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Does the Family Relationship of the CEO-Chairman Matter in Corporate Performance? Evidence from an Emerging Economy

Rana Mazumder [a], Ashok Chakraborty [b], Jahedul Alam Bhuiyan [c], Babe Asma[d]*

[a] *School of Business & Economics, United International University, Dhaka, Bangladesh*
[b] *Ranada Prasad Shaha University, Narayanganj, Bangladesh*
[c] *Information Operations & Technology Management, University of Toledo, Toledo, USA*
[d] *Department of Mathematics & Statistics, University of Toledo, Toledo, USA*
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A B S T R A C T

There is minimal study on how the familial connection between the CEO and Chairman of the Board impacts the performance of a company, although we find a wealth of research on the correlation between CEO duality and company success in the literature (i.e., the CEO serves as both Chairman of the Board and CEO). We refer to this relationship as a quasi-CEO-Chairman duality and examine its influence on company performance within the larger context of a developing economy, Bangladesh. Furthermore, as we take Bangladesh's context into consideration, there hasn't been any past research on this topic. Though a significant regulative action has been taken with regards to CEO duality in the 2012 revision of Bangladesh Securities and Exchange Commission (BSEC)'s Corporate Governance Index, no policy or other regulatory measures have been taken to address such familial version of CEO duality.

Keywords: Family relationship, Corporate governance, CEO-Chairman duality, Firm performance, Emerging economy

1. Introduction

Well-functioning corporate governance is one of the crucial prerequisites for any institution's better operation and continuous development. This is an even more significant truth in the case of corporate organizations. Along with other dynamic corporate governance components, the board's structure is instrumental in achieving corporate resilience (Adedokun, 2003). The corporate governance guidelines of Bangladesh are not still that much perfect as like those of the equivalent emerging countries (Bhowmik and Islam, 2013). In short, the board's leader, a chairman, leads the policymaking, and the Chief Executive Officer (CEO) leads the execution of the policies. If an individual does both jobs, then we call it CEO-duality. Chen et al. (2005) find that CEO duality intensifies agency problems in firms and affects the firm performance. Many tests have already been done on the identification and the impacts of CEO duality. However, this study investigates a different form of such duality. Because the familial connection between these two positions may still create the same problems as when the same person holds the same position. Some regulatory issues and policy formulation insights also highlight the importance of analyzing the impact of CEO-duality, though they still miss addressing another form of CEO-duality existing in the organizations.

A dual CEO can increase the firm's value by working closely with the board under heightened economic policy uncertainty and in turnaround situations (Chang et al., 2011). A dual CEO also enjoys unitary command, which helps reduce information costs and protects the firm from a hostile takeover. However, it becomes way more straightforward for a CEO to assert more control on the board and align personal interests with the management more than the shareholders when playing the dual role. This is because CEO duality augments the authority of a CEO in comparison to the overall power of the board, which results in a significant reduction of the power the board is expected to have to monitor and control the CEO (Tang, 2017). Nonetheless, evidence of the connection between CEO duality and firm performance is diversified and confounding. Several scholars observed that CEO duality hurts a firm's financial performance (Chen et al., 2005). In comparison, others revealed a positive association between them (Boyd, 1995). Still, some others find no relationship between CEO duality and firm performance (Abdullah, 2004). These findings, adhered to by the agency and stewardship theories, call for re-examining the link between Chairman and CEO and its effect on corporate performance. It also remains unclear whether role separation is enough or an acceptable solution to CEO-duality and the firm's financial performing paradigm.

Here, we use data from an emerging economy named Bangladesh to conduct the study. We note that the existing regulations in Bangladesh merely concentrate on the role separation between the CEO and the chairman in the board. Hence, an empirical study on the association between CEO- chairman family connection and the performance of firms is timely to understand whether it is enough to have a separate person in the position of CEO and Chairman or separate family members are required in these leadership positions to ensure good governance in the firms.

In general, family dominance in the structure and functioning of boards is frequently observed in emerging economics, The existence of such family preeminence influences firm performance in various ways including a limited contribution by the outside directors (Peng et al. 2007). Schulze et al.

(2001) found that the continuation of family dynamics and control dilutes the board's effectiveness. Also, outside directors on the board are likely to be more observant in administering the CEO's decisions and activities to protect the interest of the shareholders (Muravyev et al., 2013). Though the other issues like the presence of institutional or foreign owners, adoption of environmental issues influence the firm profitability (Ali et al., 2023, Saha et al., 2024) or the infrastructural facility and the employees' motivation affect the progress of the entity (Bhowmik et al., 2017), a better role from the CEO is influential. Therefore, to achieve goal congruence by overcoming the agency problem or to increase firm performance, an investigation of the continuation and impact of the family connection between the CEO and Chairman is necessary. Apart from having the firm-level implication of such an investigation, the regulatory relevance of such a study is worthwhile. Our study fills this void by linking the CEO-Chairman family relationship with corporate performance. We find that there is a significant negative impact the CEO-Chairman family connection the performance of the firm. Here, we measure the performance of the firm using the constructs ROA-return on assets and ROE-return on equity. The paper also finds that if there is a family relation the CEO-Chairman, the shareholders' return, which is measured using a construct called Tobin's Q, does not change A plausible explanation in this regard could be that the overall efficiency of the Dhaka stock market is very poor due to the two stock market scams that occurred in 1996 and 2011 followed by regulators' failures to act against the perpetrators. These findings would enlighten the regulatory bodies (such as the Bangladesh Securities and Exchange Commission and Ministry of Finance) for drafting a sound governance system for corporate firms. More relevance of this study for policy formulation purposes is discussed in a later part.

The study expects to add value to CEO duality and corporate performance narrative in some ways we will discuss here. First, this research is the first in the context of Bangladesh explores the link between the CEO-Chairman family relationship and the performance of the firm. We believe that our results will assist scholars and policymakers of Bangladesh to design an effective governance mechanism for corporations. Second, previous studies uncover the connection between CEO duality and the firm's performance, mostly for advanced economies. We expand the CEO-duality study by testing the CEO-Chairman family relationship's impact on the firm's performance in developing economies. Thus, the research expects to assist policymakers in emerging economies as well where family control in the board is observed to be a vital feature of the companies. Third, it asserts and spreads the pertinence of agency theory to study the CEO-Chairman family relationship, which has hardly been studied thus far. Finally, we provide new insights into governance literature that CEO-Chairman family connection has negative implications for corporate governance in emerging economies.

The remainder of the study is organized as follows. Section 2 briefly reviews the policy framework for board composition and role identification in Bangladesh. Section 3 consults with relevant prior literature and Section 4 outlines our hypothesis and research model. Section 5 discusses research methods. Section 6 describes our results and Section 7 concludes with some policy recommendations.

2. Board Composition and Role Identification in the Context of Bangladesh

The companies of Bangladesh have a simple form of board that is unified and takes care of both management and supervisory activities. So, the two main leadership roles can be performed by a single person, i.e., dual CEO, to control the board's agenda and lead the operations of the decisions taken. Rashid (2011) refers that it is common to find dual CEOs in many listed companies of Bangladesh, because of such single-tier board structure. Besides, akin to other emerging economies, Bangladesh has a vast number of family firms in the DSE listed firms where family members hold the CEO and Chairman positions. This phenomenon is very peculiar because although the CEO and the Chairman are individually different persons, they are likely to perform the role like the dual CEO (In this paper, we term this as "quasi-dual CEO") due to their close family relationship.

Importantly, Securities and Exchange Commission (SEC) of Bangladesh, a regulatory body, introduced an index of guidelines, for the first time in February 2006, for corporations with an assessment to certifying accountability of firms in addition to protecting the interests of the shareholders. Two notable features of this notification were that (1) the directors working in the board should include in any case one independent director on boards out of the total ten members, and (2) there should be no CEO duality. This notification brought a positive change in the listed companies in Bangladesh in adopting and disclosing compliance requirements as evidenced from several studies (Mohiuddin et al., 2008; Uddin & Chowdhury, 2008, Das et al., 2020). However, the notification was issued under the "comply basis", meaning that firms could adopt the provisions partially and clarify the explanations for non-compliance if there is any (Biswas, 2012). Then, in August 2012, SEC revised the governance guidelines for listed firms. Some of the key features of this revised guidelines were (1) the board size, which should not be less than 5 and more than 20 members, where the number of independent directors should increase significantly and be of minimum of one-fifth of total board members ; (2) no dual CEO; (3) the number of independent directors should be of minimum of three when forming an audit committee; and (4) a certificate of compliance from the selected professionals. This notification was also issued under the "comply basis," and it did not address the catalyzing issue of familial relationships involving the CEO and Chairman in the board. It is argued that family control could pessimistically influence the overall efficacy of the board which works as the top-level unit in the firms to make decisions and supervise their execution (Bugra, 1994).

In the case of companies operating in Bangladesh , Uddin and Chowdhury (2008) finds significant number of family connection between the CEO and the chairman. The matter of family control was further supported numerically in the study conducted in 2007 by Imam & Malik which revealed that upper 10, upper 5, and upper 3 stockholders in Bangladesh hold typically 41.06%, 36.96%, in addition to 32.33% of the total shares, respectively, in the market registered corporations in Bangladesh. This matter of the presence of a familial connection between CEO and Chairman in Bangladesh was slightly addressed by Biswas (2012) where he said that role parting between CEO and the Chairman would not come into use if both the CEO and Chairman in the board are from the identical household. He also noted that the question of the independence of the independent directors remains a big issue in improving corporate governance practices in Bangladesh (Biswas, 2012) Among many things, a different magnitude of role identification of the CEO and Chairman in the board of directors is a significant issue in the avenues of the governance related to corporate practices of Bangladesh. To this tune, we conduct the study to research the influence of the family relationship of CEO-Chairman on firm accomplishment, measured in terms of the financial numbers, to assist policymakers to design a suitable code of governance for Bangladesh corporates.

3. Extant Literature

Miller & Triana (2009) refers that a non-executive Chairman, different from the CEO, can enhance a superior level of corporate openness and operational efficiency. Without such split of roles, firm managers can manipulate the process by setting the board agenda in their favor and creating information asymmetry (Soloman, 1993) or influence board composition, tenure, and corporate strategy to build their empire (Pearce and David, 1987). Apart from these thoughts and findings, there are some other justifications for CEO duality as well. The other theory, from the contrasting perspective, stewardship theory postulates that executives are innately faithful and dependable agents of the principal and take care of the business resources in the best interest of the principals (Donaldson & Davis, 1994, Saha & Bhowmik, 2020). As per the thought of the theory, same person as the CEO and Chairman can result better company performance through arrangement of immediate strategy development and implementation (Anderson and Anthony, 1986). The CEO can better comprehend policy formulation and execution more promptly, accurately, and effectively when these two roles are merged. Stewardship theory suggests that CEO non-duality is needless as the agents serve in the best interest of their corporations, and they seem to be not necessarily induced by their personal interests (Rashid, 2011, Chakraborty et al., 2017). Moreover, we also find other forms of bad financial reporting even if there is CEO non-duality. Because excess amount of free cash flows facilitates earnings management irrespective of such governance status (Saha et al., 2016). Beyond the impact of the other factors like the adoption o technology, big data infrastructure, or more ratio related disclosures might play better roles for good governance (Bhuiyan et al., 2024, Uddin & Mazumder, 2016)

Along with this theoretical reasoning, board structure in diverse regions around the globe revealed that UK companies are less interested in adopting CEO duality as only 10 percent of the publicly listed companies are found to blend these two roles. Kang and Zardkoohi (2005) finds that most of the companies in Europe also split CEO from Chairman. In contrast, uniting CEO-Chairman is found to be a common practice in the USA, as approximately 70%-80% of the US firms have a dual CEO (Rhoades et al., 2001). Conversely, the structure and leadership of companies' board in Asian market are significantly intermingled with both of such edges. Based on the context of a contingency model, Finkelstein and D'Aveni (1994) advocates for a more dynamic and strong board and asserts that the benefits of unitary commands from a board with CEO duality be greater than the hazards of CEO entrenchment. Moreover, Peng et al. (2007) exerted that firms of elevated dynamism setup and scanty munificence will get more benefits from CEO duality. Other studies sensed a confirmed correlation amongst the little firms and their CEO duality in addition to asserting that larger companies might receive extended benefits from non-CEO duality (Palmon & Wald, 2002).

Hasan et al. (2014) stated that the firms with familial connections in the boards disclose in their financials a lot lesser than the non-family firms. Family-controlled firms can also appoint directors per their own accord and thereby reduce the independence of the board. Therefore, it seems better for family-controlled firms to substitute family members in critical leading roles with non-family experts to bring more accountability and professionalism into the business operation (Levinson, 1971). However, there is a shortage of empirical evidence to see if the status of a CEO working as a chairman is advantageous for family firms or else what happens on the way to the corporate financial performance of firms when there is a quasi-dual CEO.

4. Hypothesis

The proponents of agency theory strongly believe that individuals are generally opportunistic and having the resources to do so, managers would exploit their interests (McCullers and Schoreder, 1982). Several earlier experimental tests further support CEO non-duality to augment firm performance (Chen et al., 2005). However, such separation may not be conducive for firms where family members hold key positions in the management and board (Cheung et al., 2004; Lei and Song, 2004). Not surprisingly, Jiang et al. (2022) find evidence that leaders without family connections with companies are more capable of earning management than those with family ties with companies. As a result of basing on the agency theory the paper hypothesizes that:

***$H_{1:}$* Appointing both the CEO and Chairman from a same family will negatively affect the performance of the firm.**

5. Research Methodology

5.1 Sample and Data

The analysis is predicated on all non-financial corporations registered on the Dhaka Stock Exchange (DSE), the top stock exchange in Bangladesh, under ten distinct industry types. Initially, we got 683 firm years, but due to data insufficiency and the inclusion of market-based firm performance along with accounting measures, we finally included 522 observations in our sample. The data period is for 5 years, from 2010 to 2014. Data is collected manually from the annual reports of the companies selected from almost all the industries in Bangladesh. Table 1 represents this distribution.

Table 1: Industry Wise Sample Distribution

S.L.	**Industry Name**	**Total Firms (P)**	**Selected Firms (S)**	**Percentage(%)**
1	Ceramics Sector	5	5	100%

2	Cement	7	7	100%
3	Engineering	36	24	66%
4	Food & Allied	18	18	100%
5	Fuel & Power	19	18	95%
6	IT Sector	8	6	75%
7	Pharmaceuticals & Chemicals	29	26	90%
8	Tannery Industries	6	5	83%
9	Telecommunication	2	2	100%
10.	Textile	36	28	78%
Total no. of firms		166	139	84%

5.2 Empirical model and variable definition

The study looks at the connection between the CEO and chairman's family dynamics and the company's financial performance. While return on asset (ROA) assesses corporate success, Tobin's Q is used to represent market performance. The CEO–Chairman family link is quantified by the variable family duality dummy (DUALFAM). To make sure that our results are robust, we also include a couple of control variables. The model looks like this:

$PERFORMANCE = \beta_0 + \beta_1 DUALFAM + \beta_2 SIZE + \beta_3 LEVERAGE + \beta_4 INVESTMENT + \beta_5\ ADVERTISE + \beta_6 LIQUIDITY + \beta_7 ASSETTURN + \beta_8 DPS + \beta_9 AUDIT + \beta_{10} BODOWN + \beta_{11} INSTOWN + \varepsilon$ [Model 1]

Where performance is the company's monetary performance indexed by the ROA and market performance by the Tobin's Q, highly used in empirical research (Bai et al., 2004). Two measures are extensively applied as an indicator to measure the performance of the companies in the relevant finance and accounting research (Lam & Lee, 2008;Rutledge et al. 2016).

Appendix 1 presents definitions of the variables. DUALFAM indicates family duality dummy, and the remaining are control variables with an error term.

The variable SIZE represents the company size taking a very useful measure by logging total amount of assets. In a developing country perspective, resources and their optimal utilization are considered one of the dominant factors in determining capacity (Bhuiyan & Mazumder, 2024). That's why the log measure is taken as a variable measure to represent firm size. LEVERAGE presents the ratio between debt to total assets; INVESTMENT marks a ratio between capital expenditure and total assets. The control variable AUDIT represents the affiliation with big 4 audit firms in the world like KPMG, PwC, EY and Deloitte. Given the similar types of concepts used by Cheung et al., 2004; Lei and Song, 2004; Chen et al., 2005 The dummy variable DUALSAME represents the dichotomy of the CEO along with chairman meaning identical individual is having a post of both the CEO along with Chairman where DUALDIFF indicates a situation when a CEO and a Chairman are independently unlike though they are from the identical family. The next variable DUALDPSE means the CEO-Chairman seem separately distinct though happen to be from the identical family. DUALDPDF, the last dummy variable, means CEO and Chairman are individually different and come from different families.

6. Results

6.1 Descriptive Statistics

Table 2 describes an empirical model supported by descriptive statistics, which include several key variables. The average profitability of examined companies is nearly 6%, going up to a maximum rate of 28.6%. This profitability was measured using ROA (return on assets). TOBINQ, used as a market-based performance parameter, indicated that the firms were generally overvalued at approximately three times their actual worth, with rates varying between 0.22—roughly double its least value—and below thirtyfold that (.22 ~ +29). Additionally, in around two-fifths, or about forty percent, based on five hundred twenty-two observations, CEOs also held chairman positions or had familial ties within senior management, according to the DUALFAM metric, indicating such practices are common among these corporations.

Table 2: Descriptive statistics

Variable	No. of observation	Mean	Standard deviation	Minimum	Maximum
ROA	522	0.054	0.071	-0.223	0.286
TOBINQ	522	3.008	3.925	0.225	28.464

DUALFAM	522	0.389	0.488	0	1
SIZE	522	7.032	1.683	0	11.750
LEVERAGE	522	0.532	0.434	0.018	4.475
INVESTMENT	522	0.052	0.076	0	0.656
ADVERTISE	522	0.004	0.015	0	0.166
LIQUIDITY	522	0.079	0.153	-1.264	1.033
ASSETTURN	522	0.870	0.859	0.003	5.998
DPS	522	2.318	7.536	0	90
AUDIT	522	0.192	0.394	0	1
BODOWN	522	0.394	0.227	0	0.90
INSTOWN	522	0.144	0.132	0	0.78

This portion analyses several financial variables of sample firms. The LEVERAGE variable indicates that 53.20 % of the total assets are financed by debt capital, representing the balance between a company's use of debt and equity for financing purposes. Approximately 0.4% of total assets make up promotional expenditures according to ADVERTISE variable calculations while ASSETTURN analysis reveals that companies generate sales equating to roughly 87% expenditure on their physical resources or assets in volume terms. DPS exhibits significant fluctuations when it comes to cash dividend payments among different businesses as suggested through standard deviation measures with AUDIT figures showing about one-fifth (or nearly exactly 20%) being audited annually by big four audit entities partnered globally such as KPMG, EY, PwC & Deloitte within Bangladesh. Another significant statistic shown by the BODOWN variable represents on average board memberships as they own nearly 40% of the total corporation ownership, which signals about the board's power in controlling and decision making. On the other hand, institutional ownership represented by INSTOWN shows an average estimate of 0.144 which signifies the proportion of institutional ownership is not satisfactory which ultimately results in very scanty pressure from this part.

6.2 Univariate Analysis

Table 3 represents a univariate analysis where firms are categorized under two heads i.e., family relation and non-family relation. Among 522 observations 203 firm years have been found with the existence of the connection which is familial concerning the CEO and the chairman. No evidence of family relationships has been found for the rest of the observations. There are four specific groups of characteristics related to performance, firm specific factors, ownership, and governance which have been analysed by performing t-test (parametric) and Z test(non-parametric) to find mean and median differences respectively. Performance characteristics include the return on assets (ROA), Tobin'Q, revenue, net profit, and asset turnover.

Table 3: Univariate Analysis

Variable	Mean				Median			
	Full sample (522)	Family relation (203)	Non-family relation (319)	Difference (t-value)	Full sample (522)	Family relation (203)	Non-family relation (319)	Difference (z-value)
Performance Characteristics								
Return on asset	0.054	0.037	0.065	-0.029***(-4.58)	0.045	0.029	0.056	-0.027*** (-6.32)
Tobin’s Q	3.01	3.17	2.90	0.27 (0.77)	1.79	1.67	1.90	-0.23* (-1.65)
Revenue (in million)	4,421	2,598	5,581	-2,983** (-2.53)	1,222	979	1,479	-500** (-2.32)
Net profit (in million)	502	286	640	-354** (-2.18)	67	49	109	-60*** (-4.74)
Profit margin	0.098	0.108	0.091	0.017 (0.25)	0.111	0.084	0.130	-0.046*** (-4.80)
Asset turnover (times)	0.87	0.84	0.89	-0.05 (-0.68)	0.62	0.68	0.58	0.10 (1.40)
Firm-specific Characteristics								

Total asset (in million)	6,841	3,850	8,744	-4,894*** (-3.37)	1,846	1,759	2,071	-312** (-2.28)
Market capitalization (in million)	14,239	12,391	15,415	-3,024 (-0.63)	2,491	2,123	3,314	-1,191*** (-3.22)
Market to book ratio	6.60	7.67	5.91	1.76 (1.43)	2.67	2.41	2.74	-0.33 (-0.24)
Leverage	0.53	0.53	0.53	-0.00 (-0.01)	0.48	0.51	0.47	0.04* (1.90)
Investment intensity	0.052	0.044	0.057	-0.013* (-1.88)	0.025	0.020	0.029	-0.009 (-1.51)
Advertisement (in million)	29.92	9.28	43.06	-33.78** (-2.21)	0.28	0.16	0.42	-0.26*** (-2.59)
Operating cash flows (in million)	785	196	1159	-963*** (-3.07)	75	45	117	-72*** (-5.09)
Cash dividend per share	2.32	0.67	3.37	-2.70*** (-4.05)	0.28	0.008	0.473	-0.465*** (-3.92)
Big-4 audit firm	0.19	0.10	0.25	-0.15*** (-4.14)				
Ownership Characteristics								
Board of director ownership	0.39	0.43	0.37	0.06*** (3.01)	0.43	0.45	0.40	0.05*** (2.63)
Institutional ownership	0.14	0.15	0.14	0.01 (1.19)	0.12	0.14	0.12	0.02* (1.78)
Foreign ownership	0.03	0.01	0.05	-0.04*** (-3.53)	0.00	0.00	0.00	-0.00 (-0.50)
Government ownership	0.03	0.00	0.05	-0.05*** (-4.34)	0.00	0.00	0.00	-0.00*** (-4.99)
Governance Characteristics								
Board size	7.42	7.10	7.62	-0.52*** (-2.65)	7	7	7	-0** (-2.37)
Independent director	1.24	1.28	1.21	0.07 (0.88)	1	1	1	0 (1.50)
Board independence	0.175	0.18	0.17	0.01 (1.10)	0.167	0.167	0.167	0* (1.95)

A negative mean difference with t- value –4.58 significant at the 1% level shows that non-family firms generate more return using the firm's assets than firms with family relationships. This finding is consistent with the empirical result of Bennedsen et al. (2007) where they find a significant negative relationship between family relationships in the firm management and return on asset (ROA) and return on equity (ROE). Surprisingly for Tobin’s Q, the market based firm performance measurement tool, there has been found a positive mean difference though not significant which implies that the family relationship between CEO and Chairman boosts firm’s market performance. Such a finding contradicts with the empirical result of the study of Pe´ rez-Gonza´lez (2006) where the author finds a negative market performance (Tobin’s Q) of firms with the family relationships among CEO and board chairman. A significant negative mean difference of revenue implies that firms with non-family relationships generate more revenue than firms with the family relationship. Univariate analysis finds very insignificant differences between family relation firms and non- family relation firms in terms of profit margin and asset turnover, the two classic financial performance measurements.

For firm specific characteristics, the mean size of total assets in non-family relation firms is much higher than in family firms which indicates that a family relationship between the board’s chairman and CEO tends firms to invest less money in asset acquisition. There is a negative difference for market capitalization also. On the other hand, there is a positive mean difference for market to book ratio, and firms with family and non-family relationships are almost indifferent for leverage variables. The t-value –2.21 of Advertisement variable, significant at the 5% level of significance implies that firms with family relations among top personnel are found to spend significantly less money in the advertisement activities. Firms with family relations have significantly lower mean operating cash flows which indicates that non-family firms hold much more cash to meet the expenditure of operating activities. A significant negative mean difference of cash dividend per share evidence that where a family relation exists between CEO and Chairman or CEO holds the position of chairman also, there is a significantly less dividend payout. This finding is contradictory to the empirical finding of Setia-Atmaja (2010) where he finds that dividend payout ratios are higher in the family-controlled firms than non-family firms. A similar significant negative mean difference has also been found in the Big-4 audit firm variable where only 10% of the firms with family relations are audited by Big 4 audit firms. Darmadi (2016) also finds empirical evidence in his study that family-controlled firms are found to sustain opaqueness gain through hiring auditors who hold lower quality levels.

A significant positive mean difference of the board of director ownership variable indicates the board members hold comparatively more shares in the firms with family relations. In ownership characteristics, an attention-grabbing finding is that the parentage of institutional ownership in family relation firms is higher than in firms with non-family relations. But in case of foreign and government ownership non-family firms are far ahead than firms with family relations. A significant negative mean difference with t-value -2.65 of board size variable evidence that firms where CEO and chairman relate to family relationship or CEO duality exists, comparatively fewer board members are found there. However, it is mentionable in this case that Prabowo and

Simpson (2011) have not found any significant association between the size of board and the existence of family control having family relationships in the board. At last firms with family relations have been found with more independent directors than firms with no family relation.

6.3 Multivariate Regression Analysis

Now, we get into the regression results and start with the table no.4 for depicting several dimensions of OLS.

Table 4: Regression Analysis

Variable	Model 1 (Pooled OLS)		Model 1 (Two-way Clustering)	
	ROA	TOBINQ	ROA	TOBINQ
DUALFAM	-0.014*** (-2.89)	0.402 (1.03)	-0.014** (-2.10)	0.402 (0.94)
SIZE	0.009*** (4.56)	-0.278* (-1.81)	0.009*** (3.90)	-0.278** (-2.01)
LEVERAGE	-0.066*** (-3.23)	0.362* (1.68)	-0.066*** (-3.93)	0.362 (1.56)
INVESTMENT	0.123*** (4.63)	5.293* (1.72)	0.123*** (5.16)	5.293* (1.81)
ADVERTISE	0.285* (1.87)	29.422** (2.43)	0.285 (1.59)	29.422** (2.56)
LIQUIDITY	0.003*** (3.07)	0.008 (0.29)	0.003** (2.50)	0.008 (0.33)
ASSETTURN	0.016*** (4.43)	0.679*** (2.95)	0.016** (2.34)	0.679** (2.22)
DPS	0.002*** (4.20)	0.002 (0.11)	0.002*** (2.50)	0.002 (0.07)
AUDIT	0.021*** (3.33)	0.769 (1.44)	0.021*** (2.20)	0.769 (1.06)
BODOWN	-0.035*** (-2.80)	0.603 (1.00)	-0.035*** (-2.83)	0.603 (0.61)
INSTOWN	-0.028 (-1.61)	1.883 (1.10)	-0.028 (-1.49)	1.883 (1.52)
CONSTANT	0.023 (1.48)	2.952*** (3.11)	0.023 (1.38)	2.952*** (3.24)
No. of Observation	522	522	522	522
Adjusted R^2	45.97%	6.08%	45.97%	6.08%

Hambrick (1983) has stated that the operation of such two ways of clustering, along with the adjustment of time effect and firm effect, can neutralize the issues related to lack of homoscedasticity. Here, the familial connections among CEO and Chairman from the perspectives of accounting and market performances are represented by ROA and TOBINQ, respectively, in the regressions. From the results based on Pooled OLS and Two-way clustering methods, it's been steadily noted a sizable negative correlation exists between firm performance relative to such arrangements. This conclusion aligns with other discoveries in this study while also resonating with numerous preceding research conclusions. For instance, Syriopoulos et al., (2012) discovered that profitability can be negatively affected when one person takes on dual roles like these because board monitoring capacity decreases along with decision-making efficiency of directors overall. In largely of the cases the market-based performance, assessed by Tobin's Q, has barely remained to be stated to hold considerable connections per each or both variables which interest and control. Erickson & Whited (2000) plus Bond & Cummins (2001) get to repeatedly mention that inconsistent stock market variations, abrupt bubbles in share prices, etc. would influence the structured and accurate interpretations of Tobin's Q in the studies. Erickson and Whited (2002) also show that biasedness caused in the market can initiate measurement errors in Q and thereby this can be substantially liable to report ineffective scenarios.

In case control variables, measurement of financial performance seems to be positively associated with firm size in both types of regressions conducted. Som other control variables like asset turnover, investment ratio, liquidity ratio, dividend per share, and big-4 auditors are all positively associated with firm performance, in ROA always and Tobin's Q sometimes. On the other hand, leverage and board ownership have negative connection to the firm performance here in the results of the paper. The R^2 of 45% shows considerable strength of the regression models as well.

Regression with Dummy variables

Table 5: Regression Analysis

Variable	Model 6	
	ROA	TOBINQ
DUALDPSF	0.017* (1.67)	-0.991 (-0.94)
DUALDPDF	0.030*** (3.04)	-1.122 (-1.15)
SIZE	0.008*** (3.87)	-0.273* (-1.94)
LEVERAGE	-0.065*** (-3.97)	0.351 (1.47)
INVESTMENT	0.120*** (5.13)	5.325* (1.87)
ADVERTISE	0.279 (1.54)	30.095** (2.56)
LIQUIDITY	0.003** (2.47)	0.008 (0.32)
ASSETTURN	0.016** (2.37)	0.670** (2.24)
DPS	0.001** (2.47)	0.001 (0.03)
AUDIT	0.021** (2.19)	0.748 (1.03)
BODOWN	-0.033*** (-2.75)	0.632 (0.62)
INSTOWN	-0.027 (-1.49)	1.963 (1.49)
CONSTANT (DUALSAME)	-0.006 (-0.36)	4.068*** (2.71)
No. of Observation	522	522
Adjusted R^2	45.94%	6.32%

Here, table no.5 depicts relevant results on regressions where a few key dummy variables have been taken into considerations like DUALSAME, DUALDPSF and DUALDPDF. The variable DUALSAME has been determined as a constant in the regression model to compare other dummy variables and control variables. The findings from regression reveals that here may be an insignificant adverse association between DUALSAME and ROA which implies that if a single person serves the firm both as CEO and Chairman then firms may face negative accounting return. On the other hand, DUALDPDF, representing different persons from different families in case of CEO-Chairman positions, illustrates a strong encouraging influence on the firm profitability which strengths our justification to accept our hypothesis 1 as companies having CEO and Chairman from different families (not from the same family ties) will be more profitable due to more stability and lesser risks of domination by all powerful single CEO/Chairman. This result is coherent beside a fact that when a lone individual performs the firm both as CEO and chairman then firms may face negative accounting return. Moreover, such an analysis is also supportable in the line of the research by Tang (2017) where a similar relationship has been found among the CEO duality plus the performance of the firm.

Surprisingly a significant optimistic association has been evidenced concerning the DUALSAME plus the company's market based firm performance, Tobin's Q.

4. Conclusion & Policy Implication

A vital determination for the familial connection amongst the CEO plus the Chairman of the companies along with relevant outcomes or consequences on the performance of the companies ought to be a crucial matter in the contexts of recent research of corporate governance. On this note, this research strives for relevant solution regarding the connection amongst the duality of CEO and chairman, in addition to the business performance in a pertinent setting of developing economies, when the CEO plus the Chairman of the board of directors suffers from the duality as they may be separately dissimilar individuals but originate as of the identical household. We study such a matter through the process of manual collection of data from the yearly accounts of most of the non-financial companies registered in the Dhaka Stock Exchange (DSE), Bangladesh for the years 2010 to 2014 using Ordinary Least Square along with two-way clustered standard error.

Our study shows that a company's performance, gauged through its return on assets (ROA) and equity (ROE), tends to suffer when the CEO is related to the Chairman. Even after reflecting components like board ownership or institutional control, this adverse trend continues. This aligns with agency theory predictions stating familial connections between top executives can provide excessive power for CEOs while rendering boards ineffective in monitoring managerial activities - which results in unchecked opportunistic behavior by managers thus leading causing declining business outcomes. This argument mirrors Anderson & Reeb's 2003 U.S based study exploring how an excess of familial influence within leadership circles potentially fosters moral hazard conflicts.

Eventually, we believe that our analysis makes significant contribution for the policy makers as the findings indicate to revise the corporate governance index for a better governance environment in Bangladesh. This is for the reason that the governing rule is still worried by the CEO duality concern though the familial connection is not given any attention yet. Likewise contributing to the policy association, this study is supposed to get going additional study scope in this capacity of attention.

Appendix 1 Definition of variables

Variable Label	**Variable Name**	**Variable Definition**
ROA	Return on assets	Net profit divided by total assets
TOBINQ	Tobin's Q	Market value of equity plus book value of debt divided by total assets
DUALFAM	Family-Duality dummy	Dummy variable that takes 1 if CEO and Chairman of the Board are same person or come from same family, and 0 otherwise
SIZE	Firm size	Log of total sales
LEVERAGE	Leverage/Debt ratio	Ratio of total debt to total assets
INVESTMENT	Investment ratio	Capital expenditure divided by total assets
ADVERTISE	Advertising ratio	Advertising expense divided by total assets
LIQUIDITY	Liquidity ratio	Operating cash flows divided by total assets
ASSETTURN	Asset turnover	Total sales to total assets ratio
DPS	Dividend per share	Total cash dividend divided by number of shares outstanding
AUDIT	Big-4 affiliated dummy	Dummy variable that takes 1 if auditor is a Big-4 affiliated firms and 0 otherwise
BODOWN	Board ownership	Proportion of shares owned by the members of board of directors

INSTOWN	Institutional ownership	Percentage of shares held by local institutions
BODIND	Board independence	Proportion of independent directors to total number of directors on the board
DUALDPSF	Different person-same family dummy	Dummy variable that takes 1 if CEO and Chairman of the Board are different persons from the same family, and 0 otherwise
DUALDPDF	Different person- different family dummy	Dummy variable that takes 1 if CEO and Chairman of the Board are different persons from different family, and 0 otherwise

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