented at The 8th International Scientific Conference "Economic Modernization and Social Development", April, 2007, Moscow: State University – Higher School of Economics.
79. Wang, K., O. S. and Iqbal, Z. (2009), "Audit pricing and auditor industry specialization in an emerging market: Evidence from China", *Journal of International Accounting, Auditing and Taxation*, Vol. 18 No 1, pp. 60-72.
80. Yakovlev, A. (2004), "Interaction of interest groups and their impact on economic reforms in contemporary Russia", *working paper*. Moscow: State University Higher School of Economics (in Russian).
81. Yatim, P., Kent, P. and Clarkson, P. (2006), "Governance structures, ethnicity and audit fees of Malaysian listed firms", *Managerial Auditing Journal*, Vol. 21 No. 7, pp. 757-82.
82. Zain, M.M., Wahab, E.A.A.W and Foo, Y.B. (2010), "Audit quality: do the audit committee and internal audit arrangements matters?" *Corporate Ownership & Control*, Vol. 8 No. 1, pp.333-346.

Appendix A. Extract from the CCG on Independent Directors on Board of directors

2.2. It is recommended that the board of directors should include independent Directors

2.2.1. As a rule, boards of directors of Russian companies consist of three categories of directors – executive, non-executive and independent directors.

Under the law, executive directors are defined as members of the board of directors concurrently holding positions as members of the managerial board, and their number may not exceed one-fourth of the total number of members of the board of directors of the company. At the same time, including in the board of directors only those persons who are not members of the managerial board does not in itself guarantee adequate protection of the interests of shareholders.

Efficient performance by the board of directors of its functions requires that some of its members are independent directors, i.e., persons who not only do not serve as members of the managerial board, but are also independent from the officers of the company and their affiliated persons and from major business partners of the company, and do not have any other relations with the company that may affect the independence of their opinions (a detailed discussion of the requirements for independent directors is provided in Paragraph 2.2.2 of this Chapter).

2.2.2. Independent directors can make a substantial contribution to consideration and resolution of such matters as preparation of the company's development strategy, evaluation of executive bodies' performance in terms of implementation of such strategy, resolution of corporate conflicts that involve shareholders, and a number of other matters that may affect the interests of shareholders. Therefore, independent directors ensure that the board of directors forms an objective opinion on matters under discussion, which ultimately increases investor confidence in the company.

In defining eligibility criteria for independent directors, the company should consider their ability to make independent judgments. This means that there should be no factors capable of affecting their position. Therefore, it is advisable that an independent director should be a director who:

- (1) over the last three years has not been, and at the time of election to the board of directors is not, an officer (manager) or employee of the company, or an officer or employee of the managing organization of the company;
- (2) is not an officer of another company in which any of the officers of the company is a member of the appointments and remuneration committee of the board of directors;
- (3) is not an affiliated person of an officer (manager) of the company (officer of the company's managing organization);
- (4) is not an affiliated person of the company or an affiliated person of such affiliated persons;
- (5) is not bound by contractual relations with the company, whereby the person may acquire property (receive monies) with a value in excess of 10 percent of such person's aggregate annual income, other than through receipt of remuneration for participation in the operations of the board of directors;
- (6) is not a major business partner of the company (a business partner with an annual value of transactions with the company in excess of 10 percent of the asset value of the company); and
- (7) is not a representative of the government.

No director may be deemed to be independent if he has acted in the capacity of a member of the board of directors of the company for 7 years.

2.2.5. It is advisable that information about independent directors is disclosed in the annual report of the company.

Notes

[1] No fewer than 5 directors for companies with fewer than 1,000 voting shareholders, no fewer than 7 directors for companies with fewer than 10,000 voting shareholders (but more than 1,000 voting shareholders) and no fewer than 9 directors for companies with 10,000 or more voting shareholders

[2] Hay et al. (2006) provide a comprehensive overview of basic research on audit fees, including a discussion of the various variables used to explain audit fees.