The Impact of CEO Duality on Firm Performance: Evidence From Turkey*

Mesut DOĞAN
Afyon Kocatepe University
Department of Business Administration
Hürriyet Mahallesi Ortaokul Caddesi No:6
Bayat Afyonkarahisar, Turkey

Bilge Leyli ELİTAŞ
Yalova University
Faculty of Economics and Administrative Sciences
Yalova

Veysel AĞCA
Afyon Kocatepe University
Faculty of Economics and Administrative Sciences
Afyonkarahisar

Serdar ÖGEL
Afyon Kocatepe University
Faculty of Economics and Administrative Sciences
Afyonkarahisar

Abstract

Even though it is originated in USA, accounting, auditing and corporate governance scandals (Enron, Worldcom, Parmalat etc.) experienced in 2000s have impacted many countries. One of the crucial reasons of these scandals is fallacious and sided attitudes of managers at decision making, along with the confusing of the concepts of independent auditing and internal auditing. What has been experienced in recent years has made the structure of board of directors much more important and it has increased the quantity of studies on this issue. Therefore, in the purpose of this study is to examine the impact of CEO duality on the firm performance for a sample of 204 listed firms on Istanbul Stock Exchange (ISE) between the years *2009-2010 in Turkey. In this study ROA, ROE and Tobin's q used as a financial performance measures and CEO, AGE, SBD and FFR used for the independent variables. Multiple regression analysis and t-test are used for the empirical investigations. The results show that CEO duality has a negative impact on the firm performance, consistent with the agency theory.*

Keywords: CEO Duality, Firm Performance, Agency Theory, Stewarship Theory.

1. Introduction

The main responsibility of a chief executive officer (CEO) is to initiate and implement the company's strategic goals, plans and policies. The board of directors on the other hand is responsible for carrying out company's activities in such a way that would benefit steadily shareholders in the long term. One of the important responsibilities of boards of directors is to audit current or future administrative activities of the person fulfilling the role of CEO. Since the person occupying the president of board of directors' position should carry out important auditing and monitoring activities, it is suggested that chief executive officer and president of board of directors should be different persons (Aygün and İç, 2010).

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This study uses the concept of CEO duality to indicate the case where chief executive officer is also a member of board of directors. When academic studies concerning the subject are reviewed, it is observed that studies of Gill and Mathur (2011b), Aygün and İç (2010), Ujunwa (2012), Chen et al. (2005) have determined a negative relation between duality and company performance. On the contrary the studies of Yu (2008), Gill and Mathur (2011a), Peng et al. (2007), Baptista et al. (2011), and Lam and Lee (2008) have found a positive relation between duality and company performance. Yu (2008), Valenti et al. (2011), Abdullah (2004) and Faleye (2007) have concluded that duality has no effect on company performance. The interest in this subject is growing due to the different conclusions in literature concerning duality and the obscurity of its effects on performance.

This study aims to measure the effect of CEO duality (CEO being also a member of board of directors) on company performance. For this purpose, data of 204 companies, which were active in Istanbul Stock Exchange (ISE) between the years 2009-2010, has been used. The study uses Return on Assets (ROA), Return on Equity (ROE) and Tobin's q indicator as performance indicators.

Study consists of six sections. The second section after the introduction contains conceptual framework. Third section is concerned with empirical researches on CEO duality and their results. Forth section explains the study's model and variables. Fifth section contains the results of empirical analysis. And a general assessment of the study has been put forth in the last section as well as some suggestions.

2. Conceptual Framework

2.1. Agency Theory

Corporate governance has an increasing importance especially with regard to supervision of board of directors. The studies concerning corporate governance are mostly based on agency theory (Heenetigala and Armstrong, 2011: 3)[1]. According to agency theory, company's partners and directors are different individuals. Shareholders are distributed; they are many in number and powerless in agency theory and consequently company resources are controlled by the management. Since shareholders are many, supervision role of management increases (Elloumi and Gueyié, 2001: 32).

In agency theory, shareholders and board of directors of the company want to protect themselves against over costs (Elloumi and Gueyié, 2001: 24). The costs that would arise out of the possible conflicts of interest between company's shareholders and its managers are called agency costs in literature (Ercan and Ban, 2005: 239).
Agency theory is focused on minimizing the conflict of interest between directors and representatives (agents) and maximizing the revenue of shareholders. Therefore, according to agency theory company value is considered to be maximized with optimum measures of supervision such as divided leadership, directors from outside and committees of board of directors (Heenetigala and Armstrong, 2011: 5)[2]. In case of duality, company's value is negatively affected on the contrary.

Agency theory argues that chief executive officer may exert his/her authority in the processes of decision making and consequently board of directors may not be able to assess chief executive officer in an effective way in case of duality (Aygün and İç, 2010).

Hypothesis 1: According to agency, theory there is a negative correlation between duality and company performance.

2.2. Stewardship Theory

Another theory found in literature review concerning the effect of duality on company performance is Stewardship Theory. Stewardship theory is considered to be the alternative of agency theory. Stewardship theory suggests that the representative would act according to company's purposes due to strong relation between company's purposes and the expectations of the business owner. According to this theory, the expectation of business owner from the representative is to protect the interests of company's shareholders and their own interests (Akın, 2004: 134-135). According to stewardship theory, which is considered to be the alternative of agency theory, duality creates an effective ease in actions of CEO. Therefore, company performance increases (Sheikh and Wang, 2012).

[1] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1971927 Obtained on: 10.09.2012
[2] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1971927 , Obtained on: 10.09.2012

In conclusion stewardship theory argues that in case of duality the decision making processes would speed up and consequently company's performance would increase.

Hypothesis 2: According to stewardship, theory there is a positive correlation between duality and company performance.

3. Literature Review

This section consists of literature review concerning the relation between CEO duality and company's performance. When analyzed in general, the results of the studies may be categorized in three groups. CEO duality has a positive effect on company performance; CEO duality has a negative effect on company performance; there is no relation between CEO duality and company performance. Next section briefly summarizes the studies in question.

Abdullah (2004) has analyzed the relation between board of directors, duality and company performance. According to the results of the study, no relation has been found between duality and company performance.
Chen et al. (2005) studied the partnership structure, company performance and dividend policies in companies operating in Hong Kong and found a negative relation between duality and Tobin Q (for large companies). But no relation has been found between duality and ROA or ROE.

Faleye (2007) concluded that duality has no significant effect on company performance in a section of the study concerning the structure of corporation leadership.

Peng et al. (2007) found that duality has a positive effect on company performance when concluding their study on the relationship between duality and company performance in China.

Chen et al. (2008) studied the relation between duality and company performance. According to the results of the empirical research, no significant relation has been found between duality and company performance.

Yu (2008) studied the effect of duality on company performance in the companies operating in China. No relation has been found between duality and company performance in the period of 2000-2001. But a positive relation has been found between duality and company performance in the period of 2002-2003.

Lam and Lee (2008) have studied the relation between duality and company performance in Hong Kong. According to the results of the empirical study, there was a negative relation between duality and accounting performances in family businesses and positive relationship in other businesses.

Ehikioya (2009) analyzed structure of corporation governance and company performance in developing economies on the case of Nigeria. According to the results of empirical study, a negative relation has been found between duality and company performance indicators (ROA, ROE, price-earnings ratio - PE, TOBIN's Q). But this result was not statistically significant.

Ramdani and Witteloostuijn (2010) studied the effect of independent member of board of directors and duality on performance of companies operating in Indonesia, Malaysia, South Korea and Thailand. A negative relation has been found between the size of board of directors and company performance, and a positive relation has been found between duality and company performance as results of the study.

Aygün and İç (2010) have studied the effect of CEO duality on company performance. The results of study showed that duality has a negative effect on company performance in accordance with agency theory.

Baptista et al. (2011) have studied the relation of duality and company performance using data of the year 2008 in Brazil. According to the results of empirical study, a positive relation has been found between duality and ROE (Return on Equities), one of the indicators of company performance. A positive relation has been found between other indicators of company performance such as ROA (Return on Assets), ROC (Return on Capital), MTBV (Market to Book Value) and company performance but this relation was not statistically significant.

Gill and Mathur (2011a) have studied the effect of corporate governance on company performance of the companies operating in service sector in Canada. According to the results of analysis of the period of 2008-2010, a positive relation has been found between profitability and duality.

Gill and Mathur (2011b) have studied the relation between the size of board of directors, duality and the value of companies operating in manufacturing sector in Canada. According to the results of empirical study, a negative relation has been found between the size of board of directors and value of the company but there was a positive relation between duality and value of the company. Additionally sizes of board of directors, company performance and expected growth have been found to have a positive effect on the value of company.

Valenti et al. (2011) have studied the effect of corporate governance on company performance over 90 companies selected in America. No statistically significant relation has been found between duality and indicators of company performance.

Ujunwa (2013) has found a negative relation between the size of board of directors, duality, gender variety and company performance as a result of the study on 122 companies selected in Nigeria using the data belonging to the period of 1991-2008.

Yıldız and Doğan (2012) have studied the effect of CEO duality on mutual fund companies' performances. As a result of the study, CEO duality has been found to have a positive effect on the performances of mutual fund companies.

4. Methodology

This study analyzes the effect of CEO duality on company performance. In this study, data of 204 companies, which were active in Istanbul Stock Exchange (ISE) between the years 2009-2010, has been used. Analysis did not include the companies operating in financial sector due to their different financial structures. All data utilized in the study have been obtained from the official web site of ISE[3] . Multiple regression and t test have been used in empirical analysis.

Two different performance indicators have been used in academic studies concerning the effect of the case where CEO is also a member of board of directors on financial performances of companies. According to the first approach, criteria based on accounting have been taken as financial performance indicators as it is in Baptista et al. (2011), and Lam and Lee (2008). According to the second approach, criteria based on market have been used as it is in the studies of Chen et al. (2005), Ehikioya (2009). In the study, accounting and market based financial performance indicators have been used as dependent variables. The main independent variable that has been used in the study is the case in which chief executive officer is also a member of board of directors. Additionally three control variables have been used.

Model I: $PERFORMANS\ (ROA)_{it} = \beta_{it} + \beta 2\ CEO_{it} + \beta 3\ AGE_{it} + \beta 4\ SBD_{it} ++ \beta 5\ FFR_{it}\ e_{it}$
Model II: $PERFORMANS\ (ROE)_{it} = \beta_{it} + \beta 2\ CEO_{it} + \beta 3\ AGE_{it} + \beta 4\ SBD_{it} ++ \beta 5\ FFR_{it}\ e_{it}$
Model III: $PERFORMANS\ (Q)_{it} = \beta_{it} + \beta 2\ CEO_{it} + \beta 3\ AGE_{it} + \beta 4\ SBD_{it} ++ \beta 5\ FFR_{it}\ e_{it}$

The dependent and independent variables that have been used in the study are shown below:
Return on Assets (ROA): It is calculated by proportioning Net Profit of the Period to Total Assets.
Return on Equities (ROE): It is calculated by proportioning Net Profit of the Period to Total Equities.
Tobin's q (Q): It is obtained by proportioning market value to book value.
Duality (CEO): In case where senior management is also a member of board of directors CEO is defined as CEO=1 and in other case it is defined as 0.
Free Float Rate (FFR): It is the rate of free float of the business.
Age of the Company (AGE): It is obtained by deducting establishment year from the year of financial statement.
The Size of the Board of Directors (SBD): It shows the total number of members in board of directors.

5. Findings

Multiple regression and t test have been used in empirical analysis. Table 1 shows the results of t test concerning dependent and independent variables. The companies in Table 1 are divided into two groups according to their duality state and the performances of two groups have been analyzed in order to see if there is a difference.
When t test results in Table 1 are analyzed, the ROA, ROE and Q values in the companies where CEO is also a member of the board of directors are seen to be 0.04; -8.4 and 1.87 respectively while for companies which does not have CEO duality these values are found to be 2.3; -4.3 and 2.34 respectively.

[3] http://www.imkb.gov.tr/FinancialTables/companiesfinancialstatements.aspx?sflang=tr

Performance of the companies where CEO is not a member of board of directors is higher than the performance of the companies with CEO duality. In other words, it could be said that the case in which chief executive officer is not a member of board of directors positively affects company performance.

In t test table, the number of members of board of directors for the companies which have duality has been calculated as 6.90 while the same number for the companies which do not have duality has been calculated as 6.32. In other words, there are more members in board of directors of the companies, which have CEO duality. Same table shows that average age of the companies, which have CEO duality is 37.53 and average age of the companies which do not have CEO duality is 38.21. In conclusion, the companies, which have different individuals as chief executive officer and member of board of directors are more experienced, compared to the ones, which have same people, their members of board of directors are less and their performance is higher.

Table 1: T test

VARİABLES	DUALITY FIRMS			NON-DUALITY FIRMS			MEAN DIFFERENCE	T-TEST
	OBSV.	MEAN	STD. ERROR	OBV.	MEAN	STD. ERROR		
ROA	186	0,0004	0,001	222	0,023	0,006	-0,022	-2,678***
ROE	186	-0,084	0,185	222	-0,043	0,301	-0,041	-2,345***
Q	186	1,873	0,072	222	2,345	0,285	-0,472	-2,422***
AGE	186	37,534	0,754	222	38,217	0,521	-0,638	-1,254*
SBD	186	6,90	0,418	222	6,32	0,527	0,580	2,107*
FFR	186	43,112	1,354	222	42,303	0,563	0,809	1,423

*** Correlation is significant at the 0.01 ** Correlation is significant at the 0.05 * Correlation is significant at the 0.10

Table 2 shows the results of regression analyses, which indicate the relation between CEO duality and company performance indicators such as ROA, ROE and Q according to the model, which has been designed above.

Table 2: Results of Regression Analysis

VARİABLES	MODEL1 ROA	MODELII ROE	MODEL III Q
CEO	-0,305***	-0,248***	-0,114**
AGE	-0,168**	-0,115*	-0,087
SBD	-0,312***	-0,287***	-0,139*
FFR	0,298	0,263	0,135
F statistics	18,625***	15,364***	6,200***
Adj. R^2	0,197	0,171	0,098
Observation	408	408	408
Durbin-Watson d	1,895	1,912	2,005

*** Correlation is significant at the 0.01 ** Correlation is significant at the 0.05 * Correlation is significant at the 0.10

According to Table 2, the results of regression model may be shown mathematically as below:

Model I: $PERFORMANS\ (ROA)_{it} = \beta_{it} + \mathbf{(-,305)}CEO_{it} + \mathbf{(-,168)}AGE_{t} + \mathbf{(-,312)}SBD_{it} + \mathbf{(,298)}\ \beta 5\ FFR_{it}\ e_{it}$
Model II: $PERFORMANS\ (ROE)_{it} = \beta_{it} + \mathbf{(-,248)}CEO_{it} + \mathbf{(-,115)}AGE_{it} + \mathbf{(-,287)}SBD_{it} + \mathbf{(,263)}\ \beta 5\ FFR_{it}\ e_{it}$
Model III: $PERFORMANS\ (Q)_{it} = \beta_{it} + \mathbf{(-,114)}CEO_{it} + \mathbf{(-,087)}AGE_{it} + \mathbf{(-,139)}SBD_{it} + \mathbf{(,135)}\ \beta 5\ FFR_{it}\ e_{it}$

When the results of analysis have been reviewed, statistically significant relations are found between the independent variables of *CEO, AGE* and *SBD*, and dependent variables of *ROA, ROE* and *Q*.

These independent variables are affecting dependent variables. There is a negative relation between duality, which is the main independent variable and ROA, ROE and Q. In other words, company performance is affected negatively in case chief executive officer is also a member of board of directors. In conclusion, H1 hypothesis is agreed upon. A negative relation has been found between duality and company performance. These results are in accordance with agency theory.

A statistically significant and negative relation has been determined between second independent variable which is the age of company, and ROA and ROE. But no relation has been found between Q and the age of company.

A negative relation has been found between the third independent variable, which is the number of members in board of directors, and company performance. In other words, it is observed that the increase in the number of board of directors' members causes decrease in company performance. When academic studies concerning the relation between the size of the board of directors and company performance are reviewed, results have been in the same direction with the studies of Pathan et al. (2011), Staikouras et al. (2007), Adusei (2011), Agoraki et al. (2010) and Aygün et al. (2010); but the results were in the opposite direction with the studies of Tanna et al. (2007)[4] and Adams and Mehran (2005). There were no significant results concerning the relation between last independent variable, which is the free float rate and company performance.

6. Conclusion

This study aims to measure the effect of CEO duality (CEO being also a member of board of directors) on company performance. For this purpose, data of 204 companies, which were active in Istanbul Stock Exchange (ISE) between the years 2009-2010, has been used. Multiple regression and t test have been used in empirical analysis. When the studies concerning the relation between duality and performance have been reviewed, the results found have been in the same direction with the studies of Gill and Mathur (2011b), Aygün and İç (2010), Ujunwa (2012), Chen et al. (2005) while they were in the opposite direction with the studies of Yu (2008), Gill and Mathur (2011a), Peng et al. (2007), Baptista, Klotzle and Melo (2011), Lam and Lee (2008), Yu (2008), Valenti et al. (2011), Abdullah (2004), Faleye (2007), Yıldız and Doğan (2012).

A negative relation has been determined between duality and company performance in all three models at the end of the analysis. In other words, the case in which CEO is also a member of board of directors negatively affects both accounting based performance indicators (ROA and ROE) and market based performance indicator (Q). When assessed from the perspective of the companies effective in ISE, it is to the benefit of the companies to have different CEO and member of board of directors. These results are in accordance with agency theory.

As the results of t test show, Tobin's q (Q) indicator, in other words market to book value rate is seen to have a better performance in the companies without CEO duality. When assessed from the perspective of the investors who want to invest in stocks, if the selection of the company to invest is made from within the companies of which CEO is not a member of the board of directors, the results would be more positive. When analyzed with regard to ROE, the companies, which do not have CEO duality, would again be preferred from the perspective of investor who is also a shareholder. Investor would obtain better results in companies without CEO duality in terms of both price and share of profit.

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