IMPACT OF THE BOARD ON MANAGEMENT OF LITHUANIAN STATE-OWNED ENTERPRISES

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Abstract. The article concentrates on the main challenge tackled by the state-owned enterprises (SOEs) reform initiated by the 15th government of the Republic of Lithuania – an attempt to improve the corporate governance practices and management efficiency of Lithuanian SOEs. According to the insights offered by the new public management (NPM) paradigm, resource dependency theory (RDT) and principal-agent theory (PAT), the present research seeks to identify a quantifiable relationship between the composition of the board (which is one of the core aspects of the Lithuanian SOE reform) and return on equity (ROE) in Lithuanian SOEs (which is selected to be the key variable defining management efficiency). Based on key relationships among the selected parameters of the board (e.g., size, political independency, gender diversity, other) and SOE management efficiency identified, this paper offers practical public policy recommendations in the field of SOE management efficiency.

Key words: state-owned enterprises (SOEs), board of directors (BoD), board composition, corporate governance, return on equity (ROE)

1. Introduction

In the recent years, the Government of Lithuania has been implementing various reforms targeting at inefficiencies of public sector institutions. The majority of these reforms aim to implement best practices from other countries and such international organizations as the Organisation for Economic Co-operation and Development (OECD). In 2010, the Government of Lithuania initiated the reform of state-owned enterprises, which was seeking to improve the transparency, accountability and management efficiency of SOEs, as well as help to decrease the level of political dependency in the whole sector. Although there have been many significant improvements, there are many areas which still need further attention. This can be clearly seen from the financial situation of Lithuanian SOEs (return on equity was only 2% for the whole sector in the year 2012).

Return on equity is widely used as a measure of a firm's management efficiency, and there are many internal as well as external factors which influence its value. There is no doubt that the quality of a firm's management is one of these factors. As the topic of the

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Vilnius LT-01130, Lithuania E-mail: liudas.jurkonis@gmail.com board composition in Lithuanian SOEs is widely discussed in Lithuanian press, academic and political circles, the main goal – to identify a quantifiable relationship between the composition of the board and the ROE in Lithuanian SOEs – is being raised in the paper.

Based on the insights coming from the new public management (NPM) paradigm, resource dependency theory (RDT) and principal-agent theory (PAT), the authors of the paper raise the main hypothesis that the improved composition of the boards in Lithuanian SOEs should have a positive influence on SOEs management efficiency (ROE). The following elements of the composition of the Lithuanian SOE boards were taken as independent variables: (i) the size of the board, (ii) the percentage of women on the board, (iv) the percentage of female presence in boards, (v) board independence, (vi) CEO duality to identify their relationship with the ROE as the main measure of SOEs management efficiency (dependent variable).

It is believed that the results presented in this paper can be applied not only by the responsible Lithuanian institutions, but also globally (or at least regionally) when making public policy decisions affecting the composition of the boards in sectors dominated by SOEs.

2. Review of theory and literature

In this part of the paper, the terms ROE, board of directors are defined, an overview of the previous academic research on efficiency, boards and relationship between them in SOEs and privately held companies are presented. Finally, the research method is chosen and its methodology described.

As to the introduction, the main problem which is being addressed in this paper is an unidentified relationship between the board composition and ROE in Lithuanian SOEs. Before we can start addressing this problem, the key terms (ROE, composition of the board) must be defined:

- return on equity is a commonly used ratio which shows how much net profit is
 earned per one unit of shareholder capital. This ratio is of utmost importance for
 Lithuanian SOEs, because the main goals of SOEs which fall under the commercial (group 1A) and mixed (group 1B) categories are business value growth and
 sufficient returns on investments made by the state;
- the board is a collegial management unit, which has the authority to decide on the management structure and remuneration, roles and CEO of a given company. The board is also responsible for the organization of shareholder meetings (Fundamentals of Lithuanian Law, 2004). The term 'board composition' is widely used in academic literature when talking about various characteristics of the board or its members, for example: the percentage of women on the board, the size of the board, the percentage of independent board members, CEO duality, the competences of board members, and others.

Analysis of the academic discussion regarding selected topics

The authors of this paper managed to find a number of academic papers which sought identifying the relationship between the board composition and ROE in privately owned companies. Most of their authors attempted to identify the relationship in publicly traded companies and usually use one or two of the above-mentioned board characteristics. It is worth noting that there is no single opinion on how various board characteristics influence ROE – different authors managed to come up with completely opposite results when trying to identify the relationship (in companies from different countries) between the given board characteristics and ROE. When searching for papers on the topic addressed in this paper, authors did not manage to find any academic literature on the aforementioned relationship in Lithuanian SOEs.

Independent board members

The majority of papers we have analyzed, which attempt to identify the relationship between board independence and ROE, came up with the result that board independence has a positive effect on financial performance. In the following paragraphs, several definitions of dependent and independent board members are provided.

Dependent board members are related to / employed by the company and get a compensation for it. Board members of this type usually work in management or have a personal interest in the company. When compared to independent board members, they tend to have more knowledge about internal dealings of the organization, which can be used for the benefit of the whole company (Beasley, 1996).

An independent board can be defined as a board which has members who are not working in the management of the same company nor shareholders or their family members (Gallo, 2005). An independent board consists of members without any ties with the company. In this way, the risk of the conflict of interest is minimized or completely eliminated, because independent board members do not have any vested interest. According to Jacobs (1985), independent board members are important because inside or dependent members can be unable to access sufficient external information and resources which are available for independent members.

The Lithuanian Government has imposed a provision which requires I and II category SOEs to have no less than one third of independent board members in their boards. The following independence criteria for candidates must be met:

- the candidate must not be the CEO (or have been in the past 5 years) of the SOE in question or a related company;
- the candidate must not be employed (or have been in the past 3 years) by the SOE in question or a related company;

- in the past 3 years, the candidate must not have received any remuneration (excluding remuneration for being a member of a collegiate body) from the SOE in question or a related company;
- the candidate must not possess (or represent a person possessing) more than 5% of the total shares with voting rights of the SOE in question or a related company;
- in the past 3 years, the candidate must not have had any business ties with the SOE in question or a related company nor with a person who has such ties, is a shareholder or CEO of the SOE in question. A person is believed to have such ties if he is an important supplier of goods or services (including financial, legal or consulting), an important client or organization, which receives a significant revenue from the SOE in question or a related company;
- in the past 3 years, the candidate must not have been an employee or a partner of an audit firm, which audits the SOE in question or a related company;
- the candidate must not have been a member of a SOE collegiate body for more than 12 years;
- the candidate must not be a close relative (wife, husband, child or parent) of the CEO or a person who meets any of the above criteria of the SOE in question or a related company;
- the candidate must not be a civil servant or an employee of an organization representing the state.

The corporate governance code issued by the NASDAQ OMX Vilnius stock exchange recommends that companies should have independent board members in their boards. In the UK, for example, there is a requirement stating that there must be at least three independent members in the administration council, while US requires companies to have at least one third of their board members to be independent (Bhagat & Black, 2002). According to Beasley (1996), in order for a company to be effective and to ensure an independent monitoring function, at least one third of its board members must be independent. Dependent board members are also of utmost importance, because they possess insider information which is not available to independent members.

Yasser (2011) has noticed that there is a significant positive relationship between ROE, board composition, and audit committees. This shows that there exists a strong relationship between board composition and financial results of the company, because ROE is an indicator of company performance. Bhagat & Black (1999) did a research on large US companies and found a negative relationship between the board composition and financial results of picked companies. The authors state that among large publicly traded companies with a high board diversity, there are no clear signs that a larger percentage of independent board members is related to better financial results. This means that there is no empirical reason to increase the number of independent board members in order to achieve better financial results. The research showed that companies with a

majority of independent board members on their boards are less profitable than the remaining companies.

Shah (2011) researched a relationship between Asian companies' ownership structure and their financial performance. It has been identified that a more independent and effective board has a positive impact on the financial results of the company. Another author who researched the relationship between board independence and financial results was Rashid (2010). He has managed to find that independent board members have a positive impact on the financial results of Bangladeshi companies. Dr. Sajid Hussain Awan (2012) researched companies listed on the Pakistani stock exchange and discovered that companies which have independent board members have a higher ROE when compared to others; therefore, in order to achieve a higher ROE, more independent board members should be hired.

As we can see, most of the aforementioned authors found a direct positive relationship between board independence and financial performance of companies; therefore, we can make a reasonable assumption that independent board members have a positive impact on the ROE of a given company.

Board size

Barnhart & Rosenstein (1998) have found that companies which have smaller boards achieve better financial results that those with larger ones. Mak & Yuanto (2003) were more specific and managed to discover that Singaporean and Malaysian companies with 5 board members achieve the best financial results.

There are, however, authors like Kongsted & Nielsen (2004) who found that the relationship between board size and company performance in middle-sized Danish companies is insignificant. Authors also note that board size had no impact on company performance in companies with less than 6 board members. Druckeriv (1992) claims that the larger boards have an information advantage against smaller ones, which improve their performance. Larger boards are also harder to manipulate and are better at ensuring a successful performance monitoring function. Larger boards usually have more connections, better ability to attract financing, competent managers and employees, more experience. When combined, these qualities can have a positive impact on the ROE of a given company.

Gender diversity

Gender diversity and legislation related to it is an object of many discussions around the world. Gender diversity in company boards is no exception – to this day there are many ongoing debates on whether there should be any strict requirements on the issue or it should be left for companies to decide whether gender diversity in boards is important

to them. In Norway, for example, state and municipality-owned as well as large national company boards must have at least 40% of their members of each gender. The gender diversity issue in boards is a part of a wider board diversity concept, which states that boards should resemble the ethnical and professional structure of society and have members of each gender. This can help boards to view arising challenges from different points of view (Milliken & Martins, 1996; Biggins, 1999).

In the recent times, researchers who concentrate on the research of economic and corporate phenomena delved into the issue of gender diversity in the corporate world, into issues such as a low number of women in boards, internal and external factors affecting women in boards (Burke, 2000), experience of managers and the role of women in boards (Burke & Mattis, 2000; Jamali, Safieddine & Daouk, 2007), Previous studies have disclosed that women who are members of company boards usually have a better understanding of legal environment, human resources, communication, public relations and supply management (Zelechowski & Bilimoria, 2004). Other studies have found that women on board have a positive impact on the company ROE (Smith, Smith & Verner, 2005). It is worth noting that in 2007 Lois Joy and Nancy M. Carter studied Fortune 500 companies aiming at identifying the correlation between women on boards and financial performance. Companies were divided into quartiles by the percentage of women on boards, and it was discovered that the quartile with the largest percentage of women on boards had a higher ROE value by approximately 53% when compared to the companies in the quartile with the lowest percentage of women on boards. Smith, Smith & Verner (2005) in their study have found that women are better at understanding market conditions, bring more creativity to boards thus improving the quality of their decisions.

Women on boards can also have indirect results such as a better company image, improvement in the motivation of lower ranking women in the organization.

CEO duality

An interesting phenomenon can be observed in some state as well as privately held companies: CEO is also the chairman of the board. Academics have varying opinions on the effects of such a situation. Mary (2005) claims that if decision-making and decision control functions are not separated, the board will be unable to effectively monitor and evaluate the CEO. Felton R. (2004) in his work also noticed negative effects of such a situation, noting that the chairman of the board is responsible for the organization of board meetings, hiring and firing of CEO and decisions regarding the remuneration of CEO. A similar opinion is held by Fama & Jensen (1989) and Jensen & Meckling (1976): they claim that the CEO acting as the chairman of the board makes it harder for the board to perform management monitoring by increasing agency costs.

In 2005, the OECD released Guidelines on Corporate Governance of State-owned Enterprises which recommend ensuring the absence of CEO duality. It is these guide-

lines which were used by initiators of the reform of Lithuanian SOEs as a source of recommendations, but there are still some cases where CEO of a Lithuanian SOE is at the same time the chairman of the board; therefore, it is important to try and identify whether such a situation has any impact on the performance of the company.

Membership in several boards

When looking at the membership of the same people in several boards, several assumptions can be made. One of them is that if a person is a member of several Lithuanian SOE boards, this probably means that he has a lot of experience and has the in-depth knowledge of the whole sector specifics. Such person should be able to contribute to the quality of corporate governance, and this should lead to a better company performance. There are, however, arguments which lead to a different assumption: if a person is a member of many boards, he might lack time needed for a proper understanding of each business and the challenges it faces. Hannifa & Hudaib (2006) have studied Malaysian companies and found out that board members who are members of many other boards have a negative impact on a company performance.

3. Research methods and results

According to the introduction of this paper, the main goal of our research is to identify the quantifiable relationship between the composition of the board and the ROE in Lithuanian SOEs. It is our belief that the best tool for the achievement of this goal is the application of the statistical analysis methods as case studies, and surveys of the related stakeholders would not produce a quantifiable result.

Based on the theoretical insights and insights coming from the literature review presented in earlier chapters of this paper, we built the below regression model for the initial part of our analysis (Olayinka Marte Uadiale (2010) formed a very similar model when analyzing the effects of the board composition on the performance of Nigerian companies):

ROE =
$$\beta$$
0 + β 1BSIZE + β 2BCOMP + β 3BOSHIP + β 4CEO + e,

where:

- ROE return on equity,
- $\beta 0$ intercept,
- β n the coefficient showing what impact each variable has on ROE,
- BSIZE the number of board members,
- BCOMP the percentage of independent board members,
- BOSHIP the capital owned by board members,
- CEO the coefficient which has the value of 0 if the same person is the CEO and the chairman of the board, and 0 if such a situation is not the case.

For the purpose of the research, the authors used the financial data collected by the State-owned Enterprise Governance Coordination Unit and presented in the annual SOE report (2013), as well as data related to the composition of the boards of Lithuanian SOEs, which was collected by authors using publicly available data.

By using the above model, the authors of this paper have managed to get significant and reliable results which showed that there is a strong positive relationship between board size and ROE. The relationships between other variables and ROE were also successfully identified and are presented in the later chapters.

Descriptive statistics

In this section, a research on the relationship between the board composition and ROE in Lithuanian SOEs will be performed by using the SPSS software package.

Due to the inability to obtain more data, we had to limit the scope of our research to 2012 ROE and board composition data. Below, we provide a table with descriptive statistics.

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	Mean	Std. Deviation	N	
ROE	0.081861	0.1173661	115	
B size	4.40	0.953	115	
Women	0.310725	0.1955672	115	
CEO_duality	0.03	0.160	115	
Independence 0.044348		0.1391790	115	
Cross boarding	7.805362	6.8058106	115	

TABLE 1. Descriptive statistics

After the structured review and analysis of the data set, six variables were picked: (i) return on equity (ROE) – as the main dependent variable, (ii) the number of board members (Bsize), (iii) percentage of women on board (Women), (iv) CEO duality (CEO_duality), (v) percentage of independent board members (Independence), (vi) the average number of other boards occupied by members of a given board (Cross boarding).

Table 1 shows us each variable average, standard deviation, and sample size. As we can see, companies which fall in our sample have 4.4 board members on average, 31% of all board members are women, and there are only 4.4% of independent board members. On average, each board member sits in 7.8 other company boards included in our sample, while CEO duality is very rare and can be observed only in 3 of 115 Lithuanian SOEs which are included in our sample.

The next step is the identification of a correlation between ROE and selected variables. The table with correlation data is provided below.

TABLE 2. Correlations between the selected variables of the research

		ROE	Bsize	Women	CEO_duality	Indepen- dence	Cross_ boarding
Pearson	ROE	1.000	0.396	0.012	-0.114	-0.188	0.653
correlation	Bsize	0.396	1.000	-0.011	-0.011	-0.029	0.275
	Women	0.012	-0.011	1.000	-0.205	-0.157	-0.064
	CEO_duality	114	-0.011	-0.205	1.000	0.026	-0.158
	Independence	188	-0.029	-0.157	0.026	1.000	-0.308
	Cross_boarding	0.653	0.275	-0.064	-0.158	-0.308	1.000
Sig.	ROE		0.000	0.448	0.112	0.022	0.000
(1-tailed)	Bsize	0.000		0.455	0.451	0.379	0.001
	Women	0.448	0.455		0.014	0.046	0.248
	CEO_duality	0.112	0.451	0.014		0.390	0.046
	Independence	0.022	0.379	0.046	0.390		0.000
	Cross_boarding	0.000	0.001	0.248	0.046	0.000	

As is seen in Table 2, ROE correlates most (0.653) with the Cross_boarding variable, another noteworthy correlation (0.396) is between ROE and Bsize. Both of these correlations are significant (p < 0.05). From the remaining correlations, the only significant one is between ROE and Independence (-0.188). Taking this information into account, it was decided to remove the variables Women and CEO_duality and to proceed with the remaining three variables.

It is worth noting that all variables show weak signs of correlation among themselves, and most of them are not significant; therefore, there should be no problems with multicolinearity. It is interesting that companies with more independent board members in 2012 generated lower ROE than those with less independent board members.

After the first steps it has been concluded that there is no ground to reject the initial model; therefore, the values of the model coefficients were calculated using the SPSS software.

TABLE 3. Initial regression coefficient values

	Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		В	Std. error	Beta			Tolerance	VIF
1	(Constant)	-0.124	0.038		-3.242	0.002		
	Bsize	0.029	0.009	0.234	3.267	0.001	0.921	1.086
	Independence	0.000	0.061	0.000	-0.003	0.998	0.902	1.109
	Cross_boarding	0.010	0.001	0.588	7.822	0.000	0.834	1.198

a. Dependent Variable: ROE.

As we can see from Table 3, the variable Bsize as well as the variable Cross_boarding have a positive relationship with ROE, while the variable Independence has no effect whatsoever. It is interesting that Bsize has almost a 3 times larger impact on ROE than

Cross_boarding. Standardized beta coefficients show how important each variable is to the whole model. We can see that the most important variable is Cross_boarding, half as important is the Bsize, while Independence has no importance. It is also worth taking the p value of the Student criteria for each coefficient: judging from them, all variables are important, excluding Independence. Taking this into account, we improved the regression model removing the variables having no and / or limited statistical importance.

By using the SPSS software, we came up with the values of R squared (0.476) and ANOVA (0) which both indicate that the updated model should be suitable.

Unstandardized co-Standardized Collinearity Model efficients coefficients t Sig. statistics В Std. error Beta Tolerance VIF (Constant) 0.038 -0.124-3.2710.001 Bsize 0.029 0.009 0.234 3.288 0.001 0.924 1.082 Cross_boarding 0.010 0.001 0.588 8.270 0.000 0.924 1.082

TABLE 4. Coefficient values of the improved regression model

a. Dependent variable: ROE.

As we can see after updating our regression model, the coefficient values (excluding Constant) remain unchanged.

Judging from the VIF values, we can conclude that our model does not suffer from multicollinearity. Cook's distance for all variables is below 0.086; therefore, we can conclude that there are no outliers. The next step was to run the Shapiro–Wolk test which produced the following results: p = 0.181, which is above 0.05; therefore, we cannot reject the assumption of the normality of residuals. Because there are no reasons to declare the improved regression model as unreliable, we conclude that the model is suitable and shows the relationship between the size of the board, the average number of other boards occupied by members of a given board, and ROE in selected Lithuanian SOEs.

4. Conclusions

Based on the insights coming from the new public management (NPM) paradigm, resource dependency theory (RDT) and principal-agent theory (PAT), the main hypothesis of the paper was raised stating that the full and proper implementation of corporate governance principles (including the improved composition of the board) should have a positive influence on the SOE management (ROE) efficiency via a better quality of the boards (with the following independent variable tested during the research ((i) the size of the board, (ii) percentage of women on the board, (iv) percentage of female presence in boards, (v) board independence, (vi) CEO duality).

During the research, we identified a significant positive relationship between (i) the number of board members, (ii) the average number of other boards (which fall into our

sample) occupied by members of a given board, and return on equity of Lithuanian SOEs. Data from 2012 were used for the research, but the relationship identified should be useful when discussing or adjusting the requirements for the boards of SOEs in future as well.

The regression model at which we arrived showed that the increasing size of the board by 1 member should increase ROE by 2.9%. Having in mind that the ROE in Lithuanian SOEs has been historically low, such increase would be really significant, but one should not forget that in the sample size we studied the board size varied from 2 to 6 members. Therefore, one should be careful when making assumptions on what effect an increase in board size might have on different-sized boards. Taking this into account as well as all the theoretical insights coming from RDT, we can recommend increasing the number of members on all boards to 6.

The coefficient besides the variable "Cross_boarding" shows us that increasing the average number of other boards (which fall into our sample) occupied by members of a given board by 1 would increase ROE by 1%. Taking this into account, we recommend (again – based on RDT) increasing the so-called "cross boarding" in Lithuanian SOEs. This would increase the board sizes of SOEs leading to the further increase of their ROE. It is not hard to see the logic behind the results we managed to achieve: more board members contribute to a more diverse point of view, and "cross boarding" allows them to gather valuable experience related to their duties at a much faster rate.

Our research showed that in 2012 there was no relationship between the percentage of women on Lithuanian SOE boards and their ROE. We have also found that the CEO duality is probably not affecting SOE ROE, but as there were only 3 cases where CEO duality was present, it is hard to make any reliable conclusions. The fact that the percentage of independent board members does not influence ROE was a surprise for us, but this can also be explained by the fact that a vast majority of independent board members were assigned to SOE boards only a few years prior to 2012, and this might be too short a time to achieve any significant increase in Lithuanian SOEs performance (so, the arguments raised by the principle-agent theory and / or the insights related to NPM were not confirmed during the research).

Thus, based on the results of the analysis performed, we can state that (for the Lithuanian SOEs) the hypothesis raised was partly confirmed showing its strong links to the arguments raised in resource dependency theory (stressing the dependencies of ROE on the size of the board and other aspects of resource management) as compared to the "soft" aspects outlined in the NPM and principle-agent theories which did not reveal any significant links to the "managerial" type of variable raised in our research hypothesis.

REFERENCES

Awan, S. H. (2012). Effect of board composition on firm's performance: a Case of Pakistani listed companies. Interdisciplinary Journal of Contemporary Research in Business, Vol. 3, No. 10, February 2012

Barnhart, S.W, Rosenstein, S. (1998). Board composition, managerial ownership, and firm performance: An empirical analysis. Financial Review, Vol. 33, Issue 4, pp. 1–16, November 1998.

Beasley, M.S. (1996). An empirical analysis of the relation between the boards of director composition and financial statement fraud. The Accounting Review, Vol. 71, pp. 443–465.

Bhagat, S., Black, B. (1999). The uncertain relationship between board composition and firm performance. Business Lawyer, Vol. 54, pp. 921–963.

Bhagat, S., Black, B. (2002). The non-correlation between board independence and long-term firm Performance. Journal of Corporation Law, vol. 27, no. 2, pp. 231–274.

Biggins, J.V. (1999). Making Board Diversity Work, Corporate Board.

Bilimoria, D., Dahlen, D., Zelechowski (2004). Characteristics of Women and Men Corporate Governance – An International Review.

Burke, R. J. (2000). Company Size, Board Size and Numbers of Women Corporate Directors. Springer, Netherlands.

Burke, R. J., Mattis, M. (2000). Women on Corporate Boards of Directors: International Challenges and Opportunities. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Carter, N. M., Joy, L., Narayanan, S., Wagner, H. M. (2007). The Bottom Line: Corporate Performance and Women's Representation on Boards. Catalyst.

Daouk, M., Jamali, D., Safieddine, A. (2007). Corporate Governance and Women: An Empirical Study of Top and Middle Women Managers in the Lebanese Sector.

Druckeriv, P. (1992). Corporate Governance after Enron and WorldCom Applying Principles of Results-Based Governance. Working Paper presented at Insight Conference on Corporate Governance.

Fama, E. F., Jensen, M. C. (1983). Separation of ownership and control. Journal of Law and Economics, Vol. 26(2), pp. 301–325.

Felton, R. (2004). How to separate the roles of chairman and CEO. The McKinsey Quarterly, No. 4. Gallo, M.A. (2005). Independent board directors: How to improve their contribution to the family business. IESE working paper, WP No 589.

Haniffa, R., Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. Journal of Business Finance & Accounting, Vol. 33, No. 7–8, pp. 1034–1062.

Jacobs, S. L. (1985). A well-chosen outside board gives owners peace of mind. Wall Street Journal, p. 23.

Jensen, M., Meckling, W. (1976), Theory of the firm; managerial behaviour, agency costs and ownership structure. Journal of Financial Economics, pp. 305–360.

Kongsted, H. C., Nielsen, K. M. (2004). Board Size Effects in Closely Held Corporations, Centre for Applied Microeconometrics. Institute of Economics University of Copenhagen.

Mak, Y. T., Yuanto, K. (2003). Board Size Really Matters: Further Evidence on the Negative Relationship Between Board Size and Firm Value. Pulses by Singapore Stock Exchange, p. 175.

Mary, A. C. (2005). The relationship between chief executive officer duality and subsequent corporate financial performance. Working Paper, Capella University.

Milliken, F. J., Martins, L. L. (1996). Searching for Common Threads: Understanding the Multiple Effects of Diversity in Organizational Groups. The Academy of Management Review, Vol. 21, No. 2 (Apr. 1996), pp. 402–433.

Organization for Economic Co-operation and Development (OECD) (2005). OECD Guidelines on Corporate Governance of State-owned Enterprises. OECD Publishing.

Rashid, A., Zoysa, A. D., Lodh, S., Rudkin, K. (2010). Board Composition and Firm Performance: Evidence from Bangladesh. Australasian Accounting Business and Finance Journal, Vol. 4(10), pp. 76–95.

Shah, S. Z. A., Butt, S. A., Saeed, M. M. (2011). Ownership structure and performance of firms: Empirical evidence from an emerging market. African Journal of Business Management, Vol. 5(2), pp. 515–523.

Smith, N., Smith, V., Verner, M. (2005). Do Women in Top Management Affect Firm Performance? A Panel Study of 2500 Danish Firms.

State-Owned Enterprise Governance Coordination Unit (2014). Annual SOE Reports, 2010–2013. Uadiale, O. M. (2010). The impact of board structure on corporate financial performance in Nigeria. International Journal of Business and Management, Vol. 5, No. 10; October 2010.

Yasser, Q.R., Entebang, H., Mansor, S.A. (2011). Corporate governance and firm performance in Pakistan: The case of Karachi stock exchange (KSE)-30. Journal of Economics and International Finance, Vol. 3(8), pp. 482–491.

Zelechowski, D. D., Bilimoria, D. (2004). Characteristics of women and men corporate inside directors in the US. Corporate Governance: An International Review, Vol. 12, No. 3, pp. 337–342.