IMPACT OF BONUS ISSUANCE ON INFOSYS LIMITED: A POST EVENT ANALYSIS

Project Report

Submitted by

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Under the guidance of

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In partial fulfilment of requirements for award of the post graduate degree of

Master of Commerce and Management

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

COLLEGE WITH POTENTIAL FOR EXCELLENCE

Nationally Re-Accredited at 'A++' Level (Fourth Cycle)

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March 2025

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CERTIFICATE

This is to certify that the project report titled **'IMPACT OF BONUS ISSUANCE ON INFOSYS LIMITED: A POST EVENT ANALYSIS'** submitted by **KEERTHANA RAJESH** towards partial fulfilment of the requirements for the award of post graduate degree of **Master of Commerce and Management** is a record of bonafide work carried out during the academic year 2024-25.

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Place: Ernakulam

Date: 31-03-2025

DECLARATION

I, **KEERTHANA RAJESH** hereby declare that this dissertation titled, **'IMPACT OF BONUS ISSUANCE ON INFOSYS LIMITED: A POST EVENT ANALYSIS'** has been prepared by me under the guidance of **Dr. JENCY TREESA**, Assistant Professor, Department of Commerce, St. Teresa's College, Ernakulam.

I also declare that this dissertation has not been submitted by me fully or partly for the award of any Degree, Diploma, Title or Recognition before.

Place: Ernakulam **KEERTHANA RAJESH**

Date: 31-03-2025

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1.1 INTRODUCTION TO THE STUDY

The ever-changing corporate finance environment has prompted companies to seek new ways of maximizing shareholder value and establishing their market share. One such method that is increasingly being adopted is the issuance of bonus shares, where extra shares are given to current shareholders for free, which is a distribution of retained earnings or reserves. A bonus issue is described as nothing but "a *cosmetic amendment* within the owner's equity statement" (Dhar and Chhaochharia, 2008; Kalay and Zhang, 2019). The issuance of bonus shares can be employed by companies to deploy surplus reserves, augment earnings per share, and enhance the paid-up capital base.

The informational content of firm-specific announcements such as dividends and earnings has been a subject of extensive theoretical and empirical research since the groundbreaking work of Fama, Fisher, Jensen, and Roll (1969). Investors may take such announcements to be an indication of good performance by such a company and optimism related to future profitability. The initial euphoria may lead to trading volumes and volatility increasing tremendously and impacting the share prices significantly. To the best of one's knowledge, the immediate market responses to corporate events are important for stakeholders as they attempt to deal with the intricacies that investment choices present. Additionally, the release of bonus shares can greatly improve shareholder liquidity. This is because there is an increase in the total amount of shares owned without a need for additional investment. Shareholders are advantaged by increased shareholding, making it easy to buy and sell shares as well as enhance overall market liquidity. This ultimately simplifies transactions and attracts potential investors to the stock.

However, an increased number of shares may have negative consequences for the firm. The EPS dilution resulting from increased liquidity may be unappealing to investors and therefore a negative influence on perceived profitability. Increased intensity of trading may also increase price volatility and the potential usage of stock as an object of speculation. Even more, if investors perceive bonus shares as signals to follow and their short-term interests gain momentum, then management could lose focus on long-term strategic intent, which in turn may impact the growth curve of the company. The effects of bonus share issuances do not stop here. In the long run, effects on value and market dynamics are crucial for studies. Analysts and investors need to know how the additional shares influence the key financial metrics and the overall capitalization of the market. Implications can differ based on the market conditions, investor psychology, and the continued performance of the company.

This study also aims to provide a comprehensive overview of bonus shares' short-term and long-term effects on the stock market. Questions on quantitative and qualitative consequences have been probed into to show how these corporate decisions alter investor behavior, modify market perceptions, and affect the trajectory of the company as a whole. Using a case study, this research shall unearth patterns that demonstrate the intricacies of bonus shares as a financial instrument.

This project shall be dealing with the sector of information technology, which, as compared to other industries, is dynamic and rapidly shifting, thus showing a great difference in terms of stock performance for different reasons, such as various corporate actions, including a bonus share issue. Keeping in mind this sector, through analysis, it shall give deep insight into how such a financial strategy influences investor perception or the way the market reacts by portraying how innovation and uncertainty characterize the field of work. This focused approach will enable a better understanding of how corporate financial decisions interact with stock market behavior in one of the most pivotal sectors of the global economy.

Considering the changing factors that influence market conditions these days, the consequences of bonus share issuance can be of great importance to the investors as well as the policymakers and corporate decision-makers. The results of this research can help establish a better understanding of how such corporate strategies not only reflect the current state of the company but also shape its future in the competitive landscape of financial markets.

Firstly, this study aims to examine the immediate market reactions to bonus share announcements in the Indian IT sector. By analyzing stock price movements, trading volumes, market capitalization, and volatility patterns, we seek to understand how investors perceive such corporate actions. Secondly, the research will investigate the long-term implications of bonus share issuances on firm valuation and shareholder wealth. We will explore whether bonus shares lead to sustained increases in stock prices and whether they have any impact on key financial metrics such as earnings per share (EPS) and price-to-earnings (P/E) ratio.

Thirdly, this study will delve into the role of investor sentiment and market psychology in shaping the impact of bonus shares. We will analyze how factors like investor expectations, market trends, and macroeconomic conditions influence the perception and valuation of bonus shares. By addressing these research objectives, this study contributes to a deeper understanding of the complex relationship between corporate finance decisions, investor behavior, and stock market dynamics in the Indian IT sector.

1.2 RATIONALE OF THE STUDY

The rationale behind this study is that bonus share issuances have gained significant importance as a corporate strategy in the pursuit of increasing shareholder value, improving liquidity, and utilizing surplus reserves. However, despite the wide practice of bonus shares by firms, especially in the Indian context, the impact of such practices on stock market behavior and firm performance has largely been unexplored, especially in the rapidly transforming Information Technology (IT) sector.

This sector reflects the high growth, volatility, and investor speculation that make the scenario an appropriate one for observing such corporate action effects. An understanding of how bonus shares affect the stock price and volume of trade as well as key financial metrics might thus be invaluable for the investor, corporate manager, or policymaker.

This study fills the gap in literature by examining both short-term market reactions and long-term implications on firm valuation, shareholder wealth, and market dynamics. Moreover, with the understanding of investor sentiment and market psychology, this study shall provide a more profound insight into the relationship between corporate finance decisions and investor behavior in order to benefit firms making informed financial strategies in an increasingly competitive and volatile market environment.

1.3 STATEMENT OF THE PROBLEM

The bonus share issue is the most commonly practiced corporate practice aimed at enhancing shareholder value, enhancing liquidity, and leveraging excess reserves. While there has been substantial research into investigating the short-run effects of bonus share announcements on stock prices, longer-run effects on firm value, investor activity, and market forces are not as well known. In light of the conditions of rapid growth, volatility, and contagion speculation among Indian Information Technology industry investors, a study here renders the question more pertinent.

Though bonus share issuances have been a common occurrence, not much has been studied about the full short-run and long-run impact of the sector. This element varies extensively with investor mood along with macroeconomic factors and the financial condition of the company. Whether bonus shares lead to persistent value appreciation in the firm and wealth in the shareholders or create short-run market mania and increased volatility is something not known.

In general, the present study addresses this gap by investigating short- and long-term bonus share issuance effects on stock price movements, trading volumes, market capitalization, and the key financial metrics of EPS and P/E ratio in the Indian IT sector. It aims to provide insight into how bonus share announcements affect investor sentiment, market behavior, and firm performance, thus helping corporate managers, investors, and policymakers take informed decisions in the wake of a rapidly changing financial landscape.

1.4 SCOPE OF THE STUDY

This paper is aimed at providing insights into the short- and long-term implications of bonus share issuances in relation to stock market performance, firm valuation, and investor behavior, focusing especially on the Indian Information Technology sector. It will study a period defined around the time of bonus share issuance based on firms listed at BSE and NSE.

A comprehensive analysis of immediate market effects in terms of change in stock price, trading volume, and volatility in market price will be undertaken along with an examination of effects on financial variables, EPS, P/E ratio, market capitalization over time, investor sentiment, and even the role of psychology as influencing the behavior of a market. This research is only limited to the Indian IT sector. Other corporate actions, including stock splits or dividends, are excluded in order not to dilute the study of the bonus share issuance effects. Data are sourced from public financial records, the NSE, BSE, and company reports.

1.5 OBJECTIVES OF THE STUDY

1. To analyze the short-term and long-term impact of bonus share issuance on Infosys' stock price.
2. To analyze the short-term and long-term impact of bonus share issuance on Infosys' trading volume.
3. To assess the impact of bonus share issuance on Infosys' operating performance, focusing on key profitability ratios like ROE, ROA, and profit margin.
4. To contribute to the existing body of knowledge on the effects of bonus share issuance on corporate performance and investor behavior.

1.6 HYPOTHESES OF THE STUDY

The following are the hypotheses set for the research:

Null Hypothesis 1: There is no significant change in the before and after short-term share price movement.

Alternative Hypothesis 1: There is significant change in the before and after short-term share price movement.

Null Hypothesis 2: There is no significant change in the before and after long-term share price movement.

Alternative Hypothesis 2: There is significant change in the before and after long-term share price movement.

Null Hypothesis 3: There is no significant change in the before and after short-term trade volume movement.

Alternative Hypothesis 3: There is significant change in the before and after short-term trade volume movement.

Null Hypothesis 4: There is no significant change in the before and after long-term trade volume movement.

Alternative Hypothesis 4: There is significant change in the before and after long-term trade volume movement.

1.7 RESEARCH DESIGN

For the study, Infosys Ltd. has been chosen. It is a multinational company specializing in information technology services, including consulting, technology solutions, outsourcing, and cutting-edge digital services. Its primary objective is to empower clients in their digital transformation endeavors. As of now, it holds the position of the second-largest IT Company in India, trailing behind Tata Consultancy Services.

Data was selected from Yahoo Finance and Screener. They have made multiple bonus issuances. Out of which, the 2018 bonus issuance has been chosen for the study. The data have been collected from 2017 to 2024 to understand the net profit, EPS, dividend payout %, and market capitalization before, during, and after bonus issuance. Short-term and long-term data related to share price and trade volume were collected to know the significant changes in it before and after the issuance. Graphical representations are made to have a clearer understanding of these aspects.

1.8 RESEARCH METHODOLOGY

To determine the effect of the bonus share issue on the profitability of Infosys, some of the important profitability ratios, like return on equity (ROE), return on assets (ROA), and profit margin, were computed before and after the event. Trend analysis of these ratios was done to recognize any noteworthy changes that occurred in them over a period of time. To analyze the market's reaction to the bonus share announcement, stock price movements and trading volumes were examined. A paired sample t-test was conducted to analyze the impact of bonus issuance on the before and after share price and trade volume movements for short-term and long-term. Tests such as descriptive statistics and correlation were conducted for the same.

1.9 LIMITATIONS OF THE STUDY

1. The study focuses solely on the Indian IT sector, which may limit the generalizability of findings to other sectors or markets.
2. The analysis covers a specific period around bonus share announcements, potentially overlooking long-term impacts beyond the study window.
3. The reliability of results depends on the accuracy and completeness of publicly available financial data, which may vary.
4. The study excludes other corporate actions, such as stock splits or dividends, which may also influence market behavior and investor perception.

1.10 KEY WORDS

Corporate strategy: The overall direction and strategy that a company takes to realize its long-term objectives. It includes growth, market positioning, competitive advantage, and resource allocation decisions. Corporate strategy directs mergers, acquisitions, diversification, and business expansion.

Financial metrics: Quantitative measures used to evaluate a company's financial health and performance used by investors and analysts. They are revenue, profit margins, return on investment (ROI), earnings per share (EPS), and debt-to-equity ratio.

Investor sentiment: Overall mood or sentiment of investors regarding a particular market, industry, or asset. Buying occurs if there is positive sentiment, and selling occurs if there is negative sentiment.

Market reaction: The way that financial markets react to news, events, or announcements by the company. It is manifested through stock price fluctuations, trading volume, and investor attitudes.

1.11 CHAPTERISATION

Chapter 1 - Introduction: This chapter deals with the introduction to the study, rationale of the study, statement of the problem, scope, objectives, hypothesis, research design, research methodology and limitations used in the current study.

Chapter 2 - Review of Literature: This chapter consists of the summaries of the prevailing literatures relating to the study. The research works and papers included in this study were reviewed to understand the nature of the study.

Chapter 3 - Theoretical Framework: This chapter gives an overview about the study. It gives the foundation for developing and supporting the current study.

Chapter 4 - Data Analysis and Interpretation: The data collected from various sources are sorted and analyzed in this chapter. The tools used for analysis of the data help in giving a clear picture about the study and thus helped in interpretation of the same.

Chapter 5 – Findings, Suggestions and Conclusion: This is the final chapter where a summary of the findings and conclusion to the study are stated.

2.1 LITERATURE REVIEW

A literature review generally stands for a broad synthesis and critique of available work about a given topic. It evaluates various studies, theories, and findings focused on determining commonality, identified gaps, and opposing views. A literature review, broadly speaking, provides a backdrop for a new research program, suggests a theoretical framework, and pinpoints areas deserving further investigation. It enables researchers to build on prior knowledge rather than duplicating what was done. Depending on the methodology employed, a literature review may be narrative, systematic, or analytical; it is usually part of research papers, dissertations, and academic articles to help show the writer's thorough acquaintance with the topic.

Foster and Vickery (1978): Carried out an investigation to validate the signalling hypothesis by applying the use of daily stock returns data. Their work revolved around an examination of the informational influence of stock dividend announcements on the actions of markets. In observing a sample of 82 announcements of stock dividends, they analyzed if such firm actions transmitted meaningful information to shareholders. They indicated that announcements of stock dividends were associated with significant positive abnormal returns near the date of announcement, and this suggests that the market is interpreting such announcements as good news for the financial health, growth prospects, or prospective earnings ability of a firm.

Balasingham Balachandran and Sally Tanner (2001): A study of Australian companies looked at how stock prices react to news of bonus share issues. The study found that the size of the price reaction is statistically linked to both the size of the bonus issue and the performance of the stocks before the announcement. Stocks with positive prior momentum responded more strongly, as this was indicative of investor expectations driving market response. Also, more substantial bonus issues produced bigger price reactions, implying that investors regard them as a better proxy for profitability and potential for growth. These findings stress market mood and the size of the bonus issue in framing responses of stock price.

Batchelor and Orakcioglu (2003): The research on return volatility near the ex-date of bonus issues concluded that while abnormal returns were not significant, there was a steep spike in volatility surrounding and on the ex-dividend date. The authors attribute this increased volatility to uninformed investors who have difficulty estimating the actual post-split price of the stock. This mispricing results in high trading activity and price volatility, even without the presence of substantial abnormal returns. The results show the role played by investor sentiment and market inefficiencies in influencing stock price changes following bonus share issues.

Madhuri Malhotra et al. (2007): In their article entitled "Stock Market Reaction and Liquidity Changes around Bonus Issue Announcement: Evidence from India" (2007), they analyze share price reaction to the bonus issue announcement for a sample of Indian firms. Standard event study methodology has been employed for the sake of examining the bonus issue announcement reaction. Bonus issue announcement generates negative abnormal returns around the announcement date. There exists a negative response following the bonus issue announcement, sending the message that the market under reacts following the announcement. Also, it is noted that no information leakage precedes the announcement.

Ching-Hsiang Lin and Wanncherng Wang (2008): It was first shown analytically that the SFB-imputed EPS, relative to the proposed EPS measure, understates the dilutive impacts of ESB; the SFB-imputed EPS biases the price-earnings relation downward; and the proposed EPS maintains the stock price earnings relation. After controlling for firm growth and ESB issuance, empirical evidence was found that is largely in accord with the hypotheses. The SFB-imputed EPS provides downward-biased estimates of price earnings multiples. The downward bias is aggravated as the dilution of ESB becomes larger.

Vijaya B. Marisetty et al. (2008): Conducted a study "Price reaction to rights issues in the Indian capital market" to analyze securities price reaction to the announcement of rights issues by Indian listed companies for the period 1997–2005. The finding indicates a positive but statistically insignificant price reaction to such announcements. Price reaction is substantially more negative for family group affiliation firms than for non-family group affiliation firms. The significant differential price response of firms with and without a family group affiliation can be attributed to the "tunnelling hypothesis." For family group-affiliated firms, we hypothesize that investors believe that the proceeds from the rights issue could be diverted for the advantage of the controlling shareholder.

Raja and Sudhahar (2010): This research empirically tested the informational efficiency of the capital market towards the bonus issue announcement published by the IT firms. The findings of the research indicated that the security prices responded to the bonus issue announcement. Therefore, one can reasonably deduce from the above discussions that the Indian capital market for the IT industry, as a whole, is efficient, but not perfectly efficient, up to the announcement of a bonus issue. This information inefficiency can be exploited by the investors for earning abnormal returns at any point during the announcement period.

Ghatak (2011): A study on how bonus issues and stock splits affect the stock market has found that the announcement of such events brings about a positive reaction from the market, leading to the initial rise of stock prices. Maize post-announcement date; the trend of price is rather mixed, with stocks showing diverse patterns of movement instead of one decisive direction towards up or down. This suggests that while investors take bonus issues and stock splits as positive signals in the short run, longer-run price behaviour is determined by other factors such as market forces, investor sentiment, or conditions specific to the firm.

Mian and Sankaraguruswamy (2012): Market sentiment is the key factor in the level of price volatility around surprise earnings releases because, at the end of the day, it's what people think that generally determines the character of the market reactions. The research on bonus issue announcements concluded that stock prices respond more to good surprises when the market is strong because generally optimism and higher trade volumes are the signals. In bearish markets, positive announcements may even result in weak and/or short-lived gains because risk-averse investors tend to remain on guard. These findings highlight the role of earnings surprises and bonus issues in influencing stock prices, even if it is the broader market environment that determines how rigorously these will respond.

M.Masry (2015): Using an event study approach, this study examines how free share distributions influence abnormal returns and trading activity in Egypt's stock market. The results show that free share distributions do not largely change abnormal returns, since few or no statistical differences are detected with respect to the different event windows (-1 to +1, -2 to +2, etc.), which suggests that the market does not show a high response to such announcements in terms of returns. The outcome would be on the abnormal trading activity, where there were statistically significant differences from -13 to +13 days around the event in trading volumes, saying investors made trading adjustments responding to the free share distribution, although the price of stocks remained unaffected.

David and Ginglinger (2016): The research asserts that the likelihood of bonus share distribution is likely to rise in economic downturns or when the leverage levels of a firm are on the rise, because a company would rather issue stock dividends than cash dividends in order to maintain liquidity. Companies with financing constraints usually employ bonus issues as an out-of-cash way of compensating the shareholders without depleting capital. Also, a surge in demand for bonus-issuing company shares can lead to a favourable market response, as investors view these companies as optimistic about their future prospects. This increased demand, combined with the psychological attraction of bonus shares, can propel short-term price increases after the announcement.

Alex (2017): The research tested market reaction to 57 Indian firms' bonus issue announcements on stock prices. The results showed that average abnormal returns were seen on the fifth day following the announcement, but the returns were not statistically significant. Consequently, the research concluded that bonus issue announcements do not significantly affect share prices in the Indian market, implying that investors might have already factored in the information or other market factors driving price action after the announcement.

Shakila et al. (2017): Analyzed the effect of rights issues and stock splits during a four-year period where they observed that despite the fact that the returns were not statistically significant at the 5% level, they did discover a positive mean abnormal return both for the announcement announcing that shareholders can gain a higher return from the rights issue announcement than the stock split announcement.

Poonam Kumari & Pushpender (2019): In their article, "An Empirical Analysis of Stock Price Behaviour around Bonus Issue Announcement in India," the authors tested stock price movement using Average Abnormal Returns (AARs) and Cumulative Average Abnormal Returns (CAARs) for a 21-day event window. The results show that no individual day within this window had a statistically significant abnormal return. Both the pre-announcement and post-announcement periods exhibited positive AARs, but their p-values were greater than 0.05, verifying that these returns are not statistically significant. This is an indication that bonus issue announcements in India are not generating abnormal returns, thereby suggesting that perhaps the market might have already reflected the information or that there exist other external drivers of price action.

Pankaj Kumar Mahato (2022): In his article, "An Event Study Analysis of the Impact of Bonus Share Announcement on NSE Nifty 200 Stocks," he finds a persistent leaking of information prior to the public announcement date, with a minimal rise in CAAR. Saying that the gradual leakage of information by the market caused speculative trading among selected scripts, thereby causing price appreciation ahead of the formal BSA date.

3.1 INFOSYS LIMITED

Infosys is a world leader in next-generation digital services and consulting. We help clients across 50+ countries navigate their digital transformation. With over three decades of expertise in running the system and operation of global businesses, we guide our clients through their digital transformation with mastery. We accomplish this by empowering the enterprise with an AI-driven core that enables prioritizing the realization of change. We also equip the business with agile digital at scale to drive record levels of performance and customer joy. Our evergreen learning agenda propels their ongoing improvement through creating and sharing digital skills, knowledge, and ideas across our innovation ecosystem

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Figure 3.1: Infosys Limited Logo

Source: LinkedIn Business

3.2 HISTORY OF INFOSYS LIMITED

It was established by seven engineers with a capital of $250. It was named Infosys Consultants Private Limited when it was registered on 2 July 1981. In 1983, it moved to Bangalore. It was renamed Infosys Technologies Private Limited in April 1992 and was renamed Infosys Technologies Limited after it became a public limited company in June 1992.

In February 1993, the company issued its initial public offering (IPO) at an offer price of INR 95 per share, against a book value of INR 20 per share. The IPO was at first under-subscribed but was "bailed out" by US investment banking firm Morgan Stanley, which bought a 13% equity stake at the offer price. When the company listed on the stock market in June 1993, the share price had opened at INR 145 per share.

Infosys shares were listed on the Nasdaq stock exchange in 1999 as American depositary receipts (ADRs) and was the first Indian company to list itself on Nasdaq. The share price climbed to INR 8,100 by 1999, which was the most costly share on the market at that point in time. Infosys was then one of the top 20 companies by market capitalization on the Nasdaq. The ADR listing was subsequently shifted from Nasdaq to NYSE Euronext to make European investors have greater access to the shares of the company.

Then-British Prime Minister David Cameron visited Infosys headquarters in Bangalore in July 2010 and spoke to the employees of the company. In June 2011, the company changed its name to Infosys Limited. In 2012, Infosys declared the opening of a new office in Milwaukee, Wisconsin, to support Harley-Davidson. In 2011, Infosys recruited 1,200 American employees, and by 2012 had increased its manpower by another 2,000 employees. Infosys launched a product subsidiary in July 2014, known as EdgeVerve Systems, dealing with enterprise software products in the areas of business operations, customer service, procurement, and commerce network space. In August 2015, Infosys transferred Finacle assets to EdgeVerve Systems.

Infosys crossed US$10 million in revenue per year in FY 1995, US$100 million in FY 1999, US$1 billion in FY 2004, and US$10 billion in FY 2017. Its revenue was US$18 billion in FY 2023. Infosys said it would introduce Aster in June 2024, an AI platform that will enhance marketing effectiveness by leveraging artificial intelligence.

3.1.2 SERVICES AND PRODUCTS PROVIDED BY INFOSYS LTD

Infosys offers software development, maintenance, and independent validation services to diverse industries such as finance, insurance, manufacturing, and others. It offers consulting services through its subsidiary Infosys Consulting in digital experience, cloud, data analytics, artificial intelligence, engineering, and sustainability. Its subsidiary Infosys BPM provides business process outsourcing services such as finance, procurement, customer service, and HR. Infosys offers digital platforms and solutions for digital transformation, including Finacle, Panaya, Infosys Equinox, Infosys Meridian, EdgeVerve, and Infosys Cortex. Finacle is a banking solution that supports financial institutions to boost customer service capability. Panaya is an organization application delivery platform that enables organizations to deliver applications quicker and innovate. Infosys Equinox is a digital commerce platform developed for empowering an easy and personalized shopping experience. Infosys Meridian is a productivity work platform for remote and hybrid workforces.

3.2 BONUS

A bonus is an additional financial reward above and beyond the standard payment expectation of its receiver. Businesses may give bonuses to entry-level workers as well as senior-level executives. Bonuses are generally reserved for exceptional employees, but employers will occasionally distribute bonuses to all company employees in order to avoid jealousy among employees. Bonuses can be used as carrots to lure in potential employees, and they can be awarded to existing employees as a reward for performance and to boost employee retention. Firms can pay bonuses to their current shareholders in the form of a bonus issue, which is an issue of free extra shares of the firm's stock.

3.2.1 BONUS ISSUANCE

A bonus issue, or scrip issue, or capitalization issue, is an issue of free additional shares to the shareholders. For instance, a company might offer one bonus share for each five held. Bonus issues are made by companies to draw more investment and reward the existing shareholders. Bonus issues raise the outstanding shares of a company but not its market capitalization. Firms normally finance a bonus issue from profits or share reserves that already exist. Bonus share issues are not taxed;

nonetheless, the shareholders are still required to pay tax on capital gains if they dispose of them at a net profit.

A company distributes bonus issues proportionally in line with each shareholder's holding. Bonus shares never dilute the equity of shareholders since they are issued on a fixed ratio that maintains the relative equity of every shareholder equal to what it was prior to the issue. For instance, a three-for-one bonus issue will give each shareholder three shares for every one share that they possess prior to the issue. One who owns 1,000 shares gets 3,000 bonus shares ($1{,}000 \times 3 \div 1 = 3{,}000$).

3.2.2 PURPOSE OF BONUS ISSUE

1. Increasing Market Liquidity

Bonus share issue leads to an increased number of outstanding shares. This may lead to more shares being made available in the market, thereby making it easier to sell and purchase shares. The increase in the number of shares usually leads to a similar decrease in the share price, making the stock more affordable to smaller retail investors. It's a system through which companies bring shares within reach of investors, especially if the price of their stock has been rising too high, out of reach for many shareholders.

2. Reward Shareholders

Bonus shares create a way for rewarding shareholders without draining the cash reserves of the company. Instead of paying dividends in cash, companies pay them in shares, retaining cash within the company to be used elsewhere (e.g., re-investment, paying debts). When a company gives bonus shares, it sends a signal to investors that the company is financially healthy and has enough profits or reserves to give out. The move can increase shareholder loyalty and attract potential investors who see it as an exhibition of company profitability and strength.

3. Signaling Financial Strength

A company that issues bonus shares is often perceived as financially strong because it implies that the company has sufficient retained earnings or reserves. This can help boost investor confidence, as they may interpret the issuance as an indication that the company is in a strong financial position. The release of bonus shares is also to be seen as a signal that the company has an expectation of growth in the future and expects to grow long-term. Share price is viewed as the ideal time to invest by the investors, resulting in an increased share price for the company.

4. Share Price Adjustment

The increase in shares can reduce the price per share, making the stock less expensive and more appealing to small or retail investors. This can also increase the demand for buyers in the market, which subsequently increases liquidity. When bonus shares are issued, share price usually goes down in alignment with the amount of bonus that has been awarded (for instance, a 1:1 bonus would see the price lowered by half). This can then make the share more appealing to new investors who were otherwise kept out by the higher stock price.

5. Preserve or Enhance Shareholder's Proportion

Issuance of bonus shares gives existing shareholders more shares according to the number they already own, so their ownership percentage in the firm is not affected. This sustains equilibrium of control among shareholders. Issuance of bonus shares enables existing shareholders to hold on to their control in the company without bringing new outside investors into the company, as it averts dilution of their influence or ownership.

6. Use Retained Earnings

The company can capitalize its retained earnings or other reserves by issuing bonus shares, converting them into share capital. This way, the company can use its reserves without paying out cash at once, which can be useful for current operations or expansion. Releasing bonus shares can demonstrate that the company is making optimal use of its retained profits. This serves to strengthen the perception that the company is financially healthy and capable of producing stable returns, building investor confidence.

7. Tax Efficiency

Cash dividends are sometimes taxed in certain jurisdictions. Bonus shares help companies reward shareholders without attracting taxes that would normally be levied on cash dividends. This is a preferable option for both the shareholder and the company. As bonus shares do not trigger an immediate taxable event (in contrast to dividends), it is able to defer tax burdens for shareholders. The tax effects are generally delayed to the point when the shares are disposed of, which might be a good tax measure.

8. Enhancing Perceived Market Value

Granting bonus shares has the effect of altering the market perception of the company to make it seem larger or more valuable, yet the total value is unchanged. This can give rise to good sentiment, which brings in additional investors seeking established or expanding companies. Following the issuance of bonus shares, the decreased post-issuance price per share may attract new retail investors who could have been discouraged by a higher cost. This will enhance demand for the stock and potentially propel its price upwards.

9. Compliance with Stock Exchange Requirements

Certain stock exchanges can require a company to have a minimum share capital or minimum number of shareholders. Issuing bonus shares serves to fulfill these requirements and keep the company listed on the exchange. Bonus shares can be a substitute for a stock split. While stock splits split old shares into smaller units, bonus shares are distributed from retained earnings, which can have some regulatory or financial benefits for the firm.

10. Increase Stock Market Visibility

The release of bonus shares tends to create media buzz and raise visibility within the market. Such publicity tends to attract more investors, particularly retail investors who seek companies with good prospects and stability. The issue of bonus shares can help generate a good public image. It can give a perception of prosperity and growth, which may raise the stock price of the company in the short run as the sentiment of the market improves.

11. Encourage Shareholder Base Diversification

Issuance of more shares allows a firm to have more shareholders and diversify its base of ownership. This leads to more stable stock performance because ownership is more dispersed across a larger set of investors. A diversified shareholder base can minimize the risk of volatility due to a few prominent shareholders selling stock simultaneously. This increases market support for the firm and adds to long-term stability.

3.2.3 BENEFITS OF ISSUING BONUS SHARES

- **Promoting retail participation:** Expanding the outstanding stock increases liquidity and lowers a company's share price, making its shares more accessible and liquid to trade for retail investors. Lower-priced shares enable investors to purchase more units, and higher liquidity means lower slippage costs.
- **Alternative to dividend payment:** Firms that earn irregular profits can give bonus shares instead of cash dividends to establish shareholder trust. Bonus issues can be especially attractive for small firms that wish to have more investors but lack earnings that are regular enough to pay dividends.
- **Showering financial health:** A firm issuing bonus shares indicates that it possesses adequate share reserves and/or earnings to reward future investors and existing shareholders. Issues of shares also indicate that a firm is financially healthy enough to continue growing and creating shareholder value.

- **Tax relief:** Bonus shares are not taxed when issued, and they are preferable from a tax point of view compared to receiving a cash dividend, whose recipients are taxed between 10% and 37%. Yet, investors still need to pay capital gains tax if they sell the bonus shares for a net profit.

3.2.4 DRAWBACKS OF ISSUING BONUS SHARES

- **Opportunity cost:** A firm might utilize earnings held back for a bonus issue for another purpose that might create additional shareholder value. For instance, retained earnings might be utilized for a strategic acquisition into a new growth market or to finance upgraded equipment and machinery. Missed opportunities also have the potential to generate negative publicity for a firm, which could drive investor sentiment in the wrong direction.
- **Detrimental effect on dividends:** Bonus shares don't bring any cash to the company, which might lead to a reduction in future dividend amounts, potentially disenfranchising shareholders. Other investors who end up with bonus shares might also believe that the company might focus on that mode of reward at the expense of a cash dividend in the future.
- **No financial gain in the short term:** In contrast to a cash dividend payment, the shareholders do not gain financially immediately since the price of the company's shares declines proportionally with the number of bonus shares added. For instance, suppose a shareholder purchases 100 shares of XZY Ltd. stock for $10 each, and the company issues a one-for-one bonus issue. Following the bonus issue, the shareholder now possesses 200 shares (100 initial shares + 100 bonus shares). Due to the extra bonus shares that have been added to the existing supply, they are now valued at $5 per share ($10 ÷ 2), not delivering the investor any immediate monetary benefit.

3.2.5 REASONS FOR BONUS ISSUANCE

1. Increase liquidity: A bonus issue has the benefit that it increases the liquidity of the shares, i.e., they become more readily buyable and sellable in the market. Issuing more shares brings down the price per share, which makes them more affordable and attractive to investors. This can increase the trading volume and demand for the shares, which can also support the share price in the long term.

2. Signaling confidence: A second motive for a bonus issue is that it conveys a message of optimism and confidence by the company to the market and its shareholders. By issuing additional shares, the company is indicating that it anticipates having sufficient profits and cash flow to maintain its dividend payments and growth opportunities. It also signals that the company does not require raising external funds or diluting its current shareholders. A bonus issue can therefore enhance the company's reputation and goodwill among its stakeholders.

3. Reward shareholders: A third reason for an issue of a bonus is that it rewards the shareholders for their loyalty and support. By issuing additional shares, the company raises the number of shares held by each shareholder, which can make them feel more valued and contented. It also provides them with greater flexibility and choice to sell or reinvest their shares, as per their wishes and objectives. A bonus issue can thus raise the shareholder retention and satisfaction level.

4. Adjust capital structure: Another reason why a company may issue bonuses is that they help adjust its capital structure, i.e., the debt-equity composition it uses for financing. If a company issues additional shares, its equity base rises, potentially reducing its debt-to-equity ratio and strengthening its solvency and leverage. This can also decrease the company's interest costs and tax burden, along with default or bankruptcy risk. A bonus issue can thus enhance the company's financial well-being and solidity.

5. Align with industry norms: A fifth motivation for a bonus issue is that it is in line with the industry standards and practices, i.e., the norms and expectations of the competitors and peers of the company. By issuing additional shares, the company can keep pace with or surpass the share price and dividend yield of its competitors, which can improve its competitive advantage and market position. It can also bring in additional investors and analysts who track and compare the industry trends and performance. A bonus issue can thus raise the credibility and visibility of the company.

3.3 ASPECTS RELATED TO BONUS ISSUE

1. Share Price: A share price, or a stock price, is how much it would cost to purchase one share in a company. The share price isn't set but changes depending on the market. It will probably rise if the company is thought to be performing well or drop if the company is not doing as well as hoped.

2. Trade Volume: Trade volume quantifies the number of shares or contracts traded for a given security within a given time frame. It quantifies the number of shares traded between a buyer and seller in a transaction. When securities are traded more frequently, their trade volume is high, and when securities are traded less frequently, their trade volume is low.

3. Compounded Profit Growth: Compounded profit growth, or compound annual growth rate (CAGR), is the average annual growth in the value of an investment over a period of time. It considers the impact of compounding, which occurs when returns on an investment are reinvested into the investment.

4. Return on Equity: Return on equity (ROE) is a financial performance measure of a company. It is derived by dividing net income by shareholders' equity. Since shareholders' equity is equivalent to a company's assets minus its debt, ROE is one means of expressing a company's return on net assets.

5. Net Profit, EPS, and Dividend Payout: Net profit represents a business' total revenues, less every cost and expense as well as all taxes; EPS is what an enterprise earns on each outstanding share of common stock; and Dividend Payout Ratio reflects a percentage paid by the corporation as dividends.

6. Market Capitalization: Market capitalization (market cap) is the value of a firm's outstanding shares, determined by multiplying the price per share on the current market by the number of outstanding shares. It shows the market valuation of a company's total equity.

3.3.1 EFFECTS OF BONUS ISSUE

Short-Run Effects

- The share price drops right after the bonus issue because the number of shares increases, but the total value of the company remains constant.
- Trade volume tends to increase due to increased liquidity, and it is easier to buy and sell shares.
- There is neither net profit nor profit increase on a compounded basis because the bonus issue does not generate extra profits.
- Earnings per share (EPS) and return on equity (ROE) decline as earnings are being paid to more shares.
- Dividend per share (DPS) may decrease unless the aggregate dividend paid by the company is increased.
- Market capitalization doesn't change initially as the drop in stock price balances the increase in the number of shares.

Long-Run Impact

- With time, the bonus issue can instill confidence among investors and induce more market players, thus possibly raising demand for the shares.
- As the business keeps on growing and making more profits, EPS and ROE can recover gradually.
- Increased liquidity can increase appeal to institutional investors, improving overall market perception.
- Market capitalization could increase if the stock grows in popularity and the price appreciates due to positive sentiment and business growth.
- A bonus issue in itself does not drive profit growth, but with sound fundamentals, it can contribute to long-term value creation for shareholders.

4.1 DATA ANALYSIS AND INTERPRETATION

This study's data analysis was directed toward examining Infosys Ltd.'s financial and market performance after granting the bonus in the year 2018, for which data between the years 2017-2024 was used. The study was conducted with a view to identifying patterns and trends in important financial analysis variables of a company: net profit, earnings per share (EPS), dividend payout percentage, and market capitalization, which in turn will evaluate the evolution of the company's financial health in time. This research shall evaluate and analyze if the bonus issuance has affected the overall profitability and operational efficiency of Infosys before and after the issuance based on calculations of important profitability ratios/indicators like ROE, ROA, and profit margin. The stock price and trading volume movements as impacts of the bonus issue have also been assessed through market reaction.

A comparative approach, on long term and short term movements of share price and trade volumes was used to determine whether the bonus issue has brought about considerable change in investor behavior. To strengthen statistical analyses, repeated measures such as the paired sample t-test was employed in measuring the significance of differences in the share price and trading volume, taken before and after the bonus issuance.

Summarizing of the core points in the analysis was done with descriptive statistics for correlations, which analyzed the relationship between the pre- and post-issue market performance. The data trends and fluctuations were also visualized using graphs and charts. It thus creates a wonderful insight into bonus issuance effects on the financial ability and market conduct of Infosys. The finding exemplifies how bonus issues affect stock performance, how it influences investor sentiment and also the long-term valuation of companies, which is a vital consideration for future corporate decisions.

BONUS ISSUANCES OF INFOSYS

Table No 4.1: Bonus issuances of Infosys

ANNOUNCEMENT DATE	BONUS RATIO	RECORD DATE	EX-BONUS DATE
13-07-2018	1:1	05-09-2018	04-09-2018
24-04-2015	1:1	30-11-2015	15-06-2015
10-10-2014	1:1	03-12-2014	02-12-2014
14-04-2006	1:1	14-07-2006	13-07-2006
13-04-2004	3:1	02-07-2004	01-07-2004
25-01-1999	1:1	05-03-1999	08-02-1999
18-06-1997	1:1	12-09-1997	19-08-1997
30-06-1994	1:1	15-09-1994	19-08-1994

Source: finance.yahoo.com

INTERPRETATION

Multiple bonus issues increase a company's value and also improve its market position. Repeated issuance of bonuses helps the organization to gain investor confidence and further helps the organization to gain more investors. Infosys has made 8 bonus issuances in the past years and has not made any issues since 2018. The multiple issuances made by the company highlight that the organization has strong financial health and consistent profitability. The overall company history signifies investor commitment and a positive long-term future outlook.

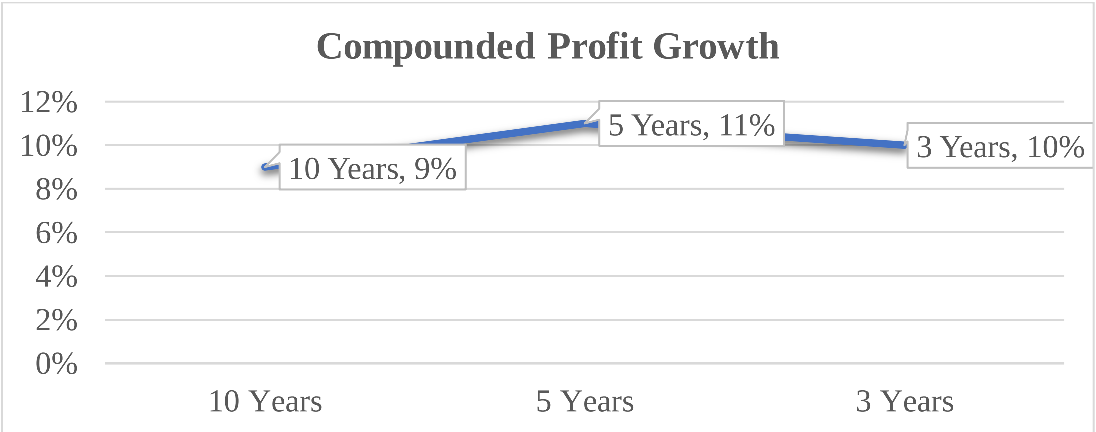
COMPOUNDED PROFIT GROWTH

Table No 4.2: Compound profit growth

TIME PERIOD	% COMPOUNDED PROFIT GROWTH
10 Years	9%
5 Years	11%
3 Years	10%

Source: www.screener.in

Chart No 4.1: Compound profit growth



INTERPRETATION

Infosys has displayed uniform growth in profitability for different time periods. Particularly, the company has sustained a 10-year compounded profit growth rate of 9%, signifying a consistent and sustainable growth in earnings over a long period. Referring to shorter time periods, the 5-year compounded profit growth rate of 11% points towards a phase of accelerated growth. This would imply that in the period under review, Infosys had certain projects or favourable market scenarios in its favour. The 10% 3-year compounded growth rate lends further credence to the proposition that the company can continue along a path of robust growth. In general, the table indicates that Infosys has been a very profitable business with reliable historical roots. The information might be useful for investors considering the company as a possible destination since it indicates a bright future for earnings and, equally as importantly, potential positive returns.

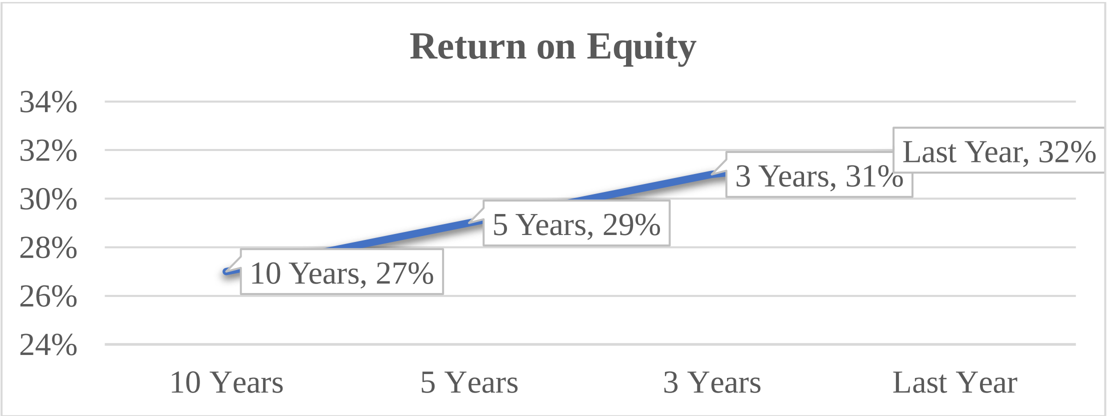
RETURN ON EQUITY

Table No 4.3: Return on equity

PERIOD	RETURN ON EQUITY
10 Years	27%
5 Years	29%
3 Years	31%
Last Year	32%

Source: www.screener.in

Chart No 4.2: Return on equity



INTERPRETATION

Infosys' ROE also reflects great performance, meaning that it is quite efficient in using shareholder capital. The 10-year average ROE is 27%, which is much higher than the industry average, indicative of far greater profitability. This trend went up further for 5 years, with a 29% average ROE and that of 3 years now being at 31%. The latest year's 32% ROE corroborates the strength of its financial performance. Overall, this combination of strong profit growth and an equally high ROE displays good health in the company's finances and potential for long-term growth. With continued shareholder returns and a focus on innovation and digital transformation, it is well-positioned in the competitive IT services space.

EFFECTS ON NET PROFIT, EPS AND DIVIDEND PAYOUT %

Table No 4.4: Effects on net profit, EPS and dividend payout %

	March 2017	**March 2018**	**March 2019**	**March 2020**	**March 2021**	**March 2022**	**March 2023**	**March 2024**
Net Profit+	14,353	16,029	15,410	16,639	19,423	22,146	24,108	26,248
EPS in Rs	31.24	36.69	35.26	38.96	45.42	52.56	58.08	63.2
Dividend Payout %	41%	59%	60%	45%	59%	59%	58%	73%

Source: www.screener.in

INTERPRETATION

The table presents the data related to the net profit, EPS, and dividend payout %. Data from 2017 till 2024 has been collected so as to analyze the change in the values with respect to the 2018 bonus issuance. The changes in the years can also take place due to other factors along with the bonus issuance. Net profit and EPS had a drop in the year 2019, succeeding the year of issuance even though the value was higher in 2018 (year of issuance) than that of 2017. Both net profit and EPS have eventually increased in the long term even though they experienced a dip in the immediate year. This shows long-term profitability and growth of the company.

Dividend Payout %, however, showed an increase in 2019 but eventually fell in 2020. It further increased and had a consistent level in 2021 and 2022 of 59%. In 2023, there was a slight fall in the percentage value, marking a decrease of 1% from that of the previous year. Later on, in 2024, it increased to 73%, showcasing strong financial health and growing retained earnings.

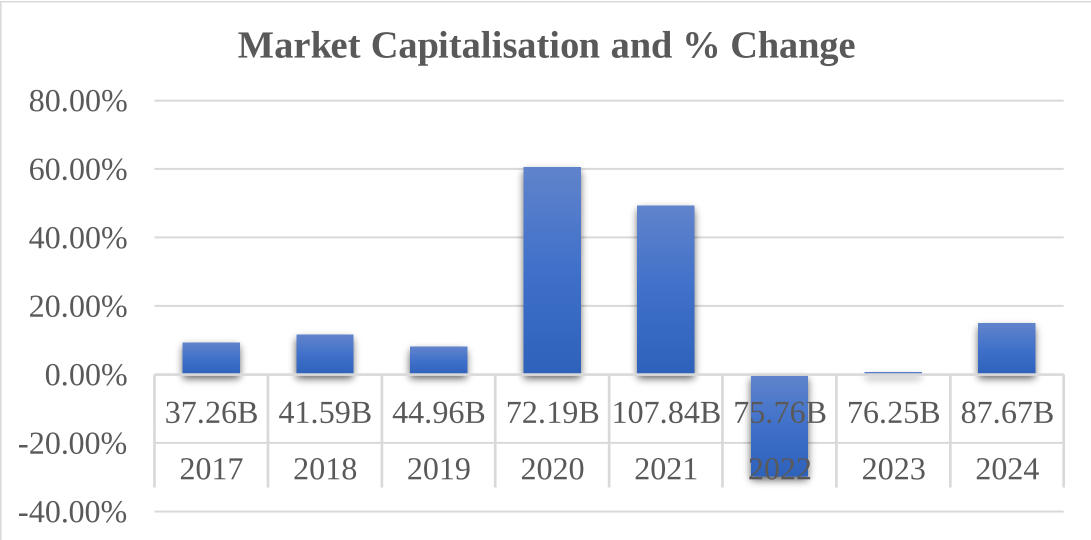
MARKET CAPITALISATION AND %CHANGE

Table No 4.5: Market capitalisation and %change

YEAR	MARKET CAP	% CHANGE
2017	37.26B	9.37%
2018	41.59B	11.62%
2019	44.96B	8.11%
2020	72.19B	60.58%
2021	107.84B	49.38%
2022	75.76B	-29.74%
2023	76.25B	0.64%
2024	87.67B	14.97%

Source: www.screener.in

Chart No 4.3: Market capitalisation and %change

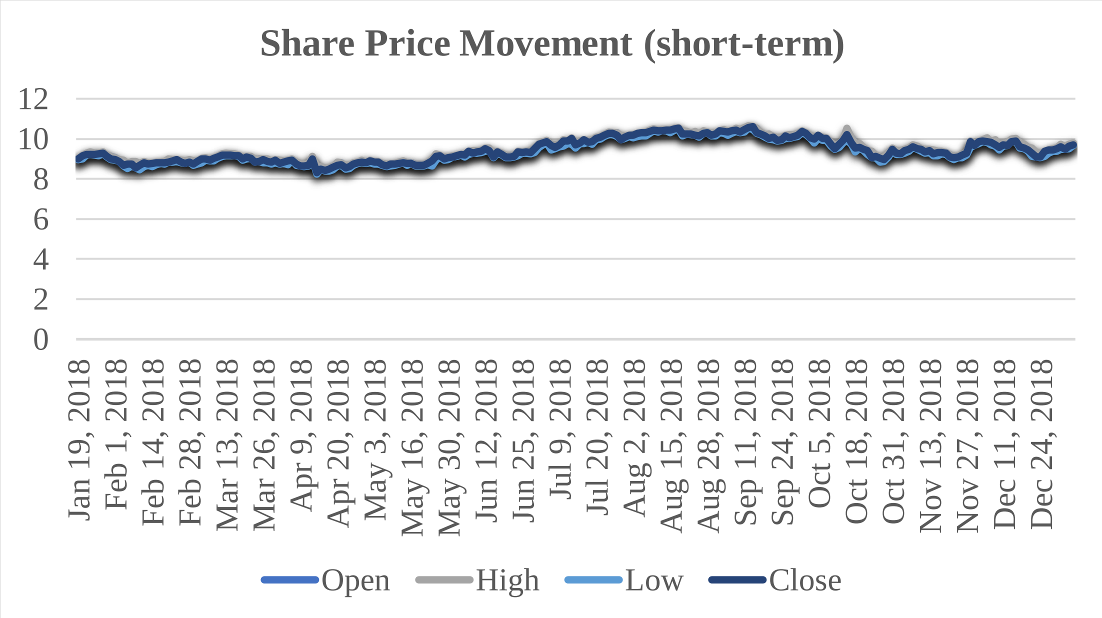


INTERPRETATION

The market capitalization as per the 2024 reports is 87.67B with a percentage change of 14.97%. After the bonus issue in 2018, the share price values had dropped by the year 2019. This resulted in a decrease in the market capitalization. However, it had a tremendous increase during the successive 2 years and then had a -29.74% change by the year 2022 as the share prices had begun to fall by then. It further picked up in the year 2023 and further improved its market capitalization by the year 2024.

SHARE PRICE MOVEMENTS (SHORT-TERM)

Chart No 4.4: Share price movements (short-term)



Source: finance.yahoo.com

INTERPRETATION

The short-term analysis of 120 days before and 120 days after the bonus issuance of 13-07-2018 is taken into account. The graph so created indicates a gradual increase in the share price values in the short-run. Since only a slight increase in the prices are analysed, the difference can be a significant variation in the short run. The movement is more or less between the same price ranges. Thus, it can be analyzed from the chart that there is a fluctuation in the share price movement in the short run.

To determine whether the price change is significant or not, test is to be applied for the same so as to analyse whether this variation analysed from the graph is statistically significant or not.

Null Hypothesis 1: There is no significant change in the before and after short-term share price movement.

Alternative Hypothesis 1: There is significant change in the before and after short-term share price movement.

Here, **Before** refers to the share prices before the issuance of bonus shares

After refers to the share prices after the issuance of bonus shares

Table No 4.6: Paired samples statistics of before and after short term share price movements

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	9.0024	120	.33189	.03030
	After	9.8556	120	.43857	.04004

Table No 4.7: Paired samples correlations of before and after short term share price movements

		N	Correlation	Sig.
Pair 1	Before & After	120	.131	.154

Table No 4.8: Paired samples test of before and after short term share price movements

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Before - After	-.85317	.51417	.04694	-.94611

Table No 4.9: Paired samples test of before and after short term share price movements

		Paired Differences 95% Confidence Interval of the Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Before - After	-.76023	-18.177	119	.000

INTERPRETATION

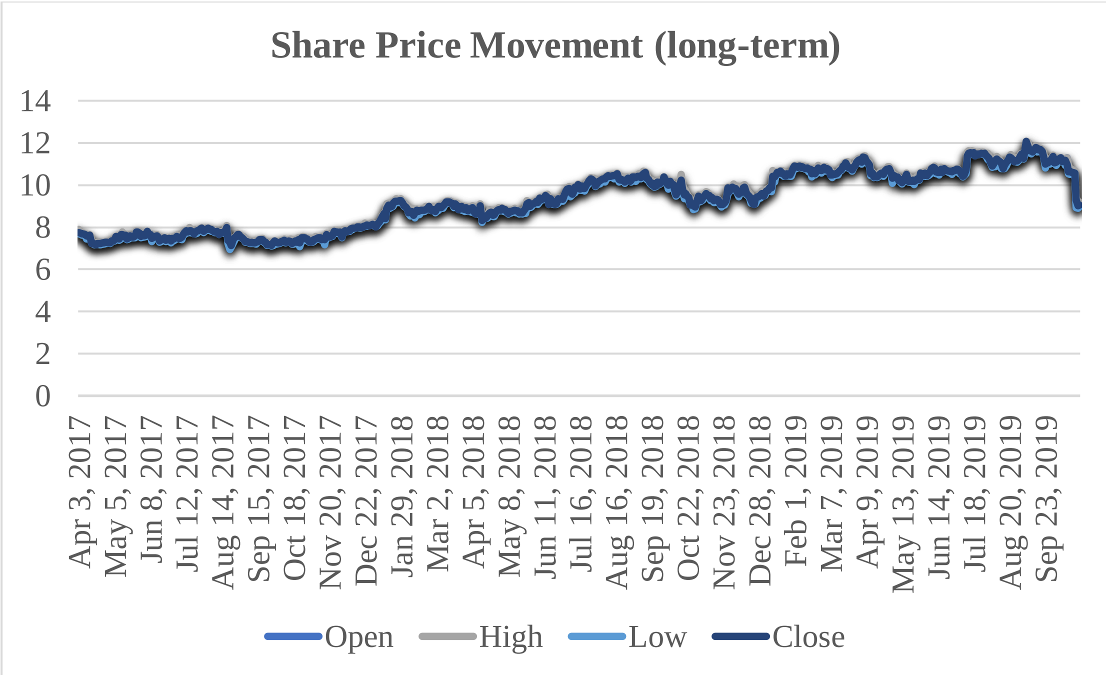
This study of before and after share prices movements (short-term) in relation to bonus issuance examines if there is a significant difference in measurements from 120 observations.

The basic descriptive statistics of the difference show an increase in the mean value of the parameter of interest from 9.0024 (before) to 9.8556 (after), thus suggesting an event effect. In addition, a small increase in standard deviation indicates a more diverse distribution of the observations for the after-measurements in comparison with the before-measurements of share prices. The result of the paired samples correlation analysis (correlation coefficient 0.131, $p = 0.154$) indicated, albeit weak, a non-significant correlation between the before and after values; thus, the relationship is not strong enough. The results from paired samples tests presented a mean difference of -0.85317, a t of -18.177, and a p-value of 0.000. Since p is less than 0.05, the difference between before and after measures is statistically significant, thus providing evidence that the incremental change in mean values was unlikely due to random chance. The corresponding 95 percent confidence interval (-0.94611, -0.76023) that does not include zero only reinforces the conclusion drawn above that a meaningful change occurred. Thus, the share prices increased significantly after the event, which confirms that the change was not due to statistical chance but a real recognized effect of bonus issuance.

From the test applied, it is thus determined that there was significant difference in the share price movement after the bonus issuance in the short term analysis. Therefore, we reject the null hypothesis and accept the alternative hypothesis as the test proves statistical significance in the before and after share price movements in relation to bonus issuance in the short-run.

SHARE PRICE MOVEMENTS (LONG-TERM)

Chart No 4.5: Share price movements (long-term)



Source: finance.yahoo.com

INTERPRETATION

For the long-term analysis, 322 days before (starting from the financial year 2017 till the date of issuance) and 322 days after the bonus issuance was taken. On analyzing the long-term movement of the share prices from the graphical representation, it is understood that there has been a subsequent increase in the share prices. Thus indicating that, in the long run, there has been a significant increase in the share price movements of Infosys after the issuance of the bonus.

It is to be determined whether the increase in price over a larger time frames as shown in the representation significant or not.

Null Hypothesis 2: There is no significant change in the before and after long-term share price movement.

Alternative Hypothesis 2: There is significant change in the before and after long-term share price movement.

Here, **Before** refers to the share prices before the issuance of bonus shares

After refers to the share prices after the issuance of bonus shares

Table No 4.10: Paired samples statistics of before and after long term share price movements

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	8.1315	322	.75236	.04193
	After	10.4602	322	.65585	.03655

Table No 4.11: Paired samples correlations of before and after long term share price movements

		N	Correlation	Sig.
Pair 1	Before & After	322	-.676	.000

Table No 4.12: Paired samples test of before and after long term share price movements

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Before - After	-2.32870	1.28976	.07188	-2.47010

Table No 4.13: Paired samples test of before and after long term share price movements

		Paired Differences 95% Confidence Interval of the Difference Upper	t	df	Sig. (2-tailed)
Pair 1	Before - After	-2.18729	-32.399	321	.000

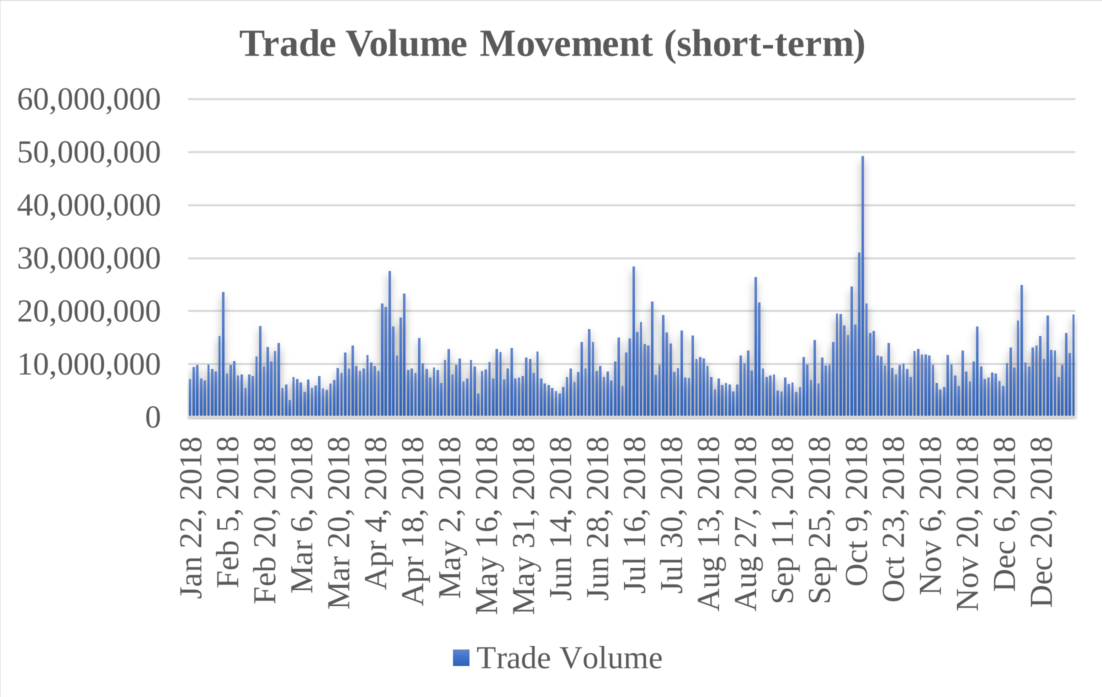
INTERPRETATION

The comparison of paired samples illustrates a pronounced increase from the mean of 8.1315 (share price before the issuance) prior to the bonus issuance to 10.4602 after (share price after the issuance), indicating movement. A slight drop in the standard deviation post-event might depict a slightly less variant data set. Paired correlation displays a strong but statistically relevant negative correlation of -0.676 with p = 0.000. The negative correlation is reasonably understood as that if it was higher before the issuance, it would be expected to decrease after or vice versa; this may point one's attention to a systematic shift instilled in the data. The paired samples print a mean difference of -2.32870, while SDs remains at 1.28976. With a t-value of -32.399 and a p-value of 0.000, the difference is valid. With the 95 percent CI (-2.47010 to -2.18729) excluding zero, the likelihood that the change is due to random variation is negated. The effect is a significant increase in share price measured after the issuance.

Thus, there is a significant difference in the share price movement after the bonus issuance in relation to the prices before the issuance. Therefore, we reject the null hypothesis and accept the alternative hypothesis as the test proves that there is statistical significance to the long-term before and after share price movements in relation to the bonus issuance.

TRADE VOLUME MOVEMENTS (SHORT-TERM)

Chart No 4.6: Trade volume movements (short-term)



Source: finance.yahoo.com

INTERPRETATION

To analyse the trade volume movements in the short run, 120 days before and 120 days after the bonus issuance of 13-07-2018 is taken into account. From the graphical representation, the movement in trade volume is highly fluctuating. It made a hike on 11Oct 2018 of 49,190,000 shares per unit of time. This shows that there has been an increase in the trade volume movements after the issuance of bonus I relation to its movement prior to the issuance.

The change in the graphical representation is to be analysed to determine whether this change is significant or not in the short run.

Null Hypothesis 3: There is no significant change in the before and after short-term trade volume movement.

Alternative Hypothesis 3: There is significant change in the before and after short-term trade volume movement.

Here, **Before** refers to the trade volume before the issuance of bonus shares

After refers to the trade volume after the issuance of bonus shares

Table No 4.14: Paired samples statistics of before and after short term trade volume movements

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	9767903.3333	120	4114004.34662	375555.49705
	After	11882693.3333	120	6278532.45926	573148.97599

Table No 4.15: Paired samples correlations of before and after short term trade volume movements

		N	Correlation	Sig.
Pair 1	Before & After	120	.296	.001

Table No 4.16: Paired samples test of before and after short term trade volume movements

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Before - After	-2114790.00	6407225.21719	584896.96374	-3272944.40565

Table No 4.17: Paired samples test of before and after short term trade volume movements

		Paired Differences 95% Confidence Interval of the Difference Upper	t	df	Sig. (2-tailed)
Pair 1	Before - After	-956635.59435	-3.616	119	.000

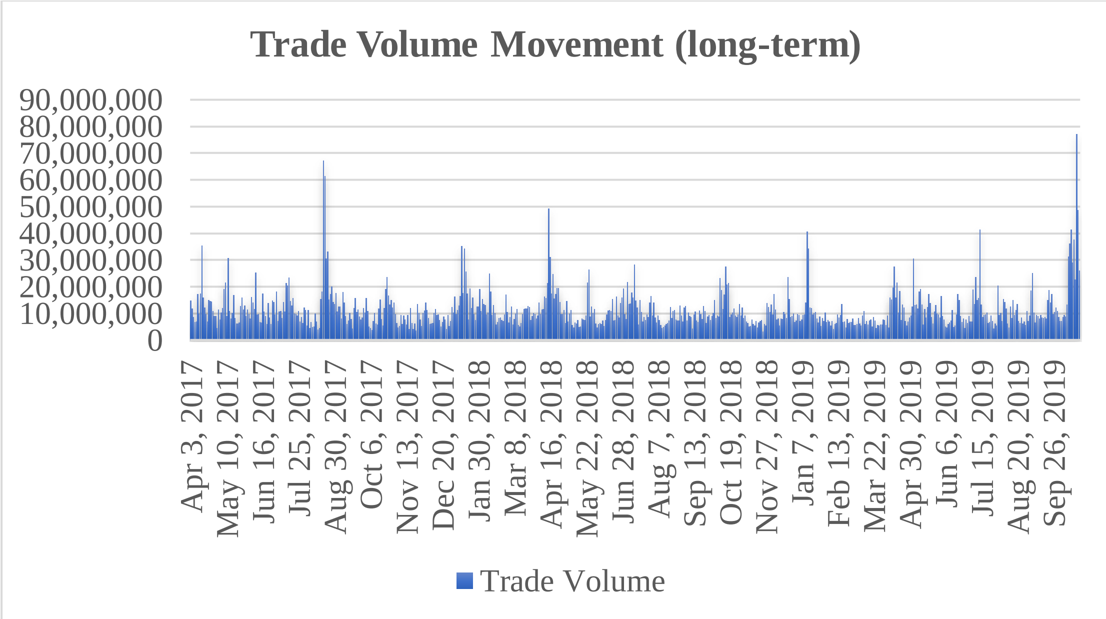
INTERPRETATION

The paired-samples statistics indicate that the mean of trade volume rose from 9,767,903.33 before the issuance to 11,882,693.33 after the issuance, indicating a considerable rise. The standard deviation increased significantly from 4,114,004.35 to 6,278,532.46, indicating a larger spread in the after-measurements. Standard error of means has also increased, suggesting more dispersion in the sample data. In sample terms, paired samples correlation is 0.296 with p-value 0.001, which implies there is a weak but significant positive correlation between before and after trade volume movements. That is, they are somehow related to each other but not that strongly. The paired samples test showed that there is a mean difference of -2,114,790 with a standard deviation of 6,407,225.22. The t encountered was -3.616, leading to the conclusion that there was statistical significance in this difference since the p-value of 0.000 speaks for itself. The 95% confidence interval ranges from the value -3,272,944.41 to -956,635.59, and because such an interval doesn't include zero, this strengthens the conclusion of a meaningful change less likely due to random variation. In conclusion, the findings reiterate the possibility of a significant increase in the measured variables after the issuance, but with the increased variability, indicating the issuance did have an impact, though the extent of change might not be equivalent across different observations.

From this analysis, it is thus understood that in the long run, share prices have significant difference after the issuance of bonus. Therefore, we reject the null hypothesis and accept the alternative hypothesis as the test makes the trade volume movements before and after the issuance statistically significant with respect to the bonus issuance.

TRADE VOLUME MOVEMENTS (LONG-TERM)

Chart No 4.7: Trade volume movements (long-term)



Source: finance.yahoo.com

INTERPRETATION

The graphical representation shows the trade volume movements of 322 days before and after the 2018 bonus issuance of Infosys Ltd. While analysing the representation, it is understood that the movement is in same pattern and not much of a high variation is found in the trade volume movement. Several highs and lows in trade volume values have taken place during this period.

It is to be determined from the trade volume movements before and after the issuance whether there has been a significant change in it or not.

Null Hypothesis 4: There is no significant change in the before and after long-term trade volume movement.

Alternative Hypothesis 4: There is significant change in the before and after long-term trade volume movement.

Here, **Before** refers to the trade volume before the issuance of bonus shares

After refers to the trade volume after the issuance of bonus shares

Table No 4.18: Paired samples statistics of before and after long term trade volume movements

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	11897381.3665	322	7310841.16828	407417.24987
	After	10864501.8634	322	7438652.83938	414539.91583

Table No 4.19: Paired samples correlations of before and after long term trade volume movements

		N	Correlation	Sig.
Pair 1	Before & After	322	.078	.160

Table No 4.20: Paired samples test of before and after short term trade volume movements

	Paired Differences			
				95% Confidence Interval of the Difference
	Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1 Before - After	1032879.50311	10012346.36871	557966.24880	-64853.08792

Table No 4.21: Paired samples test of before and after short term trade volume movements

		Paired Differences			
		95% Confidence Interval of the Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Before - After	2130612.09413	1.851	321	.065

INTERPRETATION

The paired samples t-test offered evidence needed to determine if a significant difference exists between the before and after trade volume values for the 322 observations. The mean decreased from 11,897,381.37 before the issuance to 10,864,501.86 after the issuance of bonus. This means that there was a decline in the trade volume movement being measured. The high standard deviations observed in both cases indicate that there was considerable variability in the data. The standard error of the mean was also nearly identical both before and after the bonus issuance, suggesting consistency in the spread of the samples. The paired samples correlation is .078 and has a p-value of .160. It indicates that there is very weak and statistically insignificant evidence for a relationship between the before and after values. In essence, there is no clear trend in the pattern of changes. The test for paired samples indicates a mean difference equal to 1032879.50, a standard deviation equal to 10012346.37, t = 1.851, and p = .065 (greater than .05), and therefore it is non-significant. The fact that its .95% confidence interval (from -64853.09 to 2130612.09) contains zero means that it's possible that the observed change could have arisen simply out of randomness. Overall, there was a declining trend in the mean after the event, but the change was non-statistically significant. This indicates that the bonus issuance might not have had a substantial or consistent impact on the trade volume movement both before and after the issuance, and other outside factors could have interfered with the results.

It is thus understood that there is no statistical significance to the test applied for the before and after trade volume movements in the long run with respect to the bonus issued. Thus, we accept the null hypothesis as there is no significant difference in the trade volume movements before and after the issuance.

5.1 FINDINGS

- Infosys has made multiple issuances in the past years. 2018 issuance being the last one made by them.
- The company showcases sustainable growth earnings while analyzing their compound profit growth of 10 years.
- 9%, 11%, and 10% were its compound profit growth percentage during its 10 years, 5 years, and 3 years of analyses, respectively.
- Return on equity depicts increased efficiency over the past 10 years.
- Currently the company has 32% as its ROI, which portrays a significant increase in ROI from that of 27% 10 years back.
- Both EPS and net profit have made a hike since 2020, even though it experienced a fall in values in the year 2019, just after its 2018 bonus issuance.
- Dividend payout % has, however, shown fluctuating movement of fall and rise in prices from 2018 to 2024.
- Market capitalization has shown a highly fluctuating performance, making the biggest hike of 107.84B in 2021. But the highest percentage change was in the year 2020, with 60.58%.
- The mean share price of short-term analysis rose from 9.0024 (before) to 9.8556 (after) the bonus issue, reflecting an event effect of bonus issuance. A marginal increase in standard deviation implies a more varied distribution in post-event share prices.
- Paired samples tests showed a significant mean difference of -0.85317 ($t = -18.177$, $p = 0.000$). Since $p < 0.05$ and the 95% confidence interval (-0.94611, -0.76023) does not include zero, the increase in share prices is statistically significant and not due to random chance in the short run.
- In the long-run analysis, the mean share price increased from 8.1315 (pre) to 10.4602 (post) bonus issuance, showing an apparent upward trend. A decline in the standard deviation to some extent implies a relatively less variable dataset post-event.
- A significant negative correlation of -0.676 ($p = 0.000$) in the long-term

analysis indicates a systematic change in share prices. The paired sample test also verifies a significant mean difference of -2.32870 (t = -32.399, p = 0.000), and the 95% confidence interval (-2.47010 to -2.18729) does not include zero, eliminating random variation.

- The average trading volume increased dramatically from 9,767,903.33 before to 11,882,693.33 after the issuance of the bonus in the short run. The increased variability in the trading volumes also accounts for the rise in the standard deviation of the post-issuance trading volumes.
- The correlation of paired samples (0.296, p = 0.001) implies a weak, yet statistically significant, positive relationship of volumes of trade before and after this issuance. A difference of means of -2,114,790 (t = -3.616, p = 0.000) and a 95% confidence interval (-3,272,944.41, -956,635.59) on either side of this mean prove that this change is indeed a statistically important occurrence and is also not a mere product of random fluctuation in the long run.
- There has been a drop in mean trade volume, from 11,897,381.37 (before) to 10,864,501.86 (after) the bonus issuance, thus suggesting a downward trend in the long-run analysis. Again, there are high standard deviations demonstrating high variability in the data.
- Very weak and statistically insignificant correlation between before and after trade volumes was substantiated by the paired samples correlation (0.078, p - 0.160). The t-test yields a mean difference in favor of after of 1,032,879.50 (t - 1.851, p - 0.065), which is greater than 0.05, signifying that the difference in means is not statistically significant. Also, the confidence interval (-64,853.09 to 2,130,612.09) runs through zero, meaning the observed change very well could be due to some random variation in the long run.

5.2 SUGGESTIONS

- Review the future necessity and timing of bonus finance issuance and how doing so would affect share price movements in general.
- Ensure sustained compound profit growth while optimizing operational efficiency and expanding revenue.
- Leverage return on equity and ROI to woo long-term investments and, invariably, improve shareholder value.
- Analyze 2019 EPS and the decline in net profit after the issuance of bonuses to understand what possible market reactions can be dealt with in the future.
- Set a reasonable dividend payout policy that evidently lowers investor uncertainty and improves predictability in the financial situation.
- The volatility of market capitalization shall be combated by bringing diversification into revenue sources and bolstering market position.
- Watch for any short-term reactions of the share price regarding bonus announcements while looking into any other ways to boost investor confidence.
- Upon analysis of the various factors causing the share prices to perform poorly after issuance, it shall be considered their long-term negative correlation.
- Bolster the stability of trading by attracting investors and maintaining a strong financial performance.
- Analyze the potential causes of the persistent decline in volume and take necessary actions to avoid any related liquidity shortages.
- Carry on further examinations to unveil other reasons that affect the movements of the market apart from bonus issuance.

5.3 CONCLUSION

With constant financial strength, good standing in the market, and strategic growth, Infosys has taken the lead by providing digital services and consulting globally. In this research pertaining to the analysis of the financial performance of Infosys since the issuance of the bonus in 2018 suggests that growth was guided by evolving market trends. The company has kept itself in a good financial state, with increased returns on equity and on investment reflecting operational efficiency.

The issuance of bonuses initially buoyed up investor sentiment; one would see the prices and volumes of shares increase significantly on account of this. But eventually trading faded and correlations weakened in the long-term effects, most probably. Infosys still made good profits, with earnings per share and net profit increasing since 2020, even when "sometimes plus and sometimes minus" dividends were declared. The trends in market capitalization were significantly volatile in 2020 and 2021, growing much under different forces. Bonus issuances are good for a short-term upside and yet are still a big question, how and what sort of effect it would make in the longer term on the share price and trading volumes. Statistically, it was observed that the price rise, at first, was not a random event; with stability set in, there appears to be little effect.

Considering future bonus issues, Infosys should keep in mind that dividends need to be stable, along with strategic reinvestments and sustainable financial growth to maintain leadership in digital services and consulting.

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