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Executive tenure and firm performance: An empirical examination of Indian corporate landscape*

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Abstract

In a typical corporate setting, a CEO is analogous to the captain of a ship with ultimate authority vested in him by the board of directors of the firm. During the period he heads the firm, it is expected that he would render his services as a fiduciary of the shareholders. By virtue of being in the role of a fiduciary, he would be expected to take wise decisions which benefits the firm in long/short term and the stakeholders of the firm become well off. Chairman is another top executive who oversees the actions of the CEO. In some cases, both the office of a CEO and chairman is headed by the same individual known as dual executive. The objective of this study is to explore the relationship between firm performance and tenure of top executives in the Indian context. Executive tenure is calculated by the number of years s/he spends in office in that capacity of a Chairman or a CEO. However, the length of the tenure varies to a great degree from firm to firm. There can be many factors impacting the duration of tenure of executives in India. So, this paper attempts to find out the impacts of performance on executive tenures of the firm. Other than that how much of an effect does various executive specific variables (such as executive age), firm specific variables (such as age of the firm, group affiliation/stand-alone firm) do have on the tenure of executives would also be explored. Top executives would be divided into three categories i.e. CEO/Managing Director, Chairman and Dual (holding both CEO and chairman position) to get better insight into the research question.

Keywords: Executive tenure, Firm performance, Emerging economy.
JEL: G30, F30, F40.

1. Introduction

Does CEO tenure matter? This is a very important question in the corporate landscape of any country in general and of a developing country like India in particular. As per Hambrick and Fukutomi's (1991) paradigm of CEO tenure seasons, the temporal characteristics associated with CEO tenure can affect firm performance. Primarily, the paradigm is based on the premise that 'there are discernible phases, or seasons, within an executive's tenure in a position, and those seasons give rise to distinct patterns of executive attention, behavior, and ultimately, organizational performance'. Depending on the CEO's life cycle seasons, CEO tenure can have both positive and negative effects on firm performance (Miller and Shamsie, 2001). For most of the jobs there is a tenure during which an individual is most productive.

There is a famous saying in the corporate world "A company is only as good as its leadership". In the corporate world, a CEO is appointed by the board of directors, who in turn is elected by the owners (shareholders) of the firm (see. Agrawal, A., & Knoeber, C. R. 1996), to render his services as the head of the management team to steer the company towards its objective (which in most cases is implicitly assumed to be the shareholder wealth maximization SWM[1]) by increasing the market price of outstanding shares, however a company can be registered for any legal objective[2] like customer satisfaction, profit maximization, generating employment, manufacture good quality products etc. not to mention SWM may be one of them. A CEO gets to utilize the resources (human and materials) of the company and has the decision making authority over them by the virtue of the power vested in him by the owners of the company. S/he, in consultation with his executives is expected to make decisions in the best interest of the company, decisions that would send positive signals to the market, existing and potential investors about the future of the company.

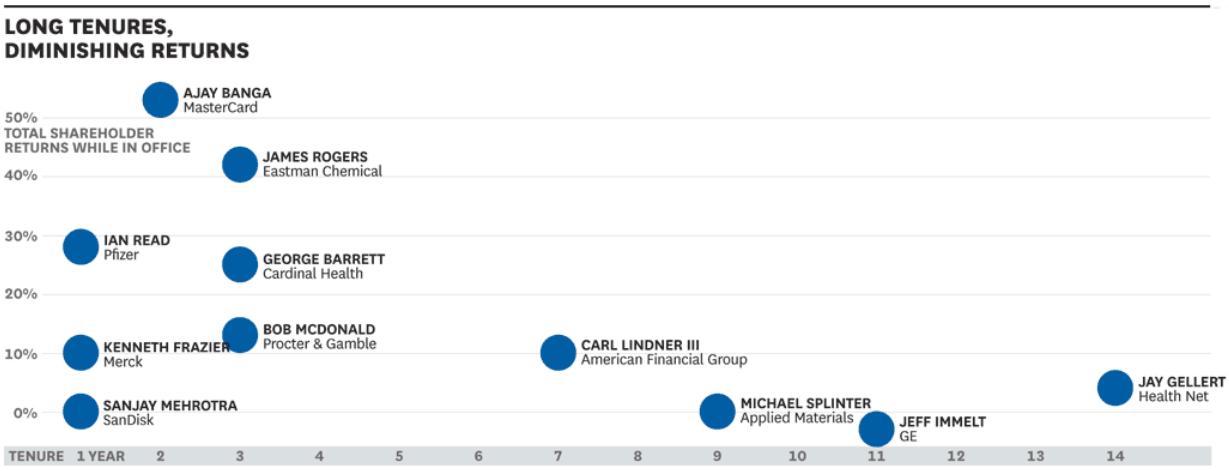
There are incidences where CEOs did admit that quitting was indeed a good idea after a certain time period because they virtually ran out of ideas and it was befitting in the interest of the firm and its stakeholders to appoint someone else as the new CEO rather than continuing with them. CEO tenure, unlike some public sector executive job does not have a pre-defined age of retirement. A CEO gets appointed and reappointed by the board based on his merits, which is the reason that there are examples of CEO tenures ranging from a few months to close to 50 years. There is no gainsaying that, other factors like condition of the economy in general, political stability etc. to

mention a few, *inter alia* firm performance may also drive the decision of reappointment of existing CEO or new appointment.

More amount of time does allow a CEO to get used to the dynamics of the company and act accordingly, but it might also accompany complacency to achieve newer targets. Can there be an optimal tenure for the CEOs which *ceteris paribus* would be just right for all stakeholders involved.

During their early tenure seasons, CEOs tend to learn rapidly and are willing to take risks. As their tenure progresses, they espouse new initiatives and expand their knowledge and skill repertoires (Wu, Levitas, and Priem, 2005), thus improving firm performance. In their later seasons, however, CEOs myopically commit to obsolete paradigms, become risk averse and stale in the saddle, and tend to adapt less to the external environment (Miller, 1991; Levinthal and March, 1993), thus hurting firm performance. Overall, the key contribution of this research is to determine how CEO tenure affects firm performance. Empirically, we garner a large-scale data set with approximately 8000 firm-year observations to unearth the relationship between firm performance and CEO tenure.

Luo, Kanuri & Andrews, (2013) states in Harvard Business Review that long tenure are generally characterized by diminishing returns.



The governance and management literature is replete with CEO leadership, background, style etc. but there lies a palpable void in the stream of CEO tenure and allied areas. The shortage of literature

coupled by the fact that interesting variations in the tenure are available for the CEOs which ranges from a few days to almost 50 years[3] (Ryan Jr., H.E., Wang, L., Wiggins III, R.A. 2007). These voids warrants for a fresh perspective in this relatively less explored stream of knowledge. Such a study has not been conducted in the Indian context where an unusual result would not be surprising as executives generally are not a complete outsider to the company. This paper purports to attract the attention of academia as well as representatives from corporate world equally.

2. Literature Review

The literature on CEO tenure are abound that firm performance has an inverted U shaped curve with CEO tenure as the performance increases with the tenure for some time before hitting the peak and sliding down. Henderson, Miller & Hambrick, (2006) conducted a longitudinal study of 98 CEOs in the relatively stable branded foods industry and 228 CEOs in the highly dynamic computer industry to find that the results strongly supported their hypotheses. The performance improves during the early seasons of the CEO when he is more willing to learn/take chances, followed by a season when he turns complacent and becomes risk averse. In the stable food industry, firm-level performance improved steadily with tenure, with downturns occurring only among the few CEOs who served more than 10 to 15 years. In contrast, in the dynamic computer industry, CEOs were at their best when they started their jobs, and firm performance declined steadily across their tenures, presumably as their paradigms grew obsolete more quickly than they could learn.

Hill & Phan, (1991) suggests that relationship between CEO pay and stock returns (alternative measure of performance) debilitates with tenure as the executive starts to wield more influence on the board. Such influence would also lead to elongation of his tenure as the top executive of the company. Shen and Canella Jr. studied the significance of CEO turnover and succession using 228 CEO successions to conclude that there is an inverted U-shaped relationship between departing CEO tenure and post-succession firm ROA.

Miller (1991) states that it is less likely that long tenured CEOs would be a good match between organizations strategy and the challenges posed by the external environment. CEO tenure related inversely to the prescribed match between organization and environment, especially in uncertain

settings. Wu, Levitas and Priem, (2005) studies the impact of technological dynamism on CEO tenure. Biopharmaceutical sector which is a technology intensive industry is chosen for this study. The results indicate a curvilinear, inverted U-shaped overall relationship between CEO tenure and invention. This notion is supported by Musteen, Barker and Beaten, (2006) corroborate the finding that CEO tenure has a significant direct and modifying association with attitude toward change with the central tendency of CEOs to become more conservative as their tenure increases. In addition, CEO gender, functional background experience and diversity of functional experiences were also found to be associated with attitude toward change. With the exception of gender, however, the effect of these variables on attitude toward change diminishes as tenure increases.

Tsai et al. (2006) studies the CEO tenure of 304 listed firms in Taiwan. Out of them 63 were family controlled and 241 were not. The results show that CEO turnover is significantly lower in family firms and its relationship to corporate performance is negative. CEO ownership and board ownership are not significant in explaining the length of family CEO tenure. These findings imply that family boards can still effectively replace the CEO despite relatively low ownership. From the ownership structure perspective, this study suggested that the agency theory is applicable for nonfamily firms in Taiwan, but unsuitable for family firms.

Allgood and Farrell 2014 analyzed the effect of CEO turnover on the relation between firm performance and CEO turnover and found that a constant negative relation between firm performance and forced turnover throughout an inside CEO's tenure. Founders are entrenched early in their careers but held accountable for firm performance later in their careers. Brookman and thistle 2009 finds that tenure increases with performance and compensation and decreases with monitoring by the board. Their results are consistent with the view that corporate governance functions reasonably well for the vast majority of firms.

Wu, Levitas, and Priem (2005) found shorter executive tenure associated with more invention as technological dynamism increases, whereas long executive tenures spurred invention in technologically stable environments.

Walters, Kroll and Wright (2007) found that in the absence of a vigilant board, CEO tenure is positively associated with performance at low to moderate levels of tenure, and negatively

associated with performance when tenure further rises to substantial levels. In the presence of a vigilant board, however, shareholder interests can be advanced even at high levels of CEO tenure.

Goyal and Park, 2002 study whether bestowing chief executive officer (CEO) and board chairman duties on one individual affects a board decision to dismiss an ineffective CEO. The results show that the sensitivity of CEO turnover to firm performance is significantly lower when the CEO and chairman duties are vested in the same individual. These results are consistent with the view that the lack of independent leadership in firms that combine the CEO and Chairman positions makes it difficult for the board to remove poorly performing managers.

The relationship between CEO tenure and firm performance over the CEO's life cycle can be visualized as an 'inverted U' (Henderson, Miller, and Hambrick, 2006) However, the impact of CEO tenure on firm performance is a complex phenomenon that goes beyond the simple, direct effects (Simsek, 2007; Souder, Simsek, and Johnson, 2012). To get a holistic view of the causal linkages between CEO tenure and firm performance, it is important to explore the underlying mechanisms that explain how CEO tenure matters (Simsek, 2007). Nevertheless, even after several calls (e.g., Wu et al., 2005; Simsek, 2007), our knowledge of the intermediate factors that channel the impact of CEO tenure on performance is surprisingly limited.

3. Data

As CEO tenure, which is defined as the CEO's time in office, is one of the important attributes regarding managers, management scholars have searched the answers for this over-time impact on firm performance. Yet, prior studies have rendered mixed results on the relationship between CEO tenure and firm performance. Furthermore, while some studies have examined the impacts of CEO tenure under heterogeneous environments, less attention has been paid to alternative contingent influences, such as corporate governance and agency issues. Therefore, a more comprehensive study that explores the CEO tenure/firm performance relationship and conducts deeper contingent analyses is needed. Drawing on resource-based view and agency theory, we attempt to answer the following questions: (1) how does CEO tenure relate to firm performance; (2) how does governance structure influence the above relationship. Using a sample of 500 number of firms as the sample, we find if CEO tenure is related to firm performance. We also find that CEO gender,

age intensify/assuage the relationship. Group based and standalone firms would also be tested for the same.

Our sampling frame is the universe of publicly traded companies in India that have data for all the independent and dependent variables used in our study. We collected data from a variety of sources, including: Prowess (CMIE), Indian Boards database (Prime). After merging all the data sources, our final data set consists of 8000 firm-year data points for 500 firms, spanning 16 years (from the year 1998 to 2014). Our data set is unique and can account for common method bias because we compiled the data set from different secondary data sources. Table 1 presents the conceptual variables, measures, and data sources.

We measured CEO tenure as the number of years of CEO experience in the position (Henderson et al., 2006; Simsek, 2007; Souder et al., 2012). CEO tenure acts as a proxy for a CEO's knowledge and influences within the firm and outside the firm (Hambrick, 2007).

Table 1

Conceptual variable	Measure	Data Source
Tenure of Executive (CEO; Chairman; Dual)	The number of years of experience in the CEO office of a given company	Indian Boards (Prime database)
Age of Executive	Year of birth deducted from current year	Indian Boards (Prime database)
Age of Firm	Year of incorporation deducted from current year	Prowess (CMIE)
Performance related variable		
Average ROA during tenure		Prowess (CMIE)
Average ROE during tenure		Prowess (CMIE)
Average Tobin's Q during tenure		Prowess (CMIE)
Average Total Return during tenure		Prowess (CMIE)
Average EPS during tenure		Prowess (CMIE)
Average Enterprise Value during tenure		Prowess (CMIE)
Group/Standalone firm/Govt. owned firm		Prowess (CMIE)
Industry type		Prowess (CMIE)

Note: This table exhibits the variables used in this study, their measurement methodology and data source. Additionally it also states the different types of performance variables used in this study.

4. Results

The results section is split into three categories to accommodate three executive titles considered in this study. Chairman, Managing Director and Dual are the categories taken in this study. We document the result for Chairman in section 4.1 first followed by CEO in section 4.2 and then Dual category executives in section 4.3.

4.1 Chairman

First, we have modelled different models using various independent variables. The independent variables that we started out with are Average Return on Assets, Average Return on Equity, Average Tobin's q, Average return, Average Earnings per share, Average Enterprise value, Age of the firm, type of ownership, type of industry and the age of the executive. We used Bayesian Model Averaging to select the best predictors for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Out of three iterations with 27, 11 and 45 models, the best 5 models are chosen with the highest cumulative posterior probability of 0.76 and they are given in table 2. Model 1 of table 2 indicates that is a positive relationship between age of the firm, age of the executive and the tenure of the executive (chairmen). Similar results are found for model 2 where average ROA also exhibits a positive relationship with executive tenure in addition to firm age and executive's age. Average return manifests a positive impact on the executive's tenure in model 4. In model 5 the ownership coefficient is negative indicating that the impact of standalone alone firm would be negative on tenure of executive.

Table 2

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	-25.62	-26.30	-17.75	-27.99	20.22
Avg_ROA		1.42			
Avg_ROE					
Avg_Q					
Avg_return				0.55	
Avg_EPS					
Avg_EntVal					
Firm_age	0.62	0.63	0.62	0.62	0.60
Ownership					-4.28
Ind_Type					
Exec_age	0.73	0.73	0.66	0.78	
r^2	0.16	0.17	0.17	0.17	0.11
Post prob	0.44	0.10	0.09	0.06	0.06
BIC	-19.17	-16.26	-16.00	-15.23	-15.20

Note: This table exhibits the five best models with highest cumulative posterior probability for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Chairman tenure in months is the dependent variable and the independent variables are average return on assets, average return on equity, average Tobin's q, average EPS and average enterprise value. Other control variables used are age of the firm, age of the executive, ownership of firm, type of industry. The goodness of fit, posterior probability and the Bayesian information criteria coefficient for model selection is given.

Table 3

	Estimate	Std. Error	t value	Pr(>|t|)	VIF	Adj. r^2
Intercept	-27.37	15.92	-1.71	0.08		
Firm_age	0.52	0.13	3.91	0.00	1.12	
Exec_age	0.74	0.23	3.11	0.00	1	0.17
Avg_EPS	0.13	0.08	1.58	0.11	1.25	
Avg_ROA	42.51	28.16	1.50	0.13	1.14	

Note: This table exhibits the regression coefficient of independent variables chosen by AIC criteria for Chairman's tenure as dependent variable. Age of firm, age of the executive, average EPS and average ROA are all positive but only firm age and executive age are significant. VIF values indicate that the issue of multicollinearity does not exist in the model. Finally the goodness of fit is given.

We used the Akaike information criterion with a correction for finite sample sizes and the Bayesian information criterion to select the combination of independent variables most suitable for the model and run regression over that model with tenure in months being the dependent variable. The regression results are exhibited in table 3 given below.

It can be observed from table 3 that age of firm and age of executive positively impact the tenure of chairman. Average EPS and ROA are also positively related but not significant.

Next, we applied the same tests as above after removing all the terminations occurring for non-performance reasons viz. death, illness, abrupt resignations etc. So the number of observations reduced from 164 to 149 observations. We applied same procedure for the forcefully removed Chairmen in the following tables. First we used Bayesian Model Averaging to select the best predictors for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Out of three iterations with 37, 29 and 67 models, the best 5 models are chosen with the highest cumulative posterior probability of 0.58. Various models in this case suggest more strongly that performance variables are positively linked with executive tenure.

Table 4

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	22.61	-9.72	19.53	-9.11	26.60
Avg_ROA		1.42			
Avg_ROE					
Avg_Q					
Avg_return					
Avg_EPS					
Avg_EntVal			11.55	10.34	
Firmage	0.47	0.51	0.49	0.52	0.47
Ownership					-4.45
Ind_Type					
Exec_age		0.51		0.45	
r^2	0.07	0.10	0.10	0.12	0.08
Post prob	0.18	0.14	0.14	0.07	0.04
BIC	-6.55	-5.99	-5.99	-4.60	-3.72

Note: This table exhibits the five best models with highest cumulative posterior probability for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Chairman tenure in months is the dependent variable and the independent variables are average return on assets, average return on equity, average Tobin's q, average EPS and average enterprise value. Other control variables used are age of the firm, age of the executive, ownership of firm, type of industry. The goodness of fit, posterior probability and the Bayesian information criteria coefficient for model selection is given.

Based on the results above, we selected the combination of independent variables chosen by the AIC criteria and applied regression on it with tenure in months being the dependent variable.

Table 5

	Estimate	Std. Error	t value	Pr(>|t|)	VIF	Adj. r^2
Intercept	-10.89	16.09	-0.67	0.49		
Firm_age	0.39	0.14	2.68	0.00	1.19	
Exec_age	0.51	0.23	2.18	0.03	1.01	0.13
Avg_EPS	0.12	0.08	1.43	0.15	1.33	
Avg_ROA	53.16	27.36	1.94	0.05	1.15	

Note: This table exhibits the regression coefficient of independent variables chosen by AIC criteria for Chairman's tenure as dependent variable. Age of firm, age of the executive, average EPS and average ROA are all positive but only firm age and executive age are significant. VIF values indicate that the issue of multicollinearity does not exist in the model. Finally the goodness of fit is given.

It can be observed from table 3 that age of firm and age of executive positively impact the tenure of chairman. Average ROA are also positively related and significant which imply that firm performance have a positive impact on chairman's tenure.

4.2 CEOs

Another important executive in a company is the CEO. So, the same process (as in the case of chairman) is applied on CEOs wherein the independent variables initially chosen are Average Return on Assets, Average Return on Equity, Average Tobin's q, Average return, Average Earnings per share, Average Enterprise value, Age of the firm, type of ownership, type of industry and the age of the executive. Then used Bayesian Model Averaging to select the best predictors for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Out of three iterations with 16, 13 and 25 models, the best 5 models are chosen with the highest cumulative posterior probability of 0.76. Model 4 displays that Avg Enterprise Value is highly positively related with a CEOs tenure along with firm age. Model 3 and 5 indicates that CEO tenure is negatively related to the age of the executive. Type of industry is negative in all the models signifying that services and banking industry CEOs tenure are lesser than that of those in the manufacturing sector.

Table 6

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	30.62	35.08	48.13	29.67	51.23
Avg_ROA					
Avg_ROE					
Avg_Q					
Avg_return					
Avg_EPS					
Avg_EntVal				4.33	
Firmage	0.29	0.27	0.28	0.28	0.25
Ownership		-4.89			-4.65
Ind_Type	-10.30	-10.85	-10.64	-11.20	-11.14
Exec_age			-0.29		-0.27
r^2	0.10	0.11	0.11	0.10	0.13
Post prob	0.36	0.18	0.11	0.05	0.04
BIC	-10.95	-9.60	-8.66	-7.24	-6.97

Note: This table exhibits the five best models with highest cumulative posterior probability for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. CEO tenure in months is the dependent variable and the independent variables are average return on assets, average return on equity, average Tobin's q, average EPS and average enterprise value. Other control variables used are age of the firm, age of the executive, ownership of firm, type of industry. The goodness of fit, posterior probability and the Bayesian information criteria coefficient for model selection is given.

Based on the results above, we selected the combination of independent variables chosen by the AIC criteria and applied regression on it with tenure in months being the dependent variable.

Table 7

	Estimate	Std. Error	t value	Pr(>|t|)	Adj. r^2
Intercept	53.13	10.98	4.83	0.00	
Firm_age	0.27	0.07	3.49	0.00	
Ind_Type	-11.38	3.05	-3.72	0.00	0.12
Ownership	-4.61	2.45	-1.88	0.06	
Exec_age	-0.27	0.16	-1.63	0.10	

Note: This table exhibits the regression coefficient of independent variables chosen by AIC criteria for CEO's tenure as dependent variable. Age of firm, age of the executive, average EPS and average ROA are all positive but only firm age and executive age are significant. Finally the goodness of fit is given.

It can be observed from table 7 that age of firm positively impact the tenure of CEO. Age of the executive however are negatively related with tenure of CEO implying that CEOs with more age would likely have less tenure left. Ownership is a dummy variable that has a value 1 for business group firms and 0 otherwise. The coefficient of ownership is negative and significant implying that the CEO tenure of business group firms would be shorter than those of standalone firms. None of the financial performance variable seem to have any influence on the tenure of CEOs.

Next set of tables are for forcefully removed CEOs where the observations only contains those CEOs who were ousted with no specific reason mentioned. The number of observations reduced from 201 to 167 in doing this. First we used Bayesian Model Averaging to select the best predictors for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Out of three iterations with 49, 32 and 97 models, the best 5 models are chosen with the highest cumulative posterior probability of 0.54. Average Enterprise Value again is the major determinant in CEO tenure and industry type dummy shows negative values for services and banking industry with respect to manufacturing sector.

Table 8

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	49.35	51.80	27.09	27.86	49.92
Avg_ROA					
Avg_ROE					
Avg_Q					
Avg_return					
Avg_EPS					
Avg_EntVal					6.87
Firmage	0.23	0.25	0.24	0.26	0.25
Ownership					
Ind_Type		-7.02		-6.38	-7.93
Exec_age	-0.37	-0.39			-0.39
r^2	0.09	0.11	0.06	0.08	0.13
Post prob	0.15	0.13	0.12	0.06	0.05
BIC	-5.85	-5.57	-5.37	-4.12	-3.88

Note: This table exhibits the five best models with highest cumulative posterior probability for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. CEO tenure in months is the dependent variable and the independent variables are average return on assets, average return on equity, average Tobin's q, average EPS and average enterprise value. Other control variables used are age of the firm, age of the executive, ownership of firm, type of industry. The goodness of fit, posterior probability and the Bayesian information criteria coefficient for model selection is given.

Based on the results above, we selected the combination of independent variables chosen by the AIC criteria and applied regression on it with tenure in months being the dependent variable.

Table 9

	Estimate	Std. Error	t value	Pr(>|t|)	Adj. r^2
Intercept	51.86	10.64	4.87	0.00	
Firm_age	0.29	0.07	3.80	0.00	
Ind_Type	-11.06	2.96	-3.73	0.00	0.13
Ownership	-3.99	2.38	-1.67	0.09	
Exec_age	-0.27	0.16	-1.71	0.08	

Note: This table exhibits the regression coefficient of independent variables chosen by AIC criteria for CEO's tenure as dependent variable. Age of firm, age of the executive, average EPS and average ROA are all positive but only firm age and executive age are significant. Finally the goodness of fit is given.

It can be observed from table 9 that age of firm positively impact the tenure of forcefully removed CEO. Age of the executive however are negatively related with tenure of CEO implying that CEOs with more age would likely have less tenure left. Ownership is a dummy variable that has a value 1 for business group firms and 0 otherwise. The coefficient of ownership is negative and significant implying that the CEO tenure of business group firms would be shorter than those of standalone firms. None of the financial performance variable seem to have any influence on forcefully removed CEOs tenure.

4.3 Executives holding Dual offices

The same process is applied on CEOs wherein the independent variables that we started out with are Average Return on Assets, Average Return on Equity, Average Tobin's q, Average return, Average Earnings per share, Average Enterprise value, Age of the firm, type of ownership, type of industry and the age of the executive. First we used Bayesian Model Averaging to select the best predictors for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Out of three iterations with 51, 35 and 147 models, the best 5 models are chosen with the highest cumulative posterior probability of 0.47. Model 1 and 4 displays that Average ROA and Average EPS is highly positively related with a CEOs tenure along with firm age. Model 1, 2, 4 and 5 indicates that CEO tenure is negatively related to Average ROE. Type of industry is negative in all the models signifying that services and banking industry CEOs tenure are lesser than that of those in the manufacturing sector.

Table 10

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	55.61	53.38	52.68	49.85	47.10
Avg_ROA	16.69			16.40	
Avg_ROE	-12.74	-2.93		-12.51	-3.06
Avg_Q					
Avg_return					
Avg_EPS	3.30			3.17	
Avg_EntVal					
Firmage				0.13	0.14
Ownership					
Ind_Type	-14.66	-13.75	-13.30	-17.59	-16.99
Exec_age					
r^2	0.35	0.29	0.26	0.37	0.31
Post prob	0.14	0.10	0.09	0.06	0.05
BIC	-28.36	-27.60	-27.51	-26.81	-26.38

Note: This table exhibits the five best models with highest cumulative posterior probability for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Dual executive tenure in months is the dependent variable and the independent variables are average return on assets, average return on equity, average Tobin's q, average EPS and average enterprise value. Other control variables used are age of the firm, age of the executive, ownership of firm, type of industry. The goodness of fit, posterior probability and the Bayesian information criteria coefficient for model selection is given.

Based on the results above, we selected the combination of independent variables chosen by the AIC criteria and applied regression on it with tenure in months being the dependent variable.

Table 11

	Estimate	Std. Error	t value	Pr(>|t|)	VIF	Adj. r^2
Intercept	54.29	5.82	9.31	0.00		
Ind_Type	-19.18	2.84	-6.74	0.00	1.84	0.31
Avg_ROE	22.92	8.20	2.79	0.00	1.37	
Firm_age	0.11	0.07	1.47	0.14	1.72	

Note: This table exhibits the regression coefficient of independent variables chosen by AIC criteria for Dual executive's tenure as dependent variable. Age of firm, age of the executive, average EPS and average ROA are all positive but only firm age and executive age are significant. VIF values indicate that the issue of multicollinearity does not exist in the model. Finally the goodness of fit is given.

It can be observed from table 11 that average ROE is positively related to dual executive tenure implying that the tenure of a dual executive increases with increase in average ROE.

The number of observations reduced from 107 to 86 when only forceful removals are considered. First we used Bayesian Model Averaging to select the best predictors for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Out of three iterations with 29, 14 and 48 models, the best 5 models are chosen with the highest cumulative posterior probability of 0.68.

Table 12

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	51.07	51.47	58.93	47.02	52.30
Avg_ROA					8.32
Avg_ROE	-10.39	-3.39	-10.49	-10.12	-12.63
Avg_Q					
Avg_return					
Avg_EPS	2.51		2.54	2.39	3.25
Avg_EntVal					
Firmage				0.09	
Ownership			-3.95		
Ind_Type	-12.80	-12.84	-13.96	-15.01	-13.35
Exec_age					
r^2	0.34	0.28	0.35	0.35	0.35
Post prob	0.34	0.10	0.08	0.07	0.06
BIC	-22.74	-20.39	-20.03	-19.56	-19.49

Note: This table exhibits the five best models with highest cumulative posterior probability for a linear model that has tenure of the executive as dependent variable and performance variables as independent ones along with other control variables. Dual executive tenure in months is the dependent variable and the independent variables are average return on assets, average return on equity, average Tobin's q, average EPS and average enterprise value. Other control variables used are age of the firm, age of the executive, ownership of firm, type of industry. The goodness of fit, posterior probability and the Bayesian information criteria coefficient for model selection is given.

Based on the results above, we selected the combination of independent variables chosen by the AIC criteria and applied regression on it with tenure in months being the dependent variable.

Table 13

	Estimate	Std. Error	t value	Pr(>|t|)	VIF	Adj. r^2
Intercept	58.81	5.07	11.58	0.00		
Ind_Type	-16.45	2.69	-6.10	0.00	1.33	0.28
Avg_ROE	22.43	8.27	2.71	0.00	1.41	

Note: This table exhibits the regression coefficient of independent variables chosen by AIC criteria for Dual executive's tenure as dependent variable. Age of firm, age of the executive, average EPS and average ROA are all positive but only firm age and executive age are significant. VIF values indicate that the issue of multicollinearity does not exist in the model. Finally the goodness of fit is given.

It can be observed from table 13 that average ROE is positively related to forcefully removed dual executive tenure implying that the tenure of a dual executive increases with increase in average ROE. Average ROE is the financial performance variables that determines the tenure of a forcefully removed dual executive.

5. Conclusions and Implications

For chairmen the age of firm and age of executive are positively and significantly related with his/her tenure but performance variables are not significant. However, for forced chairmen turnover Average ROA is positively and significantly related to his/her tenure in months in addition to firm's age and executive's age. In the case of CEOs the age of firm is positively and significantly related at 1% level of significance and age of executive is negatively and significantly related with his/her tenure at 10% level of significance. Industry type is significant along with ownership and average returns which are negative and significant at 10% level of significance. In the case of forced CEO turnover all the coefficients remain same except for average returns which become significant at 5% level of significance.

For dual executives the age of firm and average ROE are positively and significantly related with his/her tenure at 1% level of significance. Executives are influential and their decisions may affect the entire firm. In that regard, our research helps practitioners gain a broader understanding of stakeholder relationships as CEO tenure increases. For example, to build sustainable competitive advantages (Porter, 1991), CEOs may help devise processes that foster firm-employee and firm customer relationships, thereby enhancing firm returns and decreasing volatility in those returns (Bowman, 1980). Further, longer-tenured CEOs may succumb to complacency and mal-adaptability to eclectic business markets (Hambrick and Fukutomi, 1991; Miller, 1991). This work would extend research on the interfaces between strategy and finance. Executives in various capacity have different tenures depending upon the performance of corresponding firms per se.

References

Agrawal, A. and Knoeber, C. (1996), Firm performance and mechanisms to control Agency problems between Managers and Shareholders, Journal of Financial and Quantitative analysis, 31 (3): 377-397.

Allgood and Farrell. (2014), The effect of CEO tenure on the relation between firm performance and turnover, The Journal of financial research, 23 (3): 373-390.

Brookman and Thistle. (2009), CEO tenure, the risk of termination and firm value, Journal of Corporate Finance 15 (3): 331-344.

Goyal and Park. (2002), Board leadership structure and CEO turnover, Working Paper, Hong Kong University of Science & Technology.

Hambrick D. C, and Fukutomi G. D. S. (1991), The seasons of a CEO's tenure, Academy of Management Review 16(4): 719–742.

Henderson A. D, Miller D, and Hambrick D. C. (2006), How quickly do CEOs become obsolete? industry dynamism, CEO tenure, and company performance, Strategic Management Journal 27(5): 447–460.

Hill and Phan. (1991), CEO Tenure as a Determinant of CEO Pay, The Academy of Management Journal 34 (3), 707-717.

Levinthal D. A, and March J. G. (1993), The myopia of learning. Strategic Management Journal, Winter Special Issue 14: 95–112.

Luo X, Kanuri V. K., & Andrews M. (2013), How does CEO tenure matter? The mediating role of firm-employee and firm-customer relationships. Strategic Management Journal 27(5): 434–446.

Miller D, and Shamsie J. (2001), Learning across the life cycle: experimentation and performance among the Hollywood studio heads, Strategic Management Journal 22(8): 725–745.

Miller D. (1991), Stale in the saddle: CEO tenure and the match between organization and environment. Management Science 37(1): 34–52.

Musteen, M., Barker, V.L., and Beaten, V. (2006). CEO attributes associated with attitude toward change: The direct and moderating effects of CEO tenure. Journal of Business Research, 59: 604-612.

Shen and Canella Jr. (2002), Revisiting the Performance Consequences of CEO Succession: The Impacts of Successor Type, Post succession Senior Executive Turnover, and Departing CEO Tenure: The Academy of Management Journal, 45 (4): 717-733

Simsek Z. (2007), CEO tenure and organizational performance: an intervening model. Strategic Management Journal 28(6): 653-662.

Souder D, Simsek Z, and Johnson S. G. (2012). The differing effects of agent and founder CEOs on the firm's market expansion, Strategic Management Journal 33(1): 23-41.

Tsai, W. H, Hung J. H. Kuo Y. C. and Kuo L, (2006), CEO Tenure in Taiwanese Family and Nonfamily Firms: An Agency Theory Perspective, Family Business Review: Journal of the family firm institute, 19 (1), 11-28

Walters, Kroll and Wright, (2007), The impact of TMT board member control and environment on post-IPO performance, The Academy of Management Journal, 53 (3): 572-595

Wu S, Levitas E, and Priem R. L. (2005), CEO tenure and company invention under differing levels of technological dynamism. Academy of Management Journal 48(5): 859–873.

Appendix

Short tenured CEOs:

- Alan Fishman of Washington Mutual served from September 8th 2008 to September 26th 2008. He was the CEO for 17 days only before the assets of the company was seized by the federal regulators on September 25th 2008. He was allowed to go the next day. During his 18 days as CEO, Fishman received $ 19 million in pay. The company's shareholders were rewarded with the share price that fell to pennies in 2009 from $ 45 in 2007.
- Robert B. Willumstad of American International Group (AIG) served as the CEO from June 2008 to September 2008. During his tenure, the share price if AIG plunged by 97%. The collapse of AIG was followed by a global financial meltdown.
- Chris Jaques of Young and Rubicam North America rendered his services as the CEO of the company from September 2006 to January 2007.
- Jack Griffin was the CEO of Time Warner Inc.'s Magazine division from September 2008 till February 2009.

Long tenured CEOs:

- CEO: Oracle Corporation Duration: 34 years Larry Ellison is co-founder and chief executive officer of Oracle Corporation. As of 2011 he is the fifth richest person in the world, with a personal wealth of $39.5 billion.
- CEO: Marriott International Duration: 39 years John Willard "Bill" Marriott, Jr. is the Chairman and CEO of Marriott International. Marriott joined the Marriott Corporation in 1956, was elected Executive Vice President and member of the Board of Directors in January 1964 and president of the company in November 1964, Chief Executive Officer in 1972, and Chairman of the Board in 1985.
- CEO: Penske Corporation Duration: 42 years Roger S. Penske is the owner of the automobile racing team Penske Racing, the Penske Corporation, and other automotive related businesses.
- CEO: Warren Buffet: More than 45 years in Berkshire Hathaway. Has been ranked amongst the richest people in the world.