

The impact of CEO turnover on a company

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ABSTRACT

One of the most important events in an organizations life is change of leadership. The transitions of a firm's management don't only affect the directions by the management for the business but may also affect the revenue of the firm's sales. This study studied the effect of CEO turnover on various financials using variables such as stock prices, sales revenue, EBITA, earnings per share, D/E ratios and nature of CEO exit. The study population comprises of around 30 companies listed of the National Stock Exchange or Bombay Stock Exchange. A descriptive research design was used to evaluate these companies. This research used secondary data, which was retrieved from a period of 8 years. The research paper adopted an event study method, the event period for the study of stock prices was 31 days, where -15 days covered the pre-CEO change announcement period and +15 days covered post CEO announcement period. The event period for the other variables such as revenue was from -4 quarters and +4 quarters, and for EBITA was -1 year and +1 year. The statistics results established that there was a significant variation in stock returns of listed companies before and after CEO turnover announcement. The nature of exit of CEO also displayed a significant change in the financials of that company. The study concluded that the forced exit of a CEO could influence stock price, earnings per share, and sales. The effect on stock price and sales can be positive or negative depending on the shareholders perspective of that CEO and the company. The study suggests that management of listed companies should not worry about making changes to the CEO since CEO change announcements significantly affect the company's stock prices and its earnings per share which is detrimental to the shareholders.

Keywords: Planned, Forced, Stock Price, CEO resignation, Performance, Stakeholders, CEO turnover.

1.0 INTRODUCTION

1.1 BACKGROUND

Way back in 2011 when Steve Jobs had declared that he was going on a sick leave had created tremors for Apple in the stock markets. The shares dipped by about 8.4% following the announcement. It has been perceived that CEO's affect the valuation of the public listed companies. After all CEO's are the pillars of the company. It is their vision that guides in times of turbulence. Therefore, the incident of CEO change in company is assigned tremendous importance.

A CEO turnover occurs due to various reasons and preceding conditions. The choice for new CEO hinges on the various corporate characteristics like corporate size, performance and level of diversity. CEO turnover has become an event of interest over the past few years. It can be seen frequently in media, headlines covering who has appointed or removed from the organization. The interest among the academics has also increased by leaps and bounds. Although it has opened up a plethora of new angles to be researched but so far it has led to stream of inconclusive research.

A CEO change is actually an essential occurrence for businesses since financiers show reaction to the publication of such information. CEO change information for investors is immensely valuable since it is while making investment decisions.

Why CEOs Fail: the causes and consequences of turnover at the top (Chuck Lucier, Eric Spiegel, Robert Schyut, 2002);¹ shows that among the world's largest 2500 companies, there has been a 53% increase in CEO succession from 1995 to 2001. This is because shareholder activism and changes in corporate governance have transformed the CEO's world. During that 6-year time frame, the number of CEO's departing because of the company's poor financial performance increased by 130 percent. The average tenure of CEO's in a company declined from 9.5 years to 7.3 years. The departure of a CEO is caused due to 2 main reasons, either performance or merger. Although the CEO turnover, surprisingly, declined in 2001, from 2000, there is a long-term trend toward greater accountability and ever-higher CEO turnover.

Following the data, there has been a revelation that CEO turnover will continue to increase globally. It will follow the trend seen from 1995-2001 over the upcoming years.

The reasons for this increase in CEO turnover are;

- CEO turnover is a means to link management to the creation of shareholder value. CEO's who depart for performance related reasons generate poor results for the shareholders.
- All CEO's perform better during the first half of their tenure. This is because CEO's deliver significantly high returns for the shareholders during the first half of their time in office and there is significant pressure from shareholders and boards for more frequent changes and higher performance due to those changes.
- The public is increasingly demanding that CEOs bear responsibility for their company's problems.

¹ Chuck Lucier, Eric Spiegel, Robert Schyut, (2002), Why CEOs Fail: the causes and consequences of turnover at the top
<https://www.strategy-business.com/article/20306?gko=bfb5b>

- Due to the combination of shorter tenures and younger age of CEO's at ascension creates a pool of experienced former CEO's available for boards that want to replace a company leader. This is why more experienced CEOs are available to run companies.
- During the mid-2000's, the reason was due to boardroom disputes being high. Discrepancies between what each board member wants, and the struggle for power had accounted for more than one-third of all the CEO dismissals since 2004.

In 2018, there had been a string of new trends, viz. sexual assault allegations, racial slurs and company policy violations. This had caused a number of CEOs to be removed from their companies due to inappropriate behavior or conduct which violate companies' policies, and their codes of ethics.

1.2 PURPOSE

A majority of the research regarding the CEO turnover and its effects over the long period of time has been conducted from the American point of view. Also the results of those researches haven't been further analyzed. A research based from the point of Asian sub-continent has been lacking. The major focus of this thesis lies on determining the impact of a CEO turnover on the stock price of the firm and also the short-term financial stability of the firm.

1.3 PAST RESEARCH

1.3.1 Impact of CEO's exit on the firm's Financials

Pyrrhic Victories: The Cost to the Board of Ousting the CEO (Andrew Ward, Karen Bishop and Jeffrey A. Sonnenfeld, 1999);² The findings here point towards the conclusion that not only the company as a whole gets affected but also the board of directors have to pay a heavy cost, be it a normal or forced exit of a CEO. This paper directly points to three disruptions that happen at the board level. First, on an average it was found that average tenure of CEO was less than that of a director and therefore the upcoming CEO faces challenges for functioning in the best interests of board members.

Second, forced CEO exits for causes of poor corporate performance, merger/takeover, illegal or improper behavior or personal mismanagement by the CEO and there is no proof that board has failed to perform its duties. In this case the new CEO has to make a defensive approach so that he/she does not become another scapegoat. Here the company may or may not be able to recover from this change as initially CEO is not able to function and direct company freely due to board pressure.

Third, when CEO is forced to step down and board of directors have also failed to perform their duties, new CEO has to strategically make substantial changes to the board and hence a heavy board turnover is expected to happen which may again bring down the performance and efficiency of all operations within the organization. So this research points to the conclusion that when there is a forced exit of a CEO particularly when company is not performing well, not only the CEO but also the directors are severely affected by organization catastrophes.

² Andrew Ward, Karen Bishop and Jeffrey A. Sonnenfeld, (1999), Pyrrhic Victories: The Cost to the Board of Ousting the CEO

Source: Journal of Organizational Behavior, Vol. 20, No. 5 (Sep., 1999)

Powerful CEOs and Their Impact on Corporate Performance (Renée B. Adams, Heitor Almeida and Daniel Ferreira, 2005);³ The study here particularly points towards the fact that the effect of CEO's exit, be it forced or regular, on corporate performance of the company depends on how much centralized is the decision-making power of corporate structure of the organization is. It also points out there is no direct impact of whether or not the CEO appoints the member(s) of board of directors on operations as well as the stock price of the company. Companies where the decision-making power is more centralized and hence have powerful CEOs are not only the worst performers but also the best performers. It was also found that important policy recommendations for the design of governance structure inside an organization should not solely based on what CEO recommends. Though some amount of power is needed for optimal functioning of the company and the hierarchy of structure that it maintains, but all decisions that may affect future performance of the company should be taken only after it has been reviewed by the board. Board should be kept in the loop so that in a case of CEO's exit from the company, the board knows as to where the company stands as of now and what steps have to be taken in order to have a smooth transition of the company following the exit. The study also concludes that the potential cost of diluting the CEO's power in the company is that there is less variation in the performance of the company but the performance stands at an average level at all the times and is not able to perform extravagantly well.

Revisiting the performance consequences of CEO succession: the impacts of successor type, post succession senior executive turnover, and departing CEO tenure (Wei Shen, Albert A. Cannella, Jr, 2002)⁴; This research paper mainly focuses on determining the performance consequences of CEO succession. Power circulation theory of control has been followed. WEI and Albert distinguished the CEO successors as followers, contenders, and outsiders. They believed that the successor type would greatly affect the ROA. The research done prior to this was extensive but the findings were inconclusive.

In this study, components have been focused upon. They are characteristics of the CEO successor, post-succession executive turnover at the top management level and CEO succession frequency at a firm. A firm's performance is a multi-dimensional phenomenon, which is generally measured using accounting and marketing indicators (e.g., Daily, Certo, & Dalton, 2000; Finkelstein & Hambrick, 1990; Ocasio, 1994; Zajac, 1990). This research paper focuses on the accounting indicators. The power circulation theory states that a CEO will face a power contest initiated by senior executives as well as by outsider directors.

Post succession firm ROA was used as the dependent variable and it was concluded that all three components would play a role in a firm's operational performance. This concluded that post-succession executive turnover is a direct outcome of CEO succession and it has important implications on the performance of the type and also the direction of the impact would depend upon the type of successor.

³ Renée B. Adams, Heitor Almeida and Daniel Ferreira (2005), Powerful CEOs and Their Impact on Corporate Performance
Source: The Review of Financial Studies, Vol. 18, No. 4 (Winter, 2005)

⁴ Wei Shen, Albert A. Cannella, Jr, (2002), Revisiting the performance consequences of CEO succession: the impacts of successor type, post succession senior executive turnover, and departing CEO tenure

Performance consequences of new CEO outsidership: moderating effects of Pre- and post-succession contexts (Ayse Karaevli, 2007)⁵; There are various theories that have predicted that outsiders would be selected as CEO's when the organization performs poorly and is in desperate need of a strategic change. On the other hand, an insider is selected when the organization requires continuity in its operations. However, the performance consequences of new CEO origin have also been characterized by mixed results.

Advantages of new CEO outsidership: The resource dependence and upper echelon perspectives highlight the advantages of hiring a new CEO from outside the industry. The adaptive view of the resource dependence theory supports the replacement of top management with those hired from outside the industry to help resolve the organizational difficulties such as poor performance.

Whereas, the upper echelon perspective identifies the industry tenure and executives firm as two of the most important sources of strategic inertia in the firm. The upper echelon perspective identifies the tenure in the organization as the most salient characteristic of a new CEO's insidership to the firm. A CEO's industry background influences their choice of strategy, hence, the industry tenure of a new CEO is bound to affect the organizations performance.

According to the various theories, as a new CEO's outsidership increases, the new CEO becomes more open minded, less committed to status quo and is able to pursue new courses of action. Since the new CEO is less likely to be socially connected to the internal executives, he or she will be less reluctant to make major changes within the organization.

Disadvantages of new CEO outsidership: Identifying a major drawback of increase in CEO outsidership, with the increase in CEO's outsidership, it is highly likely that he or she will lack critical industry specific skills and will also create a possibility of discomfort within the firm. Since outsider CEOs are likely to be hired under poor performance situations, their lack of industry specific skills combined with pressure from the board of directors will push them towards taking premature actions rather than making well-formulated and appropriate changes in organizational structure, strategy and internal processes. Furthermore, there is more uncertainty towards the external candidate's personal traits and whether he or she will fit well within the organizations culture and meet the firm's strategic requirements. This study reconciled inconsistent findings on the performance consequences of new CEO origin. The study offered a refined conceptualization and finer measurement of the underlying construct of the insider vs. outsider CEO.

1.3.2 Impact of CEOs exit on Share-price of the firm

Effect of Chief Executive Officer change on stock returns of firms listed at the Nairobi Securities Exchange (Mburu Wanyoike, 2017);⁶ This study focuses on the effect on the stock prices when CEOs leave a company. The primary focus is on 13 companies listed at Nairobi Securities Exchange that had changed their chief executives from a period between January 2012 and December 2016. The data was collected 15 days before and 15 days after the CEO exit. It is initially pointed that the impact on share prices of a firm can be affected negatively or positively, although there is a greater risk of it being negatively affected. It is important to point out that the study has not taken into consideration the circumstances under which CEOs have left the organization, i.e., whether it was a

⁵ Ayse Karaevli, (2007), Performance consequences of new CEO outsidership: moderating effects of Pre- and post-succession contexts

Source: Strategic Management Journal, Vol. 28, No. 7 (Jul. 2007), Page: 687-688

⁶ Mburu Wanyoike, (2017), Effect of Chief Executive Officer change on stock returns of firms listed at the Nairobi Securities Exchange

forced exit or planned one. Since there is hardly any evidence to suggest otherwise, it is safe to believe that the forced exit might have a greater impact on share prices than a planned one. Finally, the research states that there is in fact a positive cumulative average abnormal return before and after CEO change announcement, and there is a significant negative correlation between the announcement of CEO's departure and the stock prices listed at NSE.

Market reaction to CEO appointment on JSE (Meiya Gert Nthoesane and Jan Walters Kruger, 2014);⁷ This study was aimed at assessing to the reaction of market on announcement of new CEO for a particular company. Here a cumulative data set of 43 companies were taken and their stock prices as well the volume of stocks traded were recorded. This study was conducted through Johannesburg Security Exchange. There were two aspects on which the companies were recorded – Share Price and Volume Traded. The study found that the announcement of a new CEO impacted negatively as far as share price is concerned, the reason being that the investors are not able to speculate future performance of the company and hence the stocks and therefore resulting in selling those stocks. As far as the volume of shares is concerned in a particular time interval of 72 days, it was found that the volume of the traded shares increased after the announcement. This is again due to the fact that there is an expectation in the market that links the person in the capacity of the CEO to the prospects of the firm and hence some investors sell their stocks while others take the risk by buying it which leads to net increase in volume of stocks traded for a particular company in a particular time interval.

1.4 CEO Turnover

When we analyze the CEO there are various patterns that can be observed and also there are various factors that stand out. These factors greatly contribute towards the performance or non-performance of a CEO. Generally, when we look at a typical MNC there are mainly three different types of CEOs possible in the initial years of that company. The CEO will either be the founder of the company or the owner of the company or if it is a family owned company it could be from among the family members. It has been observed that there is a definite pattern in terms of the tenure of the CEO. With each passing year the average tenure of a CEO is falling.

Eventually when the CEO steps aside or has to be removed the major task is find a suitable replacement. This is a very crucial task, and the main focus of this review will be on the cause and effects of this step. Now, there are number of reasons that can result into a change in CEO, but majorly the changes in the rate of CEO's succession can be assigned into 3 categories i.e.:

- **Merger-driven:** the CEO's job was eliminated typically because the chief of the other company in the merger assumed responsibility for the combined enterprise.
- **Performance-related:** the board of directors had to let go of the CEO due to weak performance or the CEO resigned because of cited job stress.
- **Regular-transition:** the CEO retires following a long-planned schedule, took a position elsewhere, stepped down for serious health reasons, or died in office.

⁷ Meiya Gert Nthoesane and Jan Walters Kruger, (2014), Market reaction to CEO appointment on JSE

The main parameter to judge a CEO's performance is the growth in net income of the company. It has been revealed that for a CEO to sustain a longer tenure, he/she must deliver consistent and acceptable returns to a shareholder. Generally, it is seen that more often than not, the long tenure CEOs meet shareholder's expectations.

2.0 Short term V/s Long term

As mentioned in the introducing paragraphs to this thesis, a number of studies have been carried out to highlight the long-term effects of CEO turnover on company performance. This has been done through investigating the initiating actions of a newly appointed CEO. These have been found to often include asset write-offs, income-reducing accounting method changes, income-reducing accounting accruals, and divestitures of previous acquisitions (Elliott and Shaw, 1988; Pourciau, 1993; Strong and Meyer, 1987; Weisbach, 1995). This is commonly referred to as incoming CEOs taking a "bath", as they in practice „wash away“ unwanted divisions and unprofitable operations in an attempt to boost future earnings, and keep the termination costs in the year of turnover. This has two implications – they reduce earnings in the short-run, but would most likely improve the assessment of future company performance, and thus lead to rising stock prices in the long run. Yet, the implications for short-term effects on stock prices are more blurry and unclear. The financial perspective, thus, has two streams – the short-term and the long-term investigations. This thesis is concerned with the effect of CEO turnover in the short-term.

2.1 Limitations

We have limited our study to the Indian market because there hasn't been enough research done on this topic with Indian companies. We have also limited our time frame to the years between 2010 and 2018. We believe 8 years is a sufficiently long time period to enable a valid analysis. Our purpose is to study the effect on company's financial stability and profitability along with the stock prices when the CEO is changed

3.0 Research Methodology and Data

The research methodology used was Chi Square analysis. The data used for various companies was secondary data.

3.1 Data Collection

Primary Sources: These data collection sources were not used as all the required parameters and data for a company are readily available at various secondary sources and are adequately reliable and valid.

Secondary Sources: All the data that was used during the research has been collected from various stock exchange websites and Bloomberg Terminal-

1. **NSE⁸:** Nation Stock Exchange is the leading stock exchange of India, which is located in Mumbai. It was the first exchange, which provided fully automated and screen-based trading platform to traders around the country. It has market capitalization of more than US \$2.27 trillion making it world's 11th largest stock exchange.

⁸ www.nseindia.com

2. **BSE⁹**: Bombay Stock Exchange is also an Indian stock exchange located in Mumbai with market capitalization of more than US \$4.9 trillion making it world's 10th largest exchange.
3. **Money Control¹⁰**: It is a leading Indian Business News website with vast amounts of financial data.
4. **Bloomberg Terminal**: It is a software provided by Bloomberg L.P that provides real time as well as historical data and helps user to analyze and take financial decisions.

Many variables were found out during the research that could be used for analysis of effect of CEO leaving the company. Some of the variables that were most relevant for research are described below:

1. **Tenure of CEO**: The number of years/months, a person is in that position.
2. **Amount of Capital**: The scale of investors (count) for that particular company.
3. **EPS**: Effect of CEO's exit is visible on earnings per share.
4. **Industry**: Various industries like pharmaceutical, healthcare, heavy machinery etc.
5. **Debt-Equity Ratio**: Prominent parameter for assessing company's performance Year on Year which may highlight the effect of CEO's exit.
6. **Nature of exit**: Maximum effect on company's performance can be captured on the basis of nature of exit of the CEO- **Forced, Voluntary or Planned**.
7. **Sales Revenue**: Comparison of Year on Year sales revenue gives insight on how the company is performing and may give evidence that - Is there is an effect of CEO exit or not?
8. **Chasm of CEO**: The personality and nature of CEO may or may not affect the company.
9. **Stock Price**: This is the most prominent variable for measuring the effect of CEO's exit on company's performance.
10. **EBITDA**: Earnings before interest, tax, depreciation and amortization is also a parameter to ascertain company's overall performance Year on Year.

Out of the above listed important parameters we selected **EPS, D/E Ratio, Sales Revenue, EBITDA, Stock Price¹¹** and **Nature of exit**. The reason for selecting these parameters are-

- a. These are the most prominent parameters that pave the way for a conclusive result.
- b. The **validation** and **reliability** could be thoroughly checked using various financial websites.
- c. All these variables are **mutually exclusive** and **collectively exhaustive**.
- d. EPS, D/E and Sales revenue portray the **overall performance** of the company and help in comparing the performance with the industry specific standards.
- e. EBITDA was selected instead of NPAT or Retained Earnings since each company has **different tax bracket and interest** due to several leverages. Also, tax levied depends on the scale of that company and also the industry in which that particular company functions. Due to this all terms derived after EBITA in the balance sheet would create a bias and produce inconclusive results.
- f. **Initial tremors** of CEO exiting are felt **immediately in the stock price** of the company and thus daily stock price was tracked 15 days before and after the date of announcement of resignation.

Data collection process

⁹ www.bseindia.com

¹⁰ www.moneycontrol.com

¹¹ www.yahoofinance.com

1. Using various financial news website, 30 companies were listed out whose CEO stepped down between the years 2010 and 2017. Companies at later years were not considered due to a simple fact that the parameter trends could not be measured due to unavailability of data.
(Initially 48 companies were selected which were then shortlisted to 30)
2. The companies that were selected met the following criteria-
 - a. The company is presently **listed on NSE or BSE**.
 - b. CEO resignation is between **2010** and **2017**.
 - c. Adequate data is available in public domain.
 - d. **Date of resignation** of CEO is available.
3. Considering the date of resignation as the reference point for each company's parameter, each parameter was collected as follows-
 - a. **EPS** was collected for four quarters before and after the quarter in which resignation was announced.
 - b. **D/E Ratio** was recorded for the year before and after the year of resignation.
 - c. **EBITDA** was also collected for the year before and after the year of resignation.
 - d. **Sales revenue** was collected quarterly – four quarters before and after the date of resignation.
 - e. **Stock Price** was recorded for 15 days before and after the day of resignation.
4. All the respective variables were then converted to their respective common unit for each of the 30 companies.

3.2 Data Analysis Process

The analysis technique selected was **Chi-square Test** to find out the correlation between the variables. Chi-square test is very commonly used when a relationship has to check between categorical variables. The underlying or default assumption of this test is – the categorical variables are independent i.e. no relationship exists between the said variables. Though Chi-square has various limitations, it is able to identify difference between expected and observed values.

Regression was not used for the analysis as there was only one independent variable – Nature of Exit and 5 dependent variables. This is a limitation of regression and hence the analysis was done using Chi-square test.

The quantitative data was handled and analyzed by using two prominent software-

- a. **MS-Excel** – Excel was used to systematically tabulate the collected data. It was also used to find average of various parameters like sales revenue, EPS and Stock Price.
- b. **IBM SPSS Statistics** – SPSS was used to analyze data by Chi-square test and produce results in a tabulated form.

The analysis was done as follows-

1. First the independent variable – Nature of exit with 3 parameters (Voluntary, Forced and Planned) was converted to binary form using excel so that it can be used in analysis.
2. EPS and Sales revenue for 9 quarters was converted to average of EPS and Sales before and after the exit.
3. Daily stock price was converted to 15-day average before and after the day of announcement.
4. Excel data was then imported to SPSS and variables defined in SPSS.
5. Analysis was done using **Descriptive Statistics (Cross Tabs)** under the Analyze Tab in SPSS.
6. Parameters used in Cross Tabs were as follows-
 - a. **Row(s):** Dependent variables (Inserting one by one).
 - b. **Column(s):** Nature of exit.

- c. Selecting **Chi-Square** and **Phi and Crammer's V** in statistics option.
- d. Expected and Observed options were selected under Cells tab for comparing the values.

Each dependent variable was compared with Nature of exit in successive iterations, the results of which are described later.

3.3 Hypothesis

As mentioned earlier, we chose six variables to measure the effect of CEO turnover. Of these six variables, we compared five variables, viz. earnings per share, debt/equity ratio, sales, stock price, earnings before interest, tax, depreciation and amortization with “nature forced” variable. In other words, “nature_forced” variable was kept constant for the comparison. Doing this helped us comprehend the effect of forced exit on other variables.

Our null and alternate hypothesis varied with change in each of the five variables.

Our hypotheses were as stated below:

H₀: earnings per share is independent of forced exit

H₁: earnings per share is dependent on forced exit

H₀: debt/equity ratio is independent of forced exit

H₁: debt/equity ratio is dependent on forced exit

H₀: sales are independent of forced exit

H₁: sales are dependent on forced exit

H₀: earnings before interest, tax, depreciation and amortization is independent of forced exit

H₁: earnings before interest, tax, depreciation and amortization is dependent on forced exit

We not only compared stock price with the forced exit of a CEO, but also with voluntary exit of him or her. We did this to have a deeper understanding of how the nature of exit of a CEO affects the stock price for a given period. Hypothesis of stock price with forced and voluntary exit is as mentioned below:

H₀: stock price is independent of forced exit

H₁: stock price is dependent on forced exit

H₀: stock price is independent of voluntary exit

H₁: stock price is dependent on voluntary exit

4.0 Research Analysis

Since our data was limited to only 30 companies listed on the Bombay Stock Exchange, we chose our significant level to be 10%. Keeping a confidence level to 90% was more feasible, because we were carrying out a completely new research on the Indian companies, hence we were uncertain of any variability that might occur in the analysis, and our sample size was also small.

The first analysis we carried out was between **EPS and Forced exit**. The analysis was carried out for EPS before and after the exit of a CEO vs. Forced exit. The test results are shown in **Exhibit 1 and Exhibit 2**. The assumption we made was at least 20% of the data should have an expected count of more than 5 (which was constant for all the other analyses). It can be seen from the results that that's not the case; hence we will be looking at the likelihood ratio. It can be seen that our likelihood ratio in both the cases are 0.078, which is slightly below our significance level of 0.1. Hence we conclude by rejecting our null hypothesis, which stated, "earnings per share are independent of forced exit". In this case, our alternate hypothesis is correct, i.e., earnings per share are dependent on forced exit.

Our next analysis was between **D/E ratio and Forced exit**. The analysis was carried out for D/E ratio before and after the exit of a CEO vs. Forced exit. The test results are shown in **Exhibit 3 and Exhibit 4**. The assumption we made was at least 20% of the data should have an expected count of more than 5. Since that's not the case, looking at the likelihood ratio, we found that the likelihood ratio for D/E ratio before the exit was 0.067 (below 0.1), and likelihood ratio for D/E ratio after the exit was 0.120 (above 0.1). The reason for this change in the result between the two analyses could be one of many myriad reasons, viz. the company may not have been performing well, industrial recession, etc. Due to this, it is possible that the CEO may have been sacked; hence the alternate hypothesis for D/E ratio before the exit vs. Forced exit is being accepted. But since the result of analysis of D/E ratio after the exit vs. CEO exit is 0.12, accepting the null hypothesis for the case, we can overall conclude that the leverage of a company is not dependent on the CEO, but on the company and its performance throughout the years itself. Therefore, we concluded by accepting our null hypothesis of debt/equity ratio being independent of forced exit.

The next analysis was between **Sales and Forced exit**. The analysis was carried out for sales before and after the exit of a CEO vs. Forced exit. The test results are shown in **Exhibit 5 and Exhibit 6**. The assumption we made was at least 20% of the data should have an expected count of more than 5. Since that's not the case, looking at the likelihood ratio, we found that the likelihood ratio for both the cases is 0.076, which was below our significance level of 0.1. Hence we concluded by rejecting our null hypothesis, which stated, "sales are independent of forced exit". In this case, our alternate hypothesis was correct, i.e., sales are dependent on forced exit.

Since the data for sales was an average of plus and minus four quarters from the date of announcement of a CEO exit, our data focused mainly on what happens to sales on a short-term basis. The reason for this could be that the firm might not be performing well in a given year; hence the board might have axed the CEO, and thereby bringing about changes in the company. This could be one of many reasons why the sales were dependent on the forced exit. *Hence, with only short-term data of sales of a company, we cannot concur that sale is actually affected by the forced exit nature of a CEO.*

Next, we analyzed **EBITDA and Forced exit**. The analysis was carried out for EPS before and after the exit of a CEO vs. Forced exit. The test results are shown in **Exhibit 7 and Exhibit 8**. The assumption we made was at least 20% of the data should have an expected count of more than 5. Since that's not the case, looking at the likelihood ratio, we found that the likelihood ratio for both the cases is 0.116, which was above our significance level of 0.1. Hence we concluded by accepting our null hypothesis, which stated, "EBITDA is independent of forced exit".

Next, we analyzed **Stock price and Forced exit**. The analysis was carried out for sales before and after the exit of a CEO vs. Forced exit. The test results are shown in **Exhibit 9 and Exhibit 10**. The assumption we made was at least 20% of the data should have an expected count of more than 5.

Since that's not the case, looking at the likelihood ratio, we found that the likelihood ratio for both the cases is 0.078, which was below our significance level of 0.1. Hence we concluded by rejecting our null hypothesis, which stated, "stock price is independent of forced exit". In this case, our alternate hypothesis was correct, i.e., stock price is dependent on forced exit.

This is because when news is flashed about the departure of a CEO, there is a lot of uncertainty in the market about who is going to replace him or her. This news also brings either a positive or a negative vibe in the minds of people, because they believe that this move is strategically better or worse for the company and themselves as current or prospective shareholders. This means that the stock price can either shoot up when the news is announced, because the public may view this as a preferable move, or the stock price can go down because the public may view this move as strategically deplorable.

Finally, we analyzed **Stock price and Voluntary exit** to check how a voluntary exit affects the stock price. The analysis was carried out for EPS before and after the exit of a CEO vs. Forced exit. The test results are shown in **Exhibit 11 and Exhibit 12**. The assumption we made was at least 20% of the data should have an expected count of more than 5. Since that's not the case, looking at the likelihood ratio, we found that the likelihood ratio for both the cases is 0.118, which was above our significance level of 0.1. Hence we concluded by accepting our null hypothesis, which stated, "Stock price is independent of voluntary exit".

5.0 Conclusion

In this paper, we study the impact of CEO turnover on a company. Based on the theoretical framework and past research, our analysis shows forced CEO exit as a measure of company's short-term stock price. For our analysis, we used quantitative data of 30 companies listed on BSE as well as NSE. For these companies, we extracted the data of EPS, EBITDA, SALES for plus four and minus four quarters from the date of announcement of a CEO's exit. For D/E ratio, we extracted data for plus one and minus one year, and for stock price, we extracted data for plus and minus 15 days from the date of announcement of CEO's departure. We then used IBM's SPSS software to conduct chi square analysis for our data. Our null hypotheses tests for almost all the variables were that forced exit of a CEO is independent of the variables. Although our null hypotheses were accepted for the variables, which measured company's performance (viz. EBITDA and D/E ratio), our null hypotheses for the variables like stock price, sales, and EPS was rejected. We would finally like to conclude from our analysis that the stock price and EPS are dependent on forced exit of a CEO. Hence, The effect can be negative or it can be positive depending on the shareholders' perception of that CEO and the company. On the other hand, for sales, if the data is considered only for a short-term basis, then even sales is affected by the forced exit nature. But if we consider long-term analysis of a company, then there are myriad detrimental factors that might be affecting the sale of a company. Hence, when we consider a long-term analysis of a company and its CEO's exit, the result obtained may or may not be the same. This also opens doors to future research that can be conducted to see the impact of a CEO's exit on a company's performance on a long-term basis. Since our research was only limited to a short term basis, we would also like to conclude that even sales is affected by the forced exit nature of a CEO.

6.0 Future Research

This research presents findings in proportion to how a company's financials are affected during the announcement of CEO turnover. Our study considers stock performance as one of the major influencers of company performance. However, the stock prices are governed by the stock market, which is not rational consideration. Due to this reason, our study also considers internal controlling factors such as D/E ratios. Other variables include EBITA, EPS, Sales revenue and Nature of exit. The nature of exit, i.e. forced exit or natural exit stands as the sole influencer of effect on the company's financials.

Our study has a limited set of control variables. To attain a higher level of understanding more control variables could be considered such as currency exchange rates between countries with significant international trades. Taking globalization into account, a control variable such as Global/European and/or American business cycle indexes could contribute greatly to the study. The ethos and philosophy of the organization could turn out to be a major variable in the research. Other internal control variables such as company size, liquidity, gender and number of employees could be used to improve the model.

This study does not consider lack of media coverage and its implications for abnormal returns, this could be one of the related topics to this study. In the future, our study would like to consider the impact of post-succession effects of turnover events on other positions within the organization, and the extent of changes in organizational policies, practices, structure and culture. One of the related topics of study could be the effect of changing board members of the companies and especially how changing the chairman of the board affects the company performance. Such a study would not be suitable in all countries since in some countries it is common, that the Chairman of the board is also the CEO. The Chairman is a part of the company's major strategic decision, hence, the Chairman definitely has some effect on the company performance.

It could be interesting to study if the CEO turnover differs between industries and also small, medium and large companies. Further, CEO changes in large-scale companies could be less impactful since large-scale companies have an established reputation, culture and the way of doing business. Whereas, in small-scale companies, the impact could be larger as there is more flexibility within the organization. The CEO tenure could also influence the large scale and small-scale companies in this above-mentioned manner.

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Annexures

Exhibit 1: EPS before CEO exit vs. Forced exit

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	30.000 ^a	29	.414	1.000		
Likelihood Ratio	40.381	29	.078	1.000		
Fisher's Exact Test	28.040			1.000		
Linear-by-Linear Association	1.273 ^b	1	.259	.270	.136	.000
N of Valid Cases	30					

a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .40.

b. The standardized statistic is 1.128.

Exhibit 2: EPS after CEO exit vs. Forced exit

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	30.000 ^a	29	.414	1.000		
Likelihood Ratio	40.381	29	.078	1.000		
Fisher's Exact Test	28.040			1.000		
Linear-by-Linear Association	2.838 ^b	1	.092	.092	.049	.000
N of Valid Cases	30					

a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .40.

b. The standardized statistic is 1.685.

Exhibit 3: D/E ratio before CEO exit vs. Forced exit

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	28.000 ^a	26	.358	.505		
Likelihood Ratio	37.521	26	.067	.505		
Fisher's Exact Test	25.885			.505		
Linear-by-Linear Association	4.503 ^b	1	.034	.022	.018	.000
N of Valid Cases	28					

a. 54 cells (100.0%) have expected count less than 5. The minimum expected count is .39.

b. The standardized statistic is -2.122.

Exhibit 4: D/E ratio after CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	23.784 ^a	23	.416	.651		
Likelihood Ratio	31.096	23	.120	.651		
Fisher's Exact Test	22.247			.651		
Linear-by-Linear Association	.217 ^b	1	.641	.815	.454	.000
N of Valid Cases	27					

a. 48 cells (100.0%) have expected count less than 5. The minimum expected count is .37.

b. The standardized statistic is .466.

Exhibit 5: Sales before CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	29.000 ^a	28	.413	1.000	
Likelihood Ratio	39.336	28	.076	1.000	
Fisher's Exact Test	27.097			1.000	
Linear-by-Linear Association	1.772	1	.183	^b	^b
N of Valid Cases	29				

a. 58 cells (100.0%) have expected count less than 5. The minimum expected count is .41.

b. Cannot be computed because there is insufficient memory.

Exhibit 6: Sales after CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	29.000 ^a	28	.413	1.000	
Likelihood Ratio	39.336	28	.076	1.000	
Fisher's Exact Test	27.097			1.000	
Linear-by-Linear Association	1.218	1	.270	^b	^b
N of Valid Cases	29				

a. 58 cells (100.0%) have expected count less than 5. The minimum expected count is .41.

b. Cannot be computed because there is insufficient memory.

Exhibit 7: EBITDA before CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25.000 ^a	25	.462	1.000	
Likelihood Ratio	33.651	25	.116	1.000	
Fisher's Exact Test	23.469			1.000	
Linear-by-Linear Association	.211	1	.646	^b	^b
N of Valid Cases	30				

a. 52 cells (100.0%) have expected count less than 5. The minimum expected count is .40.

b. Cannot be computed because there is insufficient memory.

Exhibit 8: EBITDA after CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25.000 ^a	25	.462	1.000	
Likelihood Ratio	33.651	25	.116	1.000	
Fisher's Exact Test	23.469			1.000	
Linear-by-Linear Association	.211	1	.646	^b	^b
N of Valid Cases	30				

a. 52 cells (100.0%) have expected count less than 5. The minimum expected count is .40.

b. Cannot be computed because there is insufficient memory.

Exhibit 9: Stock price before CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	30.000 ^a	29	.414	1.000	
Likelihood Ratio	40.381	29	.078	1.000	
Fisher's Exact Test	28.040			1.000	
Linear-by-Linear Association	.667	1	.414	^b	^b
N of Valid Cases	30				

a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .40.

b. Cannot be computed because there is insufficient memory.

Exhibit 10: Stock price after CEO exit vs. Forced exit**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	30.000 ^a	29	.414	1.000	
Likelihood Ratio	40.381	29	.078	1.000	
Fisher's Exact Test	28.040			1.000	
Linear-by-Linear Association	.391	1	.532	^b	^b
N of Valid Cases	30				

a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .40.

b. Cannot be computed because there is insufficient memory.

Exhibit 11: Stock price before CEO exit vs. Voluntary exit**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	30.000 ^a	29	.414	1.000	
Likelihood Ratio	38.191	29	.118	1.000	
Fisher's Exact Test	28.157			1.000	
Linear-by-Linear Association	.500	1	.479	^b	^b
N of Valid Cases	30				

a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .33.

b. Cannot be computed because there is insufficient memory.

Exhibit 12: Stock price after CEO exit vs. Voluntary exit**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	30.000 ^a	29	.414	1.000	
Likelihood Ratio	38.191	29	.118	1.000	
Fisher's Exact Test	28.157			1.000	
Linear-by-Linear Association	.873	1	.350	^b	^b
N of Valid Cases	30				

a. 60 cells (100.0%) have expected count less than 5. The minimum expected count is .33.

b. Cannot be computed because there is insufficient memory.