# A thorough analysis of US-based firms that illustrates how top management turnover impacts the firms' performance post mergers and acquisitions.


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## ABSTRACT

There is a growing consensus that mergers and acquisitions are among the most productive ways for firms to expand their operations, and this fact is garnering more and more attention. However, despite the fact that the M&A approach can provide businesses with significant economies of scale, synergy, and other benefits, a significant number of firms that have utilised this method have been unsuccessful.

There are occasional failures in mergers and acquisitions; how can companies prevent these failures? Following the completion of an M&A transaction, some companies seek the turnover of target firms' top management in cases where the top management of the target company is ineffective, or they seek to take control over the leadership of the target company in order to improve the overall performance of the target company.

A quantitative analysis of 150 sample of US stock market companies was carried out. The sample size was chosen at random. According to the descriptive and inferential statistics, companies that had top management turnover following an M&A transaction performed better than companies that did not have top management change. According to the conclusions of the study, the performance of the company can be improved by having top management turnover following an M&A.

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# 1. INTRODUCTION

## 1.1 Background Research

The corporate sector's use of mergers and acquisitions as a strategy to obtain a competitive edge has increased. Mergers and acquisitions can help a company in many ways, including expanding its client base, expanding into new areas, gaining access to cutting-edge technologies, and decreasing operating expenses (Chintan and Mousumi, 2022). Regardless of what has been said above, there have been several occasions where this strategy has failed miserably. (Galpin, 2008) Even though the number of deals is still high, most mergers and acquisitions (M&As) still don't meet many of the strategic goals that were outlined in the initial announcements. Overall bad M&A results can be caused by a number of things, such as a poor integration effort, bad strategic fit and imperfect due diligence.

So, what is it that corporations must do post M&A in order to be successful? one effective method is integrating the acquiring firm with the target firm effectively. How do the firms effectively integrate? Leading M&A advisory firms frequently see limiting executive turnover as a significant goal for the integration process (Adolph & Pettit, 2009). The explanation stated is that leaders in their organisation have a better understanding of the process and have stronger relationships with clients. (Krug, et al., 2014) One further point of view is that, in many acquisitions, the replacement of Executives can be a major source of value creation. This can be done to create cost savings or decrease resistance to the acquisition. Decreasing resistance again leads to better integration of the acquirer and target companies.

Assets are not being managed well by the people in charge. So, a takeover is seen as an attempt by the shareholders of the company being bought to get its management in line. Through the takeover, the shareholders of the target company give control of the company to a better management team (Vazirani, 2015). The term chief executive officer is the one that first comes to mind whenever we hear the phrase top executives. According to (Wang and Yang, 2022) in most cases, the turnover of an incumbent CEO with a new one who is less expensive serves as an incentive instrument that is used to punish the previous CEO for poor performance. However, there have been a number of studies conducted already on the topic of CEO turnover and how it relates to corporate performance, and the CEO of a firm will generally be replaced in the event of a merger or acquisition. Therefore, we will be focusing our attention on the turnover among top management positions other than the CEO.

The previous researches in top management turnover and financial performance of the companies have been focused majorly on the first view, that its essential to retain top management to have a better performance. While, we will investigate it in the other view that turnover in top management is essential to integrate the two firms effectively and to have a better financial performance.

**1.2 Research Objective:**

The purpose of this study is to determine whether or not there is a relationship between a company's financial performance and the top management turnover following a merger and acquisition for those firms that were traded on the stock market in the United States between the years 1997 and 2022. Indicators such as Earnings Before Interest and Tax (EBIT), Return on Investment (ROI), and Return on Equity (ROE) are utilised in the calculation of a company's financial performance.

**1.3 Research Structure:**

In the first section of this paper, I will outline the literature study that I did, which includes an early overview on growth strategy and the reasons for M&A. Later management turnover after M&A and the link between top management turnover and firms' performance are discussed. In the second section, the hypothesis is presented, followed by a discussion on the process of accessing data. Lastly, a briefing of the variables that measure the financial performance of the company.

The third section of this analysis focuses on descriptive statistics as well as inferential statistics. In addition to this, the empirical research will be used to the evaluate two distinct cases. In closing, a review of the results will follow. In the last section, I talk about what the study couldn't do and where more research could go, and finally make a conclusion based on the findings.

# 2. LITERATURE REVIEW

## 2.1 Strategy and Growth

The modern business environment is one of rapid change. Numerous factors, including fluctuating consumer demand, the introduction of innovative products and services, and, most importantly, the increasing significance of global competition, are driving quicker growth in certain industries than in others (Sherman & Hart, 2006). According to (Dyer, et al., 2021) The origin of the word strategy can be traced back to the Greek word strategos, which literally translates to "the art of the general." To put it another way, the art of war, and more specifically the part that a general play in a conflict, is where the concept of strategy first emerged. In point of fact, there is a well-known book that goes by the name The Art of War, and it is widely believed that it was written by Sun Tzu, a legendary Chinese general. The objective of the strategy in the art of war is to win, but it is not the same thing as the strategy. In a similar vein, the business strategy of a corporation is defined as the dynamic plan that the company has devised in order to obtain and maintain a competitive advantage in the market. This strategy was developed by the leaders of the company based on their thinking on how to achieve success in a specific market.

The idea of strategy should be to get you from where you are now to where you want to be in the future. As much as it is about deciding what to do, it is also about deciding what not to do, where to go, why and when and how to do it (McKeown, 2019). Businesses must regularly adjust their strategies in order to keep up with the rapid pace of change. Strategy is the process of determining the fundamental long-term aims and objectives of an organisation, as well as the selection of courses of action and the distribution of resources that are necessary for achieving these objectives (Chandler,1962). Strategy, according to Porter (1996), is about standing out. It entails purposefully deciding on a different set of activities to give a special combination of value. The core of strategy is in the actions—deciding to take actions that are different from or different from those of competitors. Understanding the underlying foundations for future strategy at the business unit and corporate levels as well as the possibilities for developing strategy in terms of both the directions that strategy might move and the techniques of development are necessary for making strategic decisions (Johnson, et al., 2008). All strategies in one or the other way are intended for the growth of the company. According to (Pearce, et al., 1987) the relationship between strategic planning and corporate success, as assessed by economic indicators, is both positive and significant.

A company has two growth plan options: internal growth or M&A growth. Internal growth strategy refers to the expansion of an organisation via the use of its own resources (Johnson, et al., 2008). The internal growth plan focuses on enhancing efficiency, innovative goods, improving marketing, recruiting the ideal personnel, and, among other things. According to (Heau,1976), the most important function for an internal growth strategy would be to conduct research and development in the engineering field. Mergers and acquisitions strategy refers to the motivation behind a deal (Weller, 2021). It's possible that some driving ideas include acquiring talent and intellectual property. The possibility of capitalising on synergy, incorporate a fresh method of doing business, also save a lot of time and avoid steep learning curves (Frederiksen,2016). A merger or acquisition (M&A) can accelerate the growth of a company, possibly more so than can the majority of other growth strategies. Once upon a time, mergers and acquisitions were primarily a phenomenon in the United States; however, ever since a fifth wave of mergers began in the 1990s, they can be found all over the world. By the turn of the millennium, mergers and acquisitions had developed into a standard method of corporate growth for businesses all over the world (Gaughan, 2010). Therefore, merger and acquisition (M&A) route is one that a significant number of companies choose to pursue for growth strategies.

### 2.2. M&A Strategy

According to Martin and McConnell (1991) economic study, there are two primary motives to consider when attempting to maximise value through M&A for a company. Synergies between the bidder and the target firms may be a motivation, or the acquisition may serve as a means of managerial discipline. The physical activities of the bidder and the target firm can be combined to create synergies that lead to financial gains in synergistic takeovers. Successful disciplinary takeovers can yield benefits without requiring a combination of the two companies' physical activities.

Mergers and Acquisitions can be motivated by a wide range of factors. The following are some of the most frequently cited explanations: Market expansion, tax implications, agency issues, synergy, and ineffective management are all discussed by Haspeslagh and Jemison (1991). In this article, we will examine how ineffective management might drive mergers and acquisitions. As a result of ineffective management, conglomerate mergers become an option. The current administration is incompetent at managing the company's resources. As a result, a takeover is interpreted as an attempt at management discipline on the part of the acquired company's stockholders Haspeslagh and Jemison (1991). By means of a takeover, the shareholders of the target firm cede power to the more capable

management team. In order to entice shareholders to sell their shares, the purchase price must be higher than the stock's current market value (Jensen and Ruback, 1983). According to Martin and McConnell (1991), gains are produced by changing the target firm's managers' nonvalue-maximizing business strategy. Although different observers place different weights on the significance of takeovers as a disciplinary mechanism, it is generally accepted that poorly performing enterprises are more likely to be the target of a disciplinary takeover than competing highly performing firms.

The acquiring parent firm must be able to give top management for the target company within one year, according to one of the five principles for successful acquisitions that Drucker (1981) outlined. This issue has been brought up on numerous occasions, and other critics have asserted that there is a substantial turnover rate in management in the wake of M&A deals. The previous line suggests that mergers and acquisitions are an effective method for expansion; however, there is still a significant amount of top management turnover. The question is why mergers and acquisitions are entertained, even though there is a high level of management turnover. According to Lell and Miller (2015), the rationales for this practice's approval include luring both domestic and foreign investment into the stock market, boosting the country's global competitiveness, encouraging more effective allocation of capital, and bolstering minority shareholder protection and transparency. (Krug and Aguilera, 2005) It is a widely held belief that retaining leaders from the target firm is an essential factor in determining how successful a post-acquisition integration would be. After doing a literature analysis, with a focus on the many elements at the micro, group, meso, and macro levels that encourage acquisitions, they came to the following conclusions: It is possible to draw the conclusion that the link between turnover and post-acquisition performance is more complicated than what is suggested by the studies that are currently available. According to the findings of certain previous research, keeping key executives on staff after an acquisition is completed could result in improved operational efficiency. Having said that, the contrary viewpoint is supported by a number of solid theoretical considerations.

### 2.3 Management Turnover

The term "management turnover" refers to the process by which personnel are fired or voluntarily resign from their positions for a variety of reasons, including poor performance, the elimination of a post, personal health, and other similar circumstances. The Chief Executive Officer (CEO) immediately comes to mind whenever the phrase "management" is mentioned. Following an M&A, there is typically a change at the top in the form of a new CEO. Weisbach (1988) analyses the boards of 367 publicly traded American companies and finds that CEO turnover has a more significant negative

correlation with performance at companies where outsiders dominate the board. Contrarily, for 270 publicly traded Japanese companies, Kang and Shivdasani (1995) find that the sensitivity of CEO turnover to performance is unrelated to the fraction of outside directors.

Since numerous studies have been conducted on the relationship between corporate performance and CEO turnover, researchers will not be shocked to find a correlation between corporate performance and top management turnover (Weisbach (1988), Martin and McConnell (1991), Kang and Shivdasani (1995)). (Franks, et al., 2000) studied CEO turnover for a sample of low-performing enterprises in the United Kingdom from 1988 to 1993. They cannot definitively conclude whether or not CEO turnover is more responsive to performance to overcome this issue, the sensitivity of top management turnover to performance must be addressed. There may be a potential of outside boards influencing the turnover of top management. Also, there is a possibility that top management turnover could be based solely on performance.

Martin and McConnell (1991) To begin, the findings of the study show that following an acquisition, there is a significant rise in the rate of senior management turnover in the target companies. Second, there is a significant correlation between the turnover rate of top executives and the success of target companies prior to a takeover. In general, these findings lend credence to the claim that takeovers play a significant part in controlling the actions of corporate managers and ensuring that their motivations are in line with those of the company's shareholders.

### 2.3.1 Turnover of Top Executives Following an Acquisition

Top managers are more likely to experience uncertainty after a merger or acquisition (Simmons, 1984). It appears that three forces contribute to Management Turnover To begin, It is likely that managers will leave the company if they are unable to either endure uncertainty or find ways to lessen it. (Walsh, et al., 1985) found that uncertainty and a lack of information were related to people's intentions to leave their jobs, it is reasonable to anticipate higher-than-normal rates of senior management turnover in the wake of a merger or acquisition. Second, (Buono, et al., 1985) in-depth examination of a bank merger, bringing together two very different cultures might lead to hostility and severe discomfort. They called what happened to them a cultural shock after M&A. According to (Smircich, 2017) every company has its own culture. Managers who are unable or unwilling to adjust to what could be a severe cultural shock are likely to abandon their positions. Thirdly, Fama and Jensen (1983) suggested that mergers and acquisitions reflect a market for corporate control, in which firms fight for the right to choose the management of a target firm's

resources. If such competition creates obvious winners and losers, it is expected that the top management turnover rate of a target business following a merger or acquisition will be higher than typical.

(Krug,2003) The acquiring company frequently inserts its own top executives into the acquired business and removes target company's employees quickly after the deal closes in order to hasten the completion of a number of immediate objectives. Top management turnovers, for instance, are a useful method for accelerating the implementation of the acquiring company's processes and values at the acquired company, as well as for achieving integration, transferring functional skills, boosting interdependence, and expanding strategic and operational control (Ettlie and Reza, 1992; Pablo, 1994). It is likely that the managers of the target company are incapable of, or just incompetent when it comes to, efficiently operating the target business (Walsh, 1988). According to (Finkelstein, 1992) it is possible for acquiring companies to use management turnover in order to facilitate a swift transfer of control from the target company to the acquiring company's own executives, hence reducing the amount of resistance to the purchase. It appears from this that acquiring corporations utilise management turnover as a means of reducing the likelihood of dispute and ensuring support for the M&A.

Martin and McConnell (1991) when managers of the target company are involved in excessive consumption of corporate perquisites, exorbitant salary, overpaying for supplies and raw materials, or the deployment of corporate resources to projects that serve to enrich or develop themselves personally. The target company's management team is subjected to management turnover so that the non-value-maximizing behaviour of the management team can be minimized. The best way to comprehend management turnover is to examine the psychological characteristics and attitudes of top executives regarding the acquisition. To minimise resistance throughout the integration process, acquiring corporations may, for instance, change executives, particularly after a hostile purchase (Cannella & Hambrick, 1993; Walsh, 1989). Executive seniority is yet another element that plays a role in post-acquisition turnover. The perspective of the acquirer is that the replacement of senior executives may have beneficial symbolic consequences by conveying signals to employees of the target company that the acquirer is in command (Krug, et al., 2014).

Walsh (1988) provided the first empirical evidence that turnover rates for target executives are much higher than average following an acquisition. Target companies experience a turnover rate that is

close to three times greater than the industry average during the first year following an acquisition, with an average loss of almost one-quarter of its leaders. Studies that have been done so far reveal that the impacts of an acquisition are temporary, and that turnover rates among target business leaders revert to normal not long after an acquisition has taken place (Walsh, 1988) . The turnover rate in the target firm after the acquisition, which results in the most significant amount of executive turnover (on average 23 percent). There has been a correlation drawn between these high early turnover rates and hostile takeover bids, poor preacquisition target company performance, culture differences between merging firms, lower job status, and lost autonomy (Lubatkin et al., 1999; Walsh, 1989). Because of this, the long-term implications of acquisitions have not yet been the subject of any research because it is expected that they will have only a modest impact (Krug, 2003).

It's possible that the forecasts made by Drucker (1981) regarding significant top management turnover are more applicable to related acquisitions than they are to unrelated acquisitions. According to (Walsh, 1988) horizontal and vertical are related acquisitions while conglomerate is considered to be unrelated acquisition. Although it is difficult to estimate the relative turnover rates across all acquisition types, it is expected that the acquirer will place less of an emphasis on top management retention in the related acquisitions. In other words, the management of the parent firm is already familiar with the operations of the target company and may be able to afford to lose some of the target's management team. In fact, the parent firm may believe that by replacing the target's management team with their own qualified managers, they may add value to the target company (Walsh, 1988). According to Parsons (1960), if the parent company's top management can perform the same institutional functions as those of the acquired target, the parent will likely replace the target's organizationally focused management team with a managerial team to serve as a bridge between the parent company's institutional leadership and the acquired target's technical leadership.

### 2.3.2 Top Executive Turnover and Post-Acquisition Performance: A Relationship

Numerous studies and critics initially suggested that management turnover following an M&A is extremely detrimental to the target business. The target company's performance may decline as a result. Cannella and Hambrick (1993) questioned executives and analysts of acquiring firms regarding their views of the post-acquisition performance of 96 big, publicly traded U.S. firms acquired between 1980 and 1984. They discovered that high executive turnover rates were linked to lower post-acquisition performance, and they concluded that executives from acquired firms are an integral part

of the acquired firm's resource base and that their retention is a significant predictor of post-acquisition performance. On the contrary according to Martin and McConnell (1991) It has been suggested that the takeover market serves an important function in providing senior company executives with a healthy dose of professional accountability. The possibility of a takeover isn't always enough to get business managers to change their behaviour if it doesn't maximise shareholder value. In some cases, the takeover threat isn't enough. In these circumstances, the threat is carried out: a bidder acquires control of the company and modifies the value-destroying practises of the present management. The bidder can accomplish this purpose in a number of critical ways, one of which is to replace the top executive or executives of the target company.

Alternately, getting rid of the ineffective managers of a nonvalue-maximizing objective could be required but would not be enough to achieve gains during a disciplinary takeover. Instead, it's possible that the profits come from installing management that has the ability to change the operating strategies of the target Martin and McConnell (1991).

# 3. METHODOLOGY

The purpose of the research methodology is to provide an overview of the various aspects that are involved in the process of conducting a research project. It does this by discussing the concept of research methods as well as the necessity of establishing research hypothesis, aims, and questions in order to produce work that is valid and reliable (Avgousti, 2013).

## 3.1 Research Philosophy

Quantitative research is a method of investigation that emphasises the quantitative collection and analysis of data. Empiricist and positivist philosophies inform its deductive approach, which places an emphasis on the testing of theory (Bryman,2016). In academic research, the quantitative technique is related with observations that are subsequently described and evaluated in an effort to offer information and develop conclusions. (Avgousti, 2013).

## 3.2 Research Hypothesis

After acquiring a deeper grasp and introduction to the topic of the research through the literature review. The subsequent stage is to collect data objectively by analysing the financial performance of organisations involved in mergers and acquisitions**.** After then, the dataset is subdivided into two groups: those companies that had experienced top management turnover as a result of the merger or acquisition, and those companies that had not experienced top management turnover as a result of the merger or acquisition.

The research evaluates the financial performance of organisations based on a number of different financial ratios and their operating efficiency. These ratios include ROI and ROE. EBIT to calculate operational efficiency. The following hypotheses were established based on the examined literature and the goal of this research, which is to investigate if management turnover after an acquisition affects the financial performance of publicly listed US companies:

H0: No significant difference between firms' financial performance and top management turnover post M&A.

H1: There is a significant difference between firms' financial performance and top management turnover post M&A.

In this study, students t-test and descriptive statistics are utilised to test hypotheses and determine significance of the hypotheses. A t test is a statistical test that compares the mean values of two

samples. The t test is used because it determines the probability that two samples share the tested variable. If we merely provided our raw data, it would be difficult to visualise what the data reveals, particularly if there was a large quantity of it. Therefore, descriptive statistics help us to display the data in a more comprehensible manner, which simplifies data interpretation.

### 3.3 Data Collection and Sources

As research samples, this study analyses the financial data from 50 different firms that are listed on the NYSE, for a total of 150 samples. The data of both the acquiring companies and the target companies are gathered up to two years prior to the M&A process. After that, the combined companies' financial records for two years after the merger or acquisition are compiled. The data pertaining to the study has been collected throughout the course of the past 25 years. That spans from the year 1997 up to the present day. Nevertheless, where data from the NYSE was not available, those firms were eliminated and replaced with the details of the companies that were available from the NYSE. The fact that the data was taken directly from the annual reports of the companies gives the data a high level of legitimacy.

### 3.4 Measures

The thesis looks at the financial success of the company by calculating ROI, ROE, and EBIT and then figuring out if firms with or without top management turnover after M&A have consistently high absolute returns.

**ROI**: (Hawkins, 2016) Return on investment, which is more commonly referred to as ROI, is a key performance indicator (KPI) that is frequently used by organisations to measure whether or not an expenditure is profitable. It is of tremendous assistance in determining how successful an endeavour has been over time. The return on investment, or ROI, is an attempt to directly evaluate the amount of return on a certain investment, relative to the cost of the investment.

**ROE**: The return on equity (ROE) of a company is a measurement of both its profitability and the effectiveness with which it makes profits. Return on equity, is a measure of a company's financial performance that is determined by dividing net income by the total amount of stock held by shareholders. ROE is commonly referred to as the return on net assets. This is due to the fact that shareholders' equity is believed to be equal to the assets of a firm less its debt (Fernando, 2022).

**EBIT**: (Murphy, 2022) Earnings before interest and taxes, refers to a company's net income before the deduction of expenses for income tax and interest. EBIT is a useful metric for analysing a company's performance in its core operations because it does not take into account the impact of costs related to its capital structure or tax expenses. The EBIT is a particularly helpful indicator since it helps evaluate a company's ability to create sufficient earnings to be profitable, repay debt, and finance continuous operations.

# 4. EMPIRICAL ANALYSIS

We are able to compute the company's financial performance by employing a useful approach known as statistical analysis, which computes the data that is gathered from the annual reports of the company. This gives us the ability to determine how successful the company is financially. Descriptive statistics and inferential statistics are the two main forms of statistical analysis that are performed. The measure of central tendency and the measure of variability, sometimes known as the spread, are the two components that make up descriptive statistics. In order to get a sense of the overall trend, we calculate the mean, and in order to get a sense of the range of possible outcomes, we calculate the standard deviation and the variation. We have used mean as measure of central tendency and used variance and standard deviation as a measure of variability. The T-test is another inferential statistical tool that is used in the analysis of the thesis.

The research population is 150 records from 50 different publicly traded US corporations for the years 1997-2022. When all of the information regarding businesses that have gone through mergers and acquisitions has been compiled, the information is then sorted into two categories: with and without management turnover following the merger and acquisition. After that, the spreadsheet in Excel is used to do analysis on all of the data.

The empirical analysis will be done in both Descriptive and Inferential statistics in order to prove that the result obtained is statistically significant and not by chance.

**4.1 Descriptive statistics:**

According to the data presented in the table below, the target companies had a poor performance as compared to the organisations that were acquiring them. When we compare the companies' EBIT or their operational efficiency before and after the merger and acquisition, we can see there is a significant increase in EBIT in terms of the measure of central tendency, but a significant variation or spread in terms of the measure of variability post M&A. Looking at ROI, in terms of measure of central tendency, there is a fall in the percentage of ROI; nevertheless, the return value comes out to be better when compared with a cost of Investment in a post-M&A scenario. Despite this, there is a large amount of heterogeneity in terms of the measure of variability in ROI. When it comes to ROE, the values are not good after mergers and acquisition. There is a huge dropdown in the measure of central tendency and huge variation in the measure of variability.

The following is information pertaining to companies that did not see a change in top management following an M&A transaction; all numbers are expressed in millions of dollars, with the exception of ROI and ROE:

**ACQUIRING FIRM**

| | EBIT | Cost of Investment | ROI | Return | Average shareholder's Equity | ROE | Return |
|---|---|---|---|---|---|---|---|
| Mean | 3779 | 24286 | 14% | 3305 | 16728 | 26% | 3537 |
| Variance | 32289595 | 436379509 | 2% | | 375734589 | 20% | |
| SD | 5682 | 20890 | 1% | | 19384 | 4% | |

**TARGET FIRM**

| | EBIT | Cost of Investment | ROI | Return | Average shareholder's Equity | ROE | Return |
|---|---|---|---|---|---|---|---|
| Mean | 1890 | 10310 | 18% | 1877 | 10946 | 6% | 615 |
| Variance | 5020747 | 87250510 | 3% | | 77285550 | 26% | |
| SD | 2241 | 9341 | 2% | | 8791 | 5% | |

**AFTER M&A**

| | EBIT | Cost of Investment | ROI | Return | Average shareholder's | ROE | Return |
|---|---|---|---|---|---|---|---|
| Mean | 4479 | 46018 | 10% | 4641 | 48259 | 0.41% | 199 |
| Variance | 158891500 | 1E+09 | 5% | | 1210391097 | 41% | |
| SD | 12605 | 33840 | 2.3% | | 34791 | 6.4% | |

Table 1. Without Top Management Turnover Post M&A

Now, let's have a look at the computed results of businesses that had top management turnover after a merger and acquisition. As was the case with table 1, we can see that in table 2 the acquiring company is doing far better than the target company before the M&A transaction. After the merger and acquisition, there was an increase in the EBIT or the operational income relative to the measure of central tendency. Also, there is less of a fluctuation in EBIT with respect to measure of variability. When we evaluate ROI in relation to the cost of investment, we find that there has been an increase in the measure of central tendency. Furthermore, after an M&A, we are able to observe that there has been a decrease in the measure of variability. In a similar manner, return on equity (ROE) performs well in terms of measures of central tendency and variability. Increase in measure of central tendency and less variation in terms of measure of variability.

**ACQUIRING FIRM**

| | EBIT | Cost of Investment | ROI | Return | Average shareholder's Equity | ROE | Return |
|---|---|---|---|---|---|---|---|
| Mean | 5714 | 37051 | 20% | 7410 | 26393 | 16% | 4173 |
| Variance | 31285414 | 2020454548 | 37% | | 2430955684 | 10% | |
| SD | 5593 | 44949 | 6% | | 49305 | 3% | |

**TARGET FIRM**

| | EBIT | Cost of Investment | ROI | Return | Average shareholder's Equity | ROE | Return |
|---|---|---|---|---|---|---|---|
| Mean | 2229 | 17153 | 14% | 2480 | 11848 | 20% | 2317 |
| Variance | 5277345 | 431815787 | 7% | | 153656554 | 17% | |
| SD | 90 | 251 | 3% | | 12396 | 4% | |

**AFTER M&A**

| | EBIT | Cost of Investment | ROI | Return | Average shareholder's | ROE | Return |
|---|---|---|---|---|---|---|---|
| Mean | 7989 | 47996 | 18% | 8747 | 42735.625 | 17% | 7465 |
| Variance | 43537604 | 2591046404 | 2% | | 1360754407 | 3% | |
| SD | 6598 | 50902 | 1% | | 36888 | 2% | |

Table 2. Top Management Turnover Post M&A (all figures, other than ROI and ROE, are expressed in terms of millions of dollars)

When we take a look at Table 1 and Table 2, we see that companies that do not experience turnover in their top management have a much wider range of values for the measure of variability when compared to companies that do experience turnover in their top management. On the other hand, when it comes to the measure of central tendency, companies that experience turnover in their top management are performing much better when compared to companies that didn't undergo top management turnover. Let's dig deeper into how measures of central tendency and measures of variability change in companies with and without management turnover. First, we will look at the measure of central tendency that is the mean value:

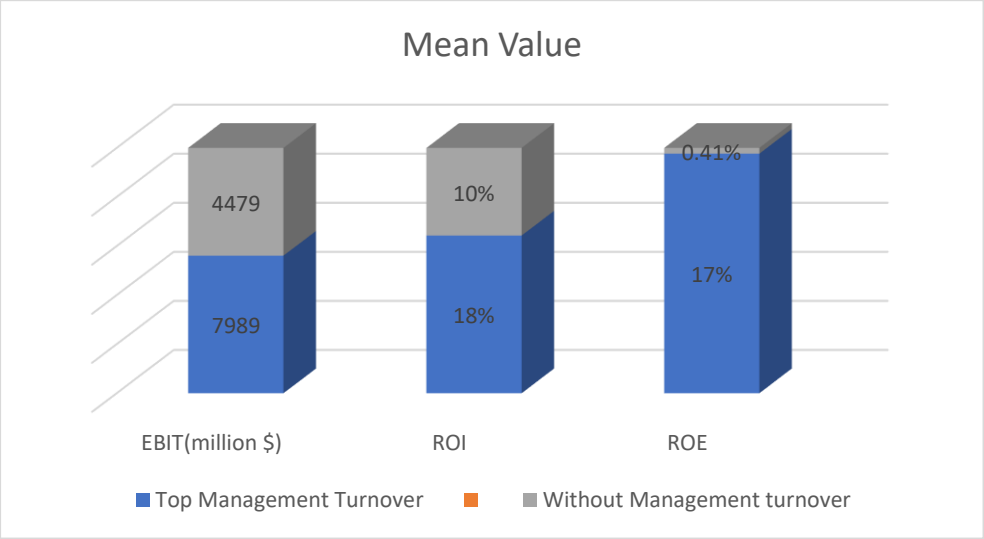
| After M&A | EBIT (million $) | ROI | ROE |
|---|---|---|---|
| Top Management Turnover | 7989 | 18% | 17% |
| Without Top Management Turnover | 4479 | 10% | 0.41% |

Table 3. Mean Value

Companies that have had turnover in their top management during the post-M&A phase have higher EBIT Values than companies that have not experienced such turnover, which have lower EBIT values. It shows the companies that had top management turnover post M&A have made more money from operations compared to companies that didn't undergo top management turnover.

When we compare the ROI from companies with and without top management turnover, we see that the companies with management turnover have high ROI compared to companies without top management turnover. A high ROI indicates that the company is able to effectively use the investment to achieve a high return on investment.

Looking at ROE, it's evident that companies with top management turnover has a high ROE, compared to firms without top management turnover. When the return on equity (ROE) for a company is low, this shows that the company's earnings are low when compared to the amount of equity held by its shareholders. For a company to have a high return on equity, it means that company must be making good use of the money its shareholders have invested.



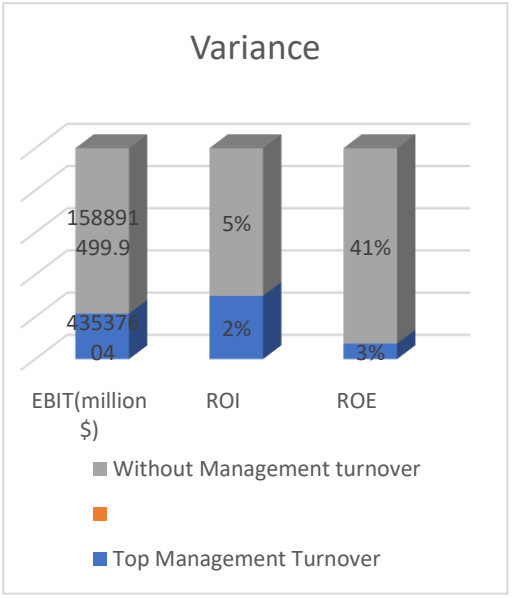

Graph 1.1 The Mean Value graph of companies with and without management turnover

Thus, from measure of central tendency that is mean value, it is clear that the companies with top management turnover are performing well compared to companies without top management turnover post mergers and acquisition.

Let us now investigate how the measures of variability, Variance and Standard Deviation, affect financial performance.

| | EBIT (million $) | ROI | ROE |
|---|---|---|---|
| Top Management Turnover | 43537604 | 2% | 3% |
| Without Management turnover | 158891500 | 5% | 41% |

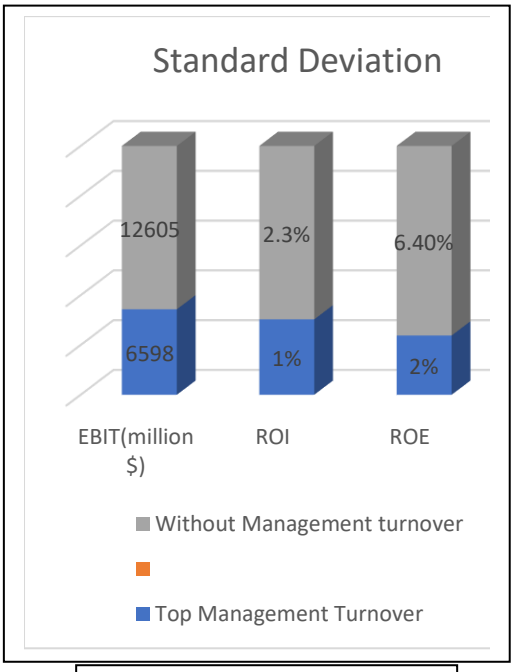
Table 4. Variance




Graph 2. Variance

| | EBIT (million $) | ROI | ROE |
|---|---|---|---|
| Top Management Turnover | 6598 | 1% | 2% |
| Without Management turnover | 12605 | 2.3% | 6.40% |

Table 5. Standard Deviation




Graph 3. Standard Deviation

We can deduce from Tables 4 and 5 that the variance and standard deviation of EBIT, ROI, and ROE are lower in the companies that had top management turnover, whereas the variation and standard deviation are higher in the companies that did not have top management turnover. If the variance as well as the standard deviation are high, this indicates that there is a high rate of volatility and risk connected with it; for example, there may be an unexpected increase or drop in the amount of revenue, sales, production, etc which is not good for any firm. There isn't a single firm that would voluntarily link itself with such a high level of risk and volatility. It is clear to us that when there is both a low variance and a low standard deviation, the financial performance of the businesses involved is excellent. As a result, it is critical for businesses to maintain a standard deviation and variance that are at exceptionally low levels.

**4.2 Students T-Test**

The Students' T-test is an inferential test that we are utilising so that we can easily and quickly analyse the data. Parametric tests known as Student's t-tests are based on the Student's distribution, also known as the t-distribution. The Student's distribution was initially determined in 1908 by William Sealy Gosset, it was named after him in appreciation of his work (Damir, et al., 2011). One-Sample t-Test, Two Independent Samples Test, and Paired Sample Test are the three varieties of t-tests that are available. Due to the fact that we will be contrasting two distinct groups in our thesis, we have decided to make use of two Independent Samples t test. (Kim, 2015) An independent t-test is utilised in situations in which the two groups being compared are free from the influence of one another.

In order to determine whether or not there is statistical significance, we will calculate the EBIT value of both companies with and without management turnover post mergers and acquisition. EBIT is the only metric that is measured since it is the only one that provides an accurate value in millions of dollars and demonstrates how efficiently the companies are operating. It does not take into consideration either the interest that is owed on loans or the tax expense either. Initially consider SD1 and SD2 as the standard deviation of the two groups, and N1 and N2 be the number of samples in each group, with a total of 50 samples for each group. Let's use the formula to determine the standard error of the difference:

$$SED=\sqrt{\frac{SD1^2}{N1}+\frac{SD2^2}{N2}} \qquad \text{.....1}$$

From table 1 and 2, when we substitute values, SD1= 6598 and SD2=12605.we find standard error of Difference= 2012 …….2

Then calculate the t statistic value by using the formula, where x1 and x2 are the mean value of two groups, x1=7989 and x2=4479

Therefore, t statistic value= $(x1-x2)/SED$ ……3

t static value obtained will be 1.744 … ……4

Now we need degrees of freedom to find the t critical value. Degree of freedom is measured by:

D= (N1-1) + (N2-1) = 98 ……5

We can now find t critical value from t distribution table corresponding to degree of freedom 98 and alpha value =0.005. 1 in 20 seems like a reasonable choice for how often you make a type 1 error so alpha value is normally considered to be 0.05.

From the t distribution table, we find that the t critical Value = 1.661 ……6. Now considering 4 and 6, we can see that t-static value is greater than t critical Value.

### 4.3 CASE ANALYSIS

Let's discuss two completed cases: one with top management turnover post M&A and other without top management turnover post M&A. The two instances are broken down into its component parts, which include an analysis of descriptive statistics, inferential statistics, corporate strategy, and fluctuations in stock market conditions. The data for the cases is also collected for two years before and after the merger, rather than five or ten years before and after the merger, because the impacts of management turnover are transient, and the firm may adopt other strategies and policies that may have an impact on its performance.

#### 4.3.1 IBM RED HAT MERGER 2019

(Discoverci, 2022) International Business Machines Corporation is an IT firm that provides integrated services that make use of information technology and expertise of business processes. The following components make up its operational structure: Global Business Services, Global Technology Services, Software, and Hardware for Systems and Global Financing Services. On June 16, 1911, Charles Ranlett Flint and Thomas J. Watson Sr. established their business, which currently operates out of its headquarters in Armonk, New York. The financial highlights of the company two years before M&A are as follows:

| | EBIT | Cost of Investment | ROI | Average shareholder's equity | ROE |
|---|---|---|---|---|---|
| Millions of $ | | | | | |
| **IBM** | **10864** | **87922** | **12%** | **24227** | **43%** |
| | **12293** | **91337** | **14%** | **25171** | **49%** |
| | | | | | |

Table 6. IBM Data pre merger

The above data reveals that the IBM was doing extremely well prior to mergers and acquisitions. Operating profit is perfectly all right. Return on investment, and return on equity sit at high percentages.

(Red Hat, 2020) Red Hat Inc. got its start when a local entrepreneur happened to run into a tech geek at a conference. From his home in Raleigh, North Carolina, the programmer known as Marc Ewing was constantly hacking, debugging, and creating his own CD distribution of Linux®. Red Hat Enterprise Linux remained the company's flagship product throughout its existence. It is an open-source offering that is targeted toward the most demanding data centers in the world. Red Hat was able to invest and contribute in many open-source groups as a result of its success, which in turn enabled the company to add more capabilities and features to its product over the course of more than a decade of consistent expansion. Red Hat used the ideals of open source when it was forced to deal with change. As a result, people engaged in heated debates, collectively adapted, and constructed an altogether new Red Hat.

The Financial details of the company two years before M&A are as follow:

| | EBIT | Cost of Investment | ROI | Average shareholder's equity | ROE |
|---|---|---|---|---|---|
| Millions of $ | | | | | |
| **RED HAT** | **52** | **283** | **21%** | **821** | **7%** |
| | **70** | **371** | **20%** | **886** | **9%** |
| | | | | | |

Table 7. Red Hat data pre merger

The data shows that RedHat is functioning at an average level. The stakes aren't high at all. The company is only making a small operating profit. There is a poor return on investment and return on equity at present but this firm might have future success because of the company's dedication to the

open-source community and the open-source development model. Red Hat Enterprise Linux is one such example of a commercial open-source Linux distribution created by Red Hat specifically for business use.

**M&A Process**

(Shepardson, 2019) IBM decided to acquire Red Hat in October, the company's largest acquisition in its more than a century of existence and a clear indication of the emphasis on high-margin companies. The firm, which was successful in gaining approval for the acquisition from regulators in the United States in May and from officials in the European Union in late June, agreed to pay $190 per share for Red Hat, which is a premium of 63 percent. Investors have occasionally been left feeling unsatisfied by the newer areas of focus.

(Miller, 2022) In 2018, IBM spent $34 billion to acquire Red Hat. This was a significant gamble on the future of hybrid cloud computing and one that appears to be paying off four years after the deal was announced. (Shepardson, 2019) IBM's traditional computer hardware division has experienced consistent year-over-year sales decreases for many years. After 2013, the company began shifting its focus away from traditional hardware goods and toward more rapidly expanding market categories such as cloud computing, software, and services. Since 2013, IBM's cloud revenue as a percentage of total sales has increased sixfold, reaching 25% of the company's total revenue. Cloud computing services generated more than $19 billion inrevenue over the preceding 12 months, ending with the first quarter of 2019. Red Hat is a company that specializes in Linux operating systems. Linux is the most common kind of open-source software and serves as an alternative to the proprietary software that is produced byMicrosoft Corp MSFT.O. Red Hat was established in 1993.

(Armonk and Raleigh, 2019) The acquisition strengthens IBM's position as the industry's dominant hybrid cloud provider and helps accelerate IBM's high-value business model. It also makes it possible for Red Hat's open-source innovations to be made available to a wider variety of customers. IBM and Red Hat are going to work together to develop the next generation of hybrid multicloud platforms. According to (Witt, 2018) With one swift move, IBM becomes the owner of a significant portion of the underlying tooling that powers cloud computing. Red Hat is strong in hybrid cloud, and Red Hat is growing extremely well; for the past 14 quarters, their average growth rate has been 17% per quarter. If they continue to grow in the same way, Red Hat will be IBM's best performing business unit for the years ahead.

(Softchoice, 2019) With their combined strengths, IBM and Red Hat are well-positioned to hasten the spread of hybrid, multi-cloud designs. They hope that by working together, they can speed up the development of cloud-native business apps for their customers and improvethe data and application portability and security across different kinds of cloud environments. Furthermore, they want to accomplish this through uniform cloud administration. Their goal is to leverage their combined expertise in cutting-edge fields including multi-cloud management, Kubernetes, containers, automation and Linux.

Both of these companies belonged to the cloud market before their merger. Because of the overlap in the activities that were being done, senior management in the sales, marketing, technology, and engineering divisions of the target company faced a high turnover rate among top executives. And in order to make the top management of the target firm more efficient, some of the top executives of the target company were forced to deal with management turnover. We are going to investigate the extent to which this top-level management turnover had an effect on the company's performance after the merger and acquisition.

| | EBIT | Cost of Investment | ROI | Average shareholder's equity | ROE |
|---|---|---|---|---|---|
| Millions of $ | | | | | |
| **IBM Red Hat** | **15023** | **84847** | **17%** | **22474** | **66%** |
| | **16318** | **90958** | **16%** | **22330** | **71%** |
| | | | | | |

Table 8. IBM Red Hat Post Merger data

The data shows that the company generates a significant operating profit. The Return on Investment and Return on Equity are also excellent in post merger period.

### 4.3.2 Abbott ST Jude Medical Merger 2017

Abbott is a healthcare company with operations all over the world. Its main goal is to help people at all stages of life live the best lives they can through better health. They have a wide range of top-selling products that fit with positive long-term trends in healthcare in both developed and developing markets (Abbott, 2016).

Let's look into the financial highlights 2 years before M&A:

| | EBIT | Cost of Investment | ROI | Average shareholder's equity | ROE |
|---|---|---|---|---|---|
| Millions of $ | | | | | |
| **Abbott** | **2599** | **17648** | **13%** | **21526** | **11%** |
| | **2867** | **17538** | **25%** | **21426** | **21%** |
| | | | | | |

Table 9. Abbott Pre merger data

According to the data presented above, the level of operational efficiency is Average. Both Return on Investment and Return on Equity are normal as well.

St. Jude Medical specializes in the research, design, manufacturing, and marketing of medical devices for the treatment of chronic pain, mobility problems, and cardiovascular conditions such as atrial fibrillation and irregular heartbeats (ST. Jude Medical, 2016).

The financial highlights of the company before 2 years of merger and acquisition are as follows:

| | EBIT | Cost of Investment | ROI | Average shareholder's equity | ROE |
|---|---|---|---|---|---|
| Millions of $ | | | | | |
| **ST Jude Medical** | **1051** | **4450** | **16%** | **4404** | **16%** |
| | **1151** | **4471** | **22%** | **4324** | **23%** |
| | | | | | |

Table 10. ST. Jude Medical Pre merger data

Looking at the target company's details, we can see that operating profit is low, while return on investment and return on equity are moderate.

**M&A Process**

(Humer and Berkrot, 2016) The manufacturers of medical equipment are coming under increasing amounts of pressure to provide their hospital clients with a greater variety of items. Hospitals have also been going through a wave of mergers, which has boosted their ability to negotiate prices.

(Enriquez, 2017) St. Jude became an Abbott wholly-owned subsidiary as a result of the transaction. Abbott Laboratories has legally completed its $25 billion acquisition of St. Jude Medical, which will add a chronic pain treatment business to its portfolio and massively expand its cardiovascular device

capabilities. (DePamphilis, 2019) The transaction was valued at $25 billion and included a premium of $6.5 billion, which represented a 37% increase over St. Jude's closing price on April 25, 2016. The price of St. Jude's common stock rose by more than 27 percent, bringing the company's market capitalization up to $24.1 billion from its previous level of $17.59 billion the day before.

(BSIC, 2016) Abbott Laboratories and St. Jude's merger will strengthen both companies' strategic and competitive advantages in the rapidly growing cardiovascular industry. Both companies offer products that compliment one other well. As a result of their differences in form and function, as well as their respective geographic dominance, there was no top management turnover. Abbott is the market leader in coronary intervention and trans-catheter mitral repair, St. Jude Medical is the undisputed leader in heart failure devices, atrial fibrillation, and cardiac rhythmmanagement. With this merger, the corporation will dominate the cardiovascular market by penetrating virtually every subsegment (BSIC, 2016).

(DePamphilis, 2019) Abbott and St. Jude came to a final agreement that said St. Jude shareholders would get $46.75 in cash and 0.8708 share of Abbott outstanding shares. This meant that each share was worth $85 in total. Abbott thinks that the deal will increase earnings per share and that, in 5 years, the combined company will make double-digit financial returns. The company's management thinks that after 5 years, annual cost savings of $500 million before taxes will begin. For the company to get the returns promised by management, it needs to save the expected amount of money each year before taxes starting in 2020. If these expected savings don't happen on time, it can have a big effect on the value of synergy. Also, it's not clear if the projected savings have taken into account the full cost of making these synergies happen.

Although the two businesses manufactured medical equipment that was compatible with one another and complementary to one another, the particulars of their offerings were different. There was no turnover in senior management due to the fact that they required highly specialised individuals in fields such as engineering and marketing.

Let's look into the financial performance of the company after the M& process:

| | EBIT | Cost of Investment | ROI | Average shareholder's equity | ROE |
|---|---|---|---|---|---|
| Millions of $ | | | | | |
| **Abbott ST. Jude** | **1564** | **25826** | **2%** | **30897** | **2%** |
| | **3650** | **26928** | **9%** | **30710** | **8%** |
| | | | | | |

Table 11. Abbott ST. Jude Medical post merger data

Interpreting the table, we can see that operating profit was normal, while the return on investment and return on equity are very low.

In the next section we will analyse the company's performance with and without management turnover using descriptive statistics and Students t-test.

**Descriptive statistics:**

As we have done in the empirical analysis, we compare the measure of central tendency that is mean value and measure of variability that is variance and standard deviation to arrive at a conclusion. Let's first compare the measure of central tendency for the companies with and without top management turnover post M&A. i.e Abbott ST. Jude Medical Merger without top management turnover post M&A and IBM Red Hat Merger with top management turnover post M&A.

| | **EBIT** | **ROI** | **ROE** |
|---|---|---|---|
| **Millions of $** | | | |
| **Abbott St. Jude Medical M&A** | **2607** | **5.32%** | **5%** |
| **IBM Red Hat M&A** | **15671** | **17%** | **69%** |
| | | | |

Table 12. Mean Value

Comparing company with and without top management turnover, the one without top management turnover has a lower operating income. From Table 8 and 11, we can see that IBM has cost of investment 3 times more than the Abbott and looking at ROI we see that IBMis performing 6 times better than Abbott when we compare the original return values instead of percentage. The IBM Red Hat Merger is performing exceptionally well in terms of return on Equity. ROE is very much high when we compare the average shareholder's equity.

Now, lets look into measure of variability, that is variance and standard deviation. Lets see how it changes in the company with and without top management turnover post M&A.

| | EBIT | ROI | ROE |
|---|---|---|---|
| Millions of $ | | | |
| Abbott St. Jude Medical M&A | 2175698 | 0.24% | 0.19% |
| IBM Red Hat M&A | 838513 | 0.01% | 0.13% |
| | | | |

Table 13. Variance

| | EBIT | ROI | ROE |
|---|---|---|---|
| Millions of $ | | | |
| Abbott St. Jude Medical M&A | 1475 | 5% | 4% |
| IBM Red Hat M&A | 916 | 1% | 3.5% |
| | | | |

Table 14. Standard Deviation

Based on the two tables above 13 & 14, we can conclude that a firm without top management turnover i.e Abbott ST. Jude Medical Merger has a greater variance in operating income or EBIT than a IBM Red Hat Merger with top management turnover post M&A. Similarly, the standard deviation is greater in company without top management turnover compared to company with top management turnover post M&A. High variance and standard deviation indicate that the operational profit is quite dispersed due to the frequent changes in the cost and revenue of the products or services offered, indicating a high degree of instability.

When we compare companies based on their ROI and ROE, we find that the one without top management turnover has a higher percentage of variation and a greater standard deviation than the one with top management turnover. The data from tables 13 and 14 reveal that there is only a little difference between the percentage of companies with and without top management turnover. When we compare the original values of cost of investment and average shareholder's equity in millions of dollars, we can see that this difference in percentage will be a huge number in reality. This high variation and standard deviation in ROIand ROE indicates that investors and shareholder's are at more risk and the company's returns are more volatile when compared to company with top management turnover, where the investors are more stable and risk free.

**Students T-test For IBM and Abbott Post Merger:**

Now lets consider the EBIT value or the so called operating income to draw the inference about both the companies financial performance post M&A. At first, let SD1 and SD2 stand in for the standard deviations of the two groups, and let N1 and N2 stand for the number of samples in each group; there are a total of 2 samples for each group.

As we have seen in the empirical analysis, we need to calculate the standard error of the difference first:

$$SED=\sqrt{\frac{SD1^2}{N1}+\frac{SD2^2}{N2}}$$

substituting the values from table 14:

$$SED=\sqrt{\frac{916^2}{2}+\frac{1475^2}{2}}$$

= 122

Now we need to calculate t static value where the mean value of two groups is x1=15671 and x2=2607 obtained from table 12.

Therefore, t static value= x1-x2/ SED

$$= \frac{15671-2607}{1227}$$

= 10.64 ..... 1

Degree of freedom can be found by (N1-1) + (N2-1) = (2-1) + (2-1) = 2.

Lets look at the t distribution table to find what t critical value matches with 2 degree of freedom and alpha value = 0.05.

We find that t critical value = 2.920..... 2

Looking at 1 and 2, we conclude that t static value is greater than t critical value.

# 5. RESULTS

The purpose of the empirical analysis is to establish the link between the turnover of top management following a merger and acquisition and the way in which this affects the company's financial performance in the US market.

Initially we carried out the descriptive analysis of the fifty companies that underwent M&A in the last twenty- five years. When we analysed the data before and after two years of M&A, we discovered that companies with top management turnover post M&A had a good financial performance in terms of EBIT, ROI and ROE. They were highly stable and more efficient when compared to companies without top management turnover post M&A. We also investigated the post M&A scenarios of Abbott St Jude Medical merger and IBM Red Hat Merger. From the descriptive statistics we observed that the IBM Red Hat merger which involved top management turnover post M&A performed exceptionally well when compared to the AbbottSt Jude Medical merger which had no top management turnover post M&A. Also in both instances, we discovered that the acquiring firms were far larger than the target firms. ROI, ROE, and EBIT were greater for acquiring firms compared to target firms.

The next step that we took was to carry out the students t-test, which is an inferential test that allowed us to confirm that everything we had seen up until this point was statistically significant and not the result of chance. When we did the t- test for 50 companies, with and without management turnover for the EBIT value at alpha is equal to 0.05. In our investigation, we found that the t-static value was higher than the t-critical value. In a similar manner, we calculated the t-static value for the EBIT value of the Abbott St. Jude Medical merger and the IBM Red Hat merger. In this case also, we discovered that the t static value is higher than the t critical value when alpha is equal to 0.05 and the corresponding degree of freedom is taken into consideration.

The empirical evidence, which included both descriptive statistics and students' t-tests, led us to the conclusion that companies that experienced top management turnover after an M&A process had significantly better financial performance than companies that did not experience top management turnover after an M&A process. Therefore, we conclude that the alternative hypothesis, which asserts that there is a relation between financial performance and top management turnover following an M&A, is more credible than the null hypothesis, which states that there is no connection between financial performance and topmanagement turnover following an M&A. So, we accept the alternate hypothesis and reject the null hypothesis.

# 6. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

**Limitations:**

In order to properly contextualise the findings of research, interpret the validity of the empirical effort, and provide a level of credibility to the findings of published research, it is essential to have a solid understanding of the limitations of the studies (Loannidis, 2007).

In this test we have used descriptive statistics and students t-test to come to the conclusion. These are the comparative analysis that we have used in this test. You can also make use of more complex tests like correlation analysis and regression analysis to verify the cause and effect relationship but this limited from the scope of the current study.

The study may have included financial performance details of each individual departments in the companies like operations, marketing, finance, technical and administration. If we get this data then a clear picture of how management turnover impacts each individual department would be clear. This analysis is important because when the company is horizontally merging with other company, in order to have a better reach, then normally there is a high senior management turnover in technical department when compared to other departments of the company. This is because of overlapping of technicalities. While the limitation with implementing this aspect in this study is due to the unavailability of each departments relevant data from reliable source. Having said that, the scope of this study prevents us from doing so. Having said all of these, according to (Cesen, 2018) the M&A industry has its own characteristics, and the variables that led to its success analysis has endless factors.

**Scope for Future Research**

This section is beneficial because it offers future scholars in this topic some direction and helps them avoid duplicating the work of others who have come before them. Firstly, we may look into how the size of the company or bigger economies of scale also acts as a factor when we analyse the impact of top management turnover on the financial performance. In the similar manner this study can be done considering how synergies and top management turnover has impact on the financial performance.

Secondly, the future research may include how different types of M&A. The horizontal, vertical, conglomerate mergers along with top management turnover may have an impact on the financial performance of the company. This study will need a lot of time. Finally, we can categorise 3-4 reasons

for management turnover and calculate how corresponding firms' financial performance is affected by the management turnover post mergers and acquisition.

# 7.CONCLUSION

The primary objective of the research presented in this paper is to investigate the relationship between the turnover of top management and the financial performance of companies following mergers and acquisitions. The data is computed for 50 companies that have been trading in the United States over the course of the past 25 years, from 1997 to 2022. The data of the acquiring company, the target company are computed for 2 years before M&A and data of post-merger scenario is computed for 2 years after M&A. The annual reports of the corporations were used to compile these statistics into a table. This research looks at Earnings Before Interest and Tax (EBIT), Return on Investment (ROI), and Return on Equity (ROE) as three key indications of a company's overall financial performance.

In this study descriptive statistics and inferential statistics are used to identify the statistical significance. In descriptive statistics, measure of central tendency and measure of variability are compared. Mean is used as a measure of central tendency. Variance and standard deviation are used as measure of variability. For the post-merger scenario, companies that didn't undergo top management turnover and the ones that underwent top management turnover post M&A were compared based on mean, variance and standard deviation. The descriptive statistics of Abbott ST. Jude Medical Merger and IBM Red Hat Merger are looked into more detail, the post-merger measure of central tendency and measure of variability are compared.

The students t- test, an inferential statistical tool is also used in this study. Earnings before interest and tax of the companies with and without top management turnover post M&A are used in this test. By performing this one tailed t-test, the results obtained show that t-statistic value is greater than t critical value at alpha equals 0.05. Also, the t-test is done for EBIT values of Abbott ST. Jude Medical Merger and IBM Red Hat Merger. The result obtained again shows that t-statistic value is higher than the t critical value when alpha = 0.05.

From the findings of the statistical analysis in the study, we can conclude that the companies that had top management turnover post M&A are performing extremely well when compared to companies that had no top management turnover post M&A. This shows that top management turnover post M&A has a positive impact on the financial performance of the company.

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