

CEO DUALITY AND FIRM PERFORMANCE: AN EMPIRICAL STUDY ON LISTED COMPANIES FROM AN EMERGING MARKET

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Abstract

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The primary purpose of the study is to investigate the impact of CEO duality on firm performance. The study is based on secondary data collected from the published annual reports of respective companies and the Capitaline corporate database. The sample consists of 174 listed non-financial companies for eight years from 2011–12 to 2018–19. This study uses an appropriate panel data regression analysis to examine the impact of CEO duality on firm performance. Based on the panel data regression model, the study found mixed results, i.e., the impact of CEO duality on market capitalization is negative significant; however, the impact becomes positive when the firm performance is measured by return on assets. These outcomes of the present study are consistent with previous studies.

Keywords: CEO Duality, Market Capitalization, Return on Assets, Panel Data Regression Model, Listed Non-Financial Companies

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1. INTRODUCTION

The association between the separations of ownership from control and firm performance has started with the seminal work of Berle and Means (1932). Such association was further intensified by the agency theory of Jensen and Mackling (1976). In this theory, they argued that the separations of ownership from control often lead to the maximization of the self-utility behavior of the corporate managers and sub-optimization of shareholders' value (Fama & Jensen, 1983; Baliga, Moyer, & Rao, 1996). Walsh and Seward (1990), in

their study on the efficiency of internal and external corporate control mechanisms, have argued that the sub-optimization of shareholders' value arises due to the lack of interest of the board of directors who represent shareholders to carry out the role of governance effectively. This conflict of interest between the agent (manager) and the company's owner (shareholder) consequently leads to corporate scandals such as WorldCom, Enron, Tyco, and Lehman Brothers (Shrivastav & Kalsie, 2016). With these scandals, the CEO duality has become a matter of debate. Many researchers have considered that the main reason for such scandals is due to one

of the most important attributes of corporate governance, i.e., CEO duality role play in the organization (White & Ingrassia, 1992; Pi & Timme, 1993; Aktas et al., 2018; Yang & Zhao, 2014). CEO duality is when one person plays both the role of a chairman and the CEO in the same organization. According to White and Ingrassia (1992), the root cause for the downfall of large US organizations such as IBM, General Motors (GM), and Westinghouse was also due to CEO duality in these organizations. Despite the downfall of these US organizations, Baliga et al. (1996, p. 43) clearly mentioned in their study that corporates in the USA were reluctant to abandon CEO duality even after such downfall. Further, interestingly in the recent study on the CEO duality and firm performance, Wijethilake and Ekanayake (2020) have stated that out of ten failure companies, eight companies were failed because of having CEO duality in their respective corporate governance structure. These statements indicate the negative implications of CEO duality. However, there is no unanimity among the researchers concerning the impact of CEO duality on firm performance. One group of researchers supports the CEO duality role and they have empirically proved the significant positive impact of CEO duality on firm performance (Peng, Zhang, & Li, 2007; Ramdani & van Witteloostuijn, 2010; Gill & Mathur, 2011a, 2011b; Mohammadi, Basir, & Löf, 2015; Balagobei & Udayakumara, 2017; Marashdeh, Alomari, Aleqab, & Alqatamin, 2021) while the other group supports CEO non-duality role (Rashid, 2010; Ujunwa, 2012; Doğan, Elitaş, Ağca, & Ögel, 2013; Shrivastav & Kalsie, 2016). Some researchers failed to extricate any significant impact of CEO duality on firm performance (Faleye, 2007; Chen, Barry Lin, & Yi, 2008; Ehikioya, 2009; Jackling & Johl, 2009; Baptista, Klotzle, & de Melo, 2011; Saibaba, 2013; Bajaher, Thabet, Alshehri, & Alshehri, 2021).

CEO duality is a growing concern in corporate governance worldwide and the separation is seen to provide a better and more balanced governance structure by enabling better and more effective supervision of the management. Companies Act 2013¹, says that the same person should not be appointed as CEO and chairperson simultaneously for publicly listed firms unless allowed by articles of a company or such a company does not undertake multiple businesses even though historically world's most successful companies had the same person in execution and monitoring position. However, in light of the recent scams across the globe, it is a big question whether this concept can be replicated in India to maximize a company's success or should our approach be more focused on good corporate governance by separating the two positions. In addition, the empirical study on the impact of CEO duality on firm performance in the context of India is very scanty to the best of our knowledge. This creates a gap in the existing literature.

Further, India is one of the fastest-growing economies globally with a vibrant, developed, and dynamic capital market, stable political environment, and high integration of financial markets. The difference in the market structure, policy scenario, and unique culture makes it

indispensable to study the Indian market (Gupta, Mahakud, & Debata, 2018). Therefore, the present study is a modest attempt to study the impact of CEO duality on firm performance in the Indian context. The outcome of the present study in the Indian context will enrich the body of existing literature in many folds. In the post-pandemic (COVID-19) period Indian economy is going to be the most preferred business destination in view of the presence of large demand-supply propositions in India. Due to the global pandemic, many global giant corporate organizations are looking to relocate their establishment from China to India, given the comparative advantage of taxation policy and ease of doing business in India. The present study has explored the impact of CEO duality on the firms' performance in terms of market and accounting measurement. By investigating the impact of board leadership on market and accounting performance, this study will allow stakeholders to make informed decisions on investment and other important corporate aspects. This will also allow users to understand how internal and external affairs of the corporate are affected by the separation of Key Managerial Personnel (KMP) from the monitoring head, i.e., board chairperson.

The rest of this paper is organized in the following manner. Section 2 discusses theoretical background and literature review. Section 3 elaborates the research methodology and data collection. Section 4 discusses the outcomes and analyses the empirical results. Finally, Section 5 deals with concluding remarks.

2. LITERATURE REVIEW

2.1. Theoretical perspective in support of CEO duality role

Proponents of CEO duality argue that CEO duality provides clear directions to all its stakeholder regarding strategy formulation, strategy implementation, and other strategic business decisions (Palanissamy, 2015). According to resource dependence and stewardship theories, CEOs act in the interest of shareholders by making use of the more robust and unified leadership that comes with duality. Unified leadership mitigates coordination and information acquisition costs and facilitates effective decision-making and adaptability, which is crucial for firms operating in competitive and dynamic environments. Stewardship theory further argues that management effectiveness depends on the principle of the unity of command. This is because when one person withholds authority, responsibility, and decision-making power, agency costs reduce to a greater extent, consequently improving firm value (Shrivastav & Kalsie, 2016). Proponents of CEO duality also have argued that non-duality creates conflict between the CEO and the chairperson, creates confusion due to the presence of two public spokesmen, the CEO and the chairperson, and finally limits intrapreneurship and innovation (Baliga et al., 1996).

¹ <https://home.kpmg/in/en/home/insights/2020/01/firstnotes-sebi-chairperson-md-ceo-defer.html>

2.2. Theoretical perspective against CEO duality

Agency theory argues that when one single individual holds the position of both CEO and chairman, that person misuses the power of the CEO in order to work for self-interests instead of shareholders' interest, and also reduces the power of other directors, thereby reducing the power of overall board (Fama & Jensen, 1983). Dobrzynski (1991) and Millstein (1992) also argued that duality limits board independence and reduce the board's power in effectively executing its governance role. Consequently, the combined role of CEO and chairman would negatively affect firm performance (Jensen & Meckling, 1976; Fama & Jensen, 1983; Rutledge, Karim, & Lu, 2016). In other words, the agency theory presumes that CEO non-duality performs better than CEO duality. Jensen (1993), in his study, had rightly stated that the CEO non-duality helps in achieving better firm performance as such non-duality makes monitoring and supervision easy. Basically, the role of a CEO is the highest executive role in a company, whose primary responsibilities include managing the overall resources and operation of the company, executing the company's norms and policies, and acting as a single point of contact between the board of directors and corporate operations.

On the other hand, the board's chairperson is responsible for leading the board and setting high governance standards. Chairman also plays a vital role in fostering the effectiveness of the individual directors, in particular, and the board, in general. Chairman also monitors and evaluates the overall managerial performance, including the performance of the CEO. Thus, the chairperson should preferably be a different person who will assess the CEO's performance; or else, one is self-evaluating (Jensen, 1993). Therefore a firm needs to have a separate role for CEO and chairman.

2.3. Hypothesis development

This section deals with the literature review regarding the association between CEO duality and firm performance. For instance, Brickley, Coles, and Jarrell (1997) have investigated the impact of leadership structure on firm performance in the context of US firms. Empirically they have found that CEO duality reduces agency cost and improves firm performance. Based on Value Line investment advisory database, Sridharan and Marsinko (1997) examined the CEO duality in the paper and forest products industry. Their regression result indicated that CEO duality leads to the higher market value of the firm. Tian and Lau (2001) found a positive and significant impact of CEO duality on firm performance measured by ROA, ROE, and shareholders' right ratio in the context of Chinese companies. In the context of Taiwan, Lin (2005) found a significant positive impact of CEO duality on firm performance and thus supported the stewardship theory. During China's Institutional Transitions, Peng et al. (2007) investigated the impact of CEO duality on firm performance. The result of their study indicated a significant positive effect on firm performance.

Similarly, Ramdani and van Witteloostuijn (2010) have articulated the positive impact of CEO duality on the firm's performance in Indonesia, Malaysia, South Korea, and Thailand. Again, in the context of companies operating in the service sector in Canada, Gill and Mathur (2011a) have analyzed the effect of corporate governance on firm performance. They have encountered a significant positive impact of CEO duality on the profitability of Canadian firms operating in the service sector. A similar result was encountered when Gill and Mathur (2011b) again analyzed a similar study in companies operating in the manufacturing sector in Canada. Further, Mohammadi et al. (2015) have analyzed the relationship between CEO duality and firm performance in the context of 11000 Swedish firms and found a significant positive impact of CEO duality on firm performance. Their finding is consistent with Balagobei and Udayakumara's (2017) study for listed companies in Sri Lanka. The above literature is in full support of stewardship theory.

On the other hand, many researchers have also encountered a negative impact of CEO duality on firm performance. For instance, Aygün and İc (2010) have studied the effect of CEO duality on company performance. The outcome of the study indicated that CEO duality has a negative impact on firm performance. In the context of Bangladesh, Rashid (2010) examined if the CEO duality influences firm performance. Based on the regression model, the author concluded that there is a negative impact of CEO duality on firm performance measured by Tobin's Q. Similarly, Ujunwa (2012) has also found a significant negative impact of CEO duality on the performance of 122 listed Nigerian companies for a study period of 1991–2008.

Using a dataset of 204 firms listed on the Istanbul Stock Exchange (ISE) between the years 2009–2010 in Turkey, Doğan et al. (2013) have encountered a significant negative impact of CEO duality on the firm performance measured by ROA, ROE, and Tobin's Q. In the context of India, Shrivastav and Kalsie (2016) have also revealed a negative impact of CEO duality on Tobin's Q and ROE used as a proxy for firm performance. However, Abdullah (2004) encountered an insignificant relationship while investigating the association between the board of directors, duality, and company performance in the context of Malaysian listed companies. Using 1,883 US big firms collected from the Compustat database, Faleye (2007) concluded no significant association between duality and firm performance. After collecting CEO-related data from Standard and Poor's ExecuComp database from 1999 to 2003 as well as accounting data and stock return from Compustat and Center for Research in Security Prices (CRSP), respectively, Chen et al. (2008) investigated CEO duality and firm performance relationship. The outcome of their OLS (ordinary least square) regression model and fixed effect regression model indicated the insignificant relationship between duality and company performance.

In the context of Nigerian companies, Ehikioya (2009) analyzed corporation governance structure and firm performance. The author has articulated a negative but insignificant impact of CEO duality on

firm performance measured by ROA, ROE, price-earnings ratio, and Tobin's Q. While analyzing board structure and firm performance in the case of India's top companies, Jackling and Johl (2009) have also failed to extricate any significant impact of CEO duality on firm performance measured by ROA and Tobin's Q. Using the data of Brazilian companies, Baptista et al. (2011) have investigated the association between CEO duality and firm performance. The outcome of their empirical study revealed a positive association between duality and firm performance measured by ROE. A positive relation was encountered when firm performance was measured by ROA, ROC, MTBV (market to book value). However, this association was not statistically significant. Similarly, in American companies, Valenti, Luce, and Mayfield (2011) also failed to extricate any significant impact of CEO duality on firm performance. The findings were consistent with the study of Chugh, Meador, and Kumar (2008) and Saibaba (2013) in the Indian context.

There are also a group of researchers who have encountered mixed findings in their respective studies. For instance, Chen et al. (2008) have analyzed the ownership concentration, firm performance, and dividend policy for the companies operating in Hong Kong. Using Tobin's Q as a measure of firm performance, they have encountered a negative impact of CEO duality on firm performance. When the return on asset (ROA) and return on equity (ROE) was used to measure firm performance, no significant relationship was encountered between duality and firm performance. Similarly, Lam and Lee (2008) examined the relationship between CEO duality and firm performance in Hong Kong. The outcome of their regression results indicated a significant negative impact of CEO duality on the accounting-based measure of firm performances (i.e., ROA, ROE, and return on capital employed — ROCE) in case of family businesses and positive impact in case of non-family businesses. Yu (2008) has studied the effect of duality on firm performance in Chinese companies. After dividing the sample into two groups, the author found an insignificant relationship between duality and company performance during 2000-2001. However, a positive impact of duality on company performance was encountered from 2002 to 2003. Wijethilake and Ekanayake (2020) have investigated the relationship between CEO duality and firm performance in the context of 212 large-scale publicly listed companies in the Colombo Stock Exchange in Sri Lanka. According to their study, when the CEO is engaged with additional informal power, their regression outcome supported the agency theory in which CEO duality exerts a negative effect on firm performance.

On the contrary, the relationship becomes positive when board involvements are high. Thus, the authors articulated that their findings supported the commonalities of the stewardship and agency theoretical perspectives. Thus, based on the above literature review, the following hypothesis has been developed for empirical testing:

H1: There is a significant impact of CEO duality on firm performance.

3. RESEARCH METHODOLOGY

3.1. Population, sample, and study period

The present study is based on secondary data collected from the published annual reports of respective companies and the CapitalinePlus corporate database². Published annual reports are used to collect the corporate governance data like CEO duality and age of the firm and the CapitalinePlus corporate database is used to collect financial data like return on assets, market capitalization, debt-equity ratio, total assets, and research and development expenditure. The initial sample included data from top 500 ranking firms listed in Economic Times-500 (ET-500) companies in the year 2012. The firm belonging to the banking and financial sector are excluded from the present study because of their separate regulatory framework, reporting practice, and strict control by the Government and monitoring body. Public Sector Units (PSUs) are also excluded from the present study due to direct control over the reportings by the government and lack of performance-based incentives. More so, in the PSUs, as well as the board of directors, there are agents who manage the company, but there is no personal interest in running the company efficiently. After excluding the financial companies and PSUs, the final sample consists of 174 non-financial companies for a period of 8 years from 2011-12 to 2018-19.

3.2. Variables of the study

The variables used in the present research are of three categories: dependent variable, independent variable, and control variable. The study's dependent variables are return on assets (ROA) and market capitalisation (MC); both are used as the proxy for firm performance. The independent variable of the present study is CEO duality. Previous studies (Rashid, 2011; Elsayed, 2007; Debnath, 2018) have advocated that firm-specific variables also significantly impact firm performance. Therefore, the present study has considered a firm's age, size, R&D, and debt-equity ratio (DER) to control the effect on firm performance (Debnath, 2017). Measurements of these variables are explained in Table 1 below.

² Capitaline database provides fundamental and market data on more than 35000 Indian listed and unlisted companies, classified under the 313 industry. Extensive data and analysis on every company profile, directors, more than 10-year financials (P&L, balance sheet, cash flow, consolidated financial data, segment data, forex data, R&D data, ratios, etc.), quarterly results, ownership pattern, finished products, raw materials, share price data, directors' report, management discussion, notes to account, business news, corporate events, etc. Capitaline database is a sister product of capital market, India's foremost investment fortnightly. The specialized expertise in data collection, standardization and presentation built up since 1985.

Table 1. Description of variables

<i>Types of variables</i>	<i>Nature of variables</i>	<i>Symbol</i>	<i>Description of variables</i>
Dependent	Return on asset	ROA	Net income over total assets.
	Market capitalisation	MC	Natural log value of market capitalisation at the end of the financial year.
Independent	Ceo duality	CEOD	Dummy variable 1 if CEO is also chairperson, 0 otherwise.
Control	Age of the firm	AGE	Total age of a firm (in terms of the year) from the year of incorporation to the year of study.
	Total assets	TA	Firm size measured by the natural log of total assets of a particular year used as a proxy of firm size.
	Debt-equity ratio	DER	Leverage measured by the debt-equity ratio.
	Research & development expenditure	R&D	Natural log value of research & development expenditure.

Source: Authors' tabulation.

3.3. Econometric model

Panel data regression model is employed in this study to investigate the impact of CEO duality on firm performance measured through ROA and MCAP. The study has undertaken two most widely used tests: Breusch-Pagan and Hausman test to determine the appropriate panel data regression model. While the significant chi-square value of the Breusch-Pagan test advocates in favour of

the random effect model (REM) instead of pooled ordinary least square (OLS) model, the significant chi-square value of the Hausman test indicates that the fixed effect model (FEM) is more appropriate than REM. The outcomes of the test statistics (results are shown in Table 4) indicate that a fixed effect model is appropriate for the present data set. The regression model of the present study is presented below:

Model 1

$$MC_{it} = \beta_{0i} + \beta_1 CEOD_{it} + \beta_2 AGE_{it} + \beta_3 SIZE_{it} + \beta_4 DER_{it} + \beta_5 R\&D_{it} + \varepsilon_{it} \quad (1)$$

Model 2

$$ROA_{it} = \beta_{0i} + \beta_1 CEOD_{it} + \beta_2 AGE_{it} + \beta_3 SIZE_{it} + \beta_4 DER_{it} + \beta_5 R\&D_{it} + \varepsilon_{it} \quad (2)$$

where, β_{0i} is the time-invariant intercept of each firm and ε_{it} is the error component. Here: $\varepsilon_i \sim N(0, \sigma_\varepsilon^2)$.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 2 presents descriptive statistics for the variables under study. The table demonstrates that the mean value of ROA is 13.77%. Minimum and maximum ROAs for the sample are 5.33 and 18.84, respectively. The mean value of ROA indicates that the majority of the sample firms are profitable firms. MC's minimum and the maximum values are

2.129 and 13.528, respectively, and the mean value of MC is nearly 8. Concerning the management leadership structure, this study finds that in about 42% of sample companies under consideration, CEO duality exists in the management structure. The average age of the sample firm in the present study is 40 years, with a maximum age of 141 years and a minimum is 5 years. The mean value of firm size (SIZE) indicates that the sample firms are large. If we look into the mean value of leverage (DER), it is almost one indicating that these larger sample firms have debt capital equal to equity capital. Further, the observed values of standard deviation indicate that the variability of the variables is not very high.

Table 2. Descriptive statistics

<i>Variable</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>
ROA	5.338	18.847	13.774	23.023	-1.054
MC	2.129	13.528	7.946	2.011	0.096
CEOD	0	1	0.420	0.494	0.320
AGE	5	141	40.580	25.757	1.647
SIZE	1.050	11.721	7.841	1.617	-1.432
DER	0.370	9.760	1.021	1.331	2.724
R&D	4.605	7.994	1.553	2.210	0.955

Note: Number of observations (N): 1392.

Source: Authors' calculation.

4.2. Correlation matrix

It is of utmost importance to check that multicollinearity is not a severe problem; otherwise, it will violate one of the basic assumptions of

the panel data regression model that independent variables must be genuinely independent of one another. Thus, the correlation matrix relating to CEO duality and firm performance measured by ROA and MC and other control variables is calculated and

shown in Table 3. It is visible from the table that there is a significantly low degree of correlation between the variables. For instance, the correlation coefficient between *CEOD* and *SIZE* is 0.087 indicating there is a positive low degree correlation significant at a 1% level. Similarly, there is a low degree correlation between *CEOD* and *R&D* significant at a 1% level and their correlation coefficient is only 0.150. Again, a low degree positive correlation significant at a 1% level is observed

between *AGE* and *SIZE* (0.119), *AGE* and *R&D* (0.194), *SIZE* and *R&D* (0.358). However, a significant negative low degree correlation is observed between *DER* and *MC* (-0.322), *DER* and *ROA* (-0.114), *DER* and *AGE* (-0.056), and *DER* and *R&D* (-0.214). This correlation efficiency indicates that multicollinearity is not severe in the present dataset. Thus, all independent variables can be used in the regression model for analyzing the impact of CEO duality on firm performance.

Table 3. Correlations matrix

Variable	MC	ROA	CEOD	AGE	SIZE	DER	R&D
MC	1						
ROA	0.310**	1					
CEOD	0.094**	0.068*	1				
AGE	0.175**	0.077**	-0.01	1			
SIZE	0.612**	0.051	0.087**	0.119**	1		
DER	-0.322**	-0.114**	0.003	-0.056*	0.032	1	
R&D	0.609**	0.216**	0.150**	0.194**	0.358**	-0.214**	1

Note: ** and * denote significance at the 0.01 level and 0.05 level (2-tailed), respectively.

4.3. Impact of CEO duality on firm performance

Table 4 depicts the regression results of Model 1. Model 1 is devoted to examining the impact of CEO duality on firm performance measured by *MC*. The empirical result of Model 1 exhibits that the coefficient estimates of CEO duality are negative and statistically significant at a 1% level. This finding is consistent with many previous studies (Rashid, 2010; Ujunwa, 2012; Shrivastav & Kalsie, 2016; Doğan et al., 2013; Rutledge et al., 2016; Mubeen, Han, Abbas, & Hussain, 2020). At the same time, the result contradicts the findings of Balagobei and Udayakumara (2017), who have found a positive association between CEO duality and *MC*, while others (Baliga et al., 1996; Abdullah, 2004; Chen et al., 2008; Singla, 2016) found no significant impact of CEO duality on market capitalization. The negative association between CEO duality and market capitalization supports the proposition of agency cost theory. Agency theory is based on the separation of ownership and control (Jensen & Meckling, 1976; Fama & Jensen, 1983). Agency theory assumes that managers enjoy more information about the business's affairs because of having operational control over the firm than owners. Consequently, these managers may act opportunistically and seek private gains at the expense of shareholders (owners) wealth, whereas, CEO exercises control over board decisions and

hence affects the board's independence as well as monitoring and governance roles which ultimately run in conflict with the overall interest of large stakeholders of the firm.

Regarding the influence of the control variables on firm performance, it is found that coefficient estimates of the firm's age and firm size are positive and significant at a 1% level. This positive impact is consistent with the study of Rashid (2010). The impact of the *R&D* is also positive and significant at the 1% level, indicating that the future investment opportunity in a knowledge-based economy also helps enhance the firm's market value. These outcomes are consistent with the study of Mubeen et al. (2020). On the other hand, *DER* is found to be negative and significant at a 1% level, which is consistent with the study of Jackling and Johl (2009) and Rashid (2010). The negative impact of *DER* on *MC* is consistent with the pecking order theory of capital structure. This theory exhibits that due to the availability of sufficient internal funds, profitable firms avoid debt capital. The observed explanatory power of the models, along with significant F-statistic, speaks in favor of the appropriateness of the regression model used in the present context. The value of Durbin-Watson statistics also exhibits that the results are not spurious. Further, the values of VIF also indicate that multicollinearity is not a severe problem for the present models.

Table 4. Regression results (Model 1)

Model	Variables	Coefficient	Std. Error	T-ratio	VIF	Test results	Breusch-Pagan test	Hausman test
Model 1	Const.	-0.597	0.484	-1.235		R ² = 0.242 Durbin-Watson = 1.764 F-statistics = 84.382***	Asymptotic test statistic: Chi ² = 2312.86***	Asymptotic test statistic: Chi ² = 115.413***
	CEOD	-0.189	0.063	-3.014***	1.028			
	AGE	0.026	0.008	3.246***	1.063			
	SIZE	0.883	0.066	13.381***	1.300			
	DER	-0.051	0.018	-2.916***	1.069			
	R&D	0.077	0.027	2.908***	1.367			

Notes: Total 1392 observations. Model 1 — Dependent variable is *MC*. *** indicate the coefficients are significant at a 1% level.

Source: Computed by the authors.

Table 5 depicts the regression results of Model 2. Model 2 is devoted to examining the impact of CEO duality on firm performance measured by *ROA*. Unlike Model 1, the empirical result of Model 2 exhibits that the coefficient estimates of CEO duality

are positive and statistically significant at a 1% level. This finding is consistent with the previous studies (Mohammadi et al., 2015; Peng et al., 2007; Wijethilake & Ekanayake, 2020). The outcome of Model 2 supports the stewardship theory proposition.

Stewardship theory assumes that duality in board leadership unifies the functional and monitoring activities; consequently, responsibility and accountability increase towards shareholders (Finkelstein & D'Aveni, 1994). The theory believes that duality leads to decreases the chances of goal misalignment between the CEO and the board because the CEO in his/her position of a chairperson bridges the gap between board and management (Baliga et al., 1996). In addition, CEO duality decreases the rivalry between the CEO and the chairperson and ensures power dynamics do not come in between the decision-making (Singla, 2016).

Consistent with Model 1, the present model also reports a significant positive relationship between the size of the firm and accounting performance as measured through ROA. This

positive relationship indicates that a bigger firm earns more profit than a smaller one because of the economy of scale in production and marketing. Similar to Jackling and Johl's (2009) findings, the present study also found the negative impact of firm age and it is significant at a 1% level. However, the impact of leverage and R&D on ROA is found to be positive but statistically insignificant. The outcome of the regression model is found to be appropriate as the F-statistic is found to be significant at the 1% level. All the values of VIF are found to be less than 10, indicating that there is no multicollinearity problem in the variables under consideration. Further, the Durbin Watson statistics value is 1.763, indicating the absence of serial correlation in the data set considered for the present study.

Table 5. Regression results (Model 2)

Model	Variables	Coefficient	Std. Error	T-ratio	VIF	Test results	Breusch-Pagan test	Hausman test
Model 2	Const.	-0.594	0.150	-3.950***		R ² = 0.093 Durbin-Watson = 2.009 F-statistics = 5.5405***	Asymptotic test statistic: Chi ² = 255.499***	Asymptotic test statistic: Chi ² = 152.29***
	CEOD	0.040	0.020	2.041**	1.027			
	AGE	-0.021	0.003	-8.408***	1.044			
	SIZE	0.173	0.021	8.452***	1.169			
	DER	0.006	0.005	1.015	1.065			
	R&D	0.007	0.008	0.800	1.271			

Note: Total 1392 observations. Model 2 — Dependent variable is ROA. *** indicates the coefficients are significant at a 1% level. Source: Computed by the authors.

5. CONCLUSION

Multiple regression models are used to analyze the data collected from a sample of 174 publicly listed Indian companies over 8 years representing 14 different sectors in India. By examining the association between CEO duality situations in corporate governance mechanisms with the performance of firms in terms of market capitalization and accounting measurement (ROA), the present study provides insight into the power dynamics between the board leadership structure and the board of directors in the Indian context that are different from the western economic setup. This study expands the limited literature on power dynamics in corporate governance mechanisms in the Indian context showing the association between CEO duality and firm performance regarding return on assets and market capitalization. The present study also exposed that no specific theory (i.e., agency theory and stewardship theory) is perfect for any economy and sample. If one theory explains accounting performance better, the other theory explains market performance better and vice-versa. Thus, the present study joins the current imbroglia by producing mixed results on CEO duality and firm performance into the existing literature, mainly from the developed economy, and is mostly inconclusive. The study will be informative for policymakers and investors to make well thought out informed decisions on policymaking and investment in the Indian context, in particular, and Asian countries, in general.

The present study focuses on assessing the impact of CEO duality on firm performance in light of both agency theory and stewardship theory in the Indian corporate governance context. Our result indicates that agency theory is more appropriate in the market performance context as the CEO duality influences the firms' market capitalization negatively. However, when performance

is measured in terms of accounting criteria, CEO duality follows stewardship theory and positively influences performance. Therefore, it is concluded that the present findings neither give full support to agency theory nor stewardship theory. The result points towards the middle of the ground. The study also joins the debate with existing literature mainly from developed economies and is inconclusive by producing mixed results. One conceivable explanation of these results could be the supremacy of family-owned businesses in the Indian corporate sector. Since the subtleties of a family-owned business are little different from that of a non-family business, the corporate governance mechanism based on developed countries may not be as effective in these family businesses as non-family businesses (Iqbal, Zhang, & Jebran, 2015). Family businesses are known for altruism, trust, founders and their families serving on top management positions and board, greater goal alignment, more responsive towards firm's needs, etc. (Singla, 2016). The present study's findings are important for many stakeholders because corporate governance mechanisms diverge between countries, particularly between developed and emerging economies that differ substantially from developed economies in their institutional, regulatory and legal environments (Arora & Sharma, 2016).

The present study considered only 8 years for selected firms based on pre-specified selection criteria and considered a limited number of variables to measure corporate governance effectiveness. Thus, despite significant findings, the study's outcome cannot be generalized across different economic setups.

Therefore, it is suggested that the future study may consider large sample sizes and from different countries with different economic statuses to find a more vivid picture of the impact of CEO duality on firm performance.

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