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A Study on Performance of IPO (Initial Public offering) with Special Reference to Selected Companies at BSE

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ABSTRACT:

Debt and/or equity are two ways that corporations and government entities raise money. The primary market can be used by unlisted companies to issue shares through an initial public offering (IPO). These businesses have the chance to grow, diversify, and expand with stronger long-term business prospects. An investor who owns shares from an IPO may view it as a short-term speculative opportunity or as a long-term chance to generate big dividends and capital gains. In India, initial public offerings (IPOs) or public issues have grown in popularity as a means of obtaining capital. These initial public offerings (IPOs) have an erratic performance over time, and previous investors who invested in them have suffered significant losses. While IPOs provide noticeable returns on the day of listing, they often perform poorly over the long run. This essay evaluates how Indian companies' operational performance changes following their initial public offerings (IPOs). If a performance metric like "profit" is normalized by sales volumes (i.e., return on sales) rather than assets (i.e., return on assets), it is discovered that there is no worsening in the operating performance post-IPO. This paper discovers a steady return on sales, in contrast to a clear fall in return on assets observed in comparable other studies. The importance of selecting the appropriate variables for matching and normalization purposes is emphasized in the paper.

Keywords: Initial Public Offering, Investors, Operating Performance, Appropriate Variables

Introduction:

The most significant event in a company's life is likely the change from privately owned to publicly own through an initial public offering (IPO) (Pagano et al., 1998). Numerous topics related to companies' performance after an IPO have been studied in the existing economic and financial literature, including underpricing of IPOs (Ibbotson, 1975; Ritter, 1984), companies' poor performance after issuance (Ritter 1991; Loughran and Ritter 1995), and companies' operating performance after going public (Bruton et al., 2010; Cai and Wei, 1997; Jain and Kini, 1994; Kim et al., 2004; Mikkelson et al., 1997). This research came to the conclusion that IPO firms were less profitable in the post-issue period than they were in the pre-issue period when operating profit to total assets was examined.The return on assets (ROA) of IPO enterprises fall after issuance, according to Janakiramanan (2008), Kohli (2009), Bhatia and Singh (2013), and Mayur and Mittal (2014). This conclusion was also reached in the Indian setting. The majority of studies in the Indian context have focused on the decade following the 1990s. The Indian capital market has seen a wave of reforms since economic reforms first began in the early 1990s. The original phase of reforms focused mostly on liberalization and consolidation, whereas changes in the 2000s sought to establish a strong regulatory framework and raise the integrity of institutions and markets. Fit and appropriate criteria for public issuers, Clause 49 relating to listing regulations, book building norms, and production of yearly and quarterly financial statements, among other important reforms, were enacted during this time. According to Marisetty and Subrahmanyam (2010), the Indian capital market underwent reform and regulation after 2000. The size and complexity of the Indian IPO market have grown as a result of these reforms and legislative changes. Among emerging market economies, it has become one of the most significant markets for international investment.

Companies use the new issue market technique in the primary market to issue securities to raise money directly from investors on a regular basis in order to support modernization, expansion, and diversification projects. By creating a connection between saving and investing, the primary market is essential to the securities market. The government and corporations, who are the borrowers, issue the securities that the investors buy through this market. As a result, this is the location where new offers by corporations are made, whether as a right issue or an IPO. All businesses must raise capital at some point in order to start up, finance expansion of operations, or finance new projects. Most businesses begin by raising money from family and friends until they reach a specific size before turning to venture capitalists or private placement. Companies typically raise equity financing from the

broader public after that. Companies that go public must release their financial statements to the public in order to retain their transparency and credibility. There are many other ways for businesses to raise money, including bank loans, overdrafts, and the retention of earnings, but equity shares are by far the most common. Initial public offerings frequently originate from smaller, more recent businesses looking for funding to grow. The first issue of shares a firm makes accessible to the general public is known as an initial public offering. Almost often, these IPOs are highly hazardous. Each of the three key participants—the issuer, investment banker, and investor—faces risks.

Before launching an initial public offering (IPO), most businesses work with an investment bank. Before settling on an offer price, underwriters and investment bankers conduct a comparative valuation based on a company's listed peer. This comparison takes into account factors such as the quality of management, future cash flows, and returns. Unusual occurrences in an initial public offering (IPO) include (a) underpricing or overpricing, (b) information asymmetry, and (c) an agency problem between the investment bank and the issuing firm. When the closing price on the listing day is higher than the initial offer price, the IPO is said to be underpriced, while when it is lower, the IPO is said to be overpriced. It's possible that the initial public offering (IPO) price is too low. Underpricing an initial public offering (IPO) can happen on purpose to win over investors or unintentionally when underwriters misjudge demand. The term "information asymmetry" describes the disparity in how well investors (and other stakeholders) understand the state of the company and its prospects.

In light of this, it would be beneficial to revisit the post-issue performance of Indian companies in order to investigate the changes in the behavior of companies in the era of reforms and regulation. A number of different reforms were implemented with the goal of increasing the proportion of successful businesses that survive in competition with those that have less impressive credentials. An examination of the operating performance of companies after the issuance of the regulation will reveal whether or not the regulation has caused a discernible change in the performance of those companies. The vast majority of studies that have focused on this topic, in particular those that relate to developed economies, have generally come to the conclusion that initial public offering (IPO) firms under perform post-issue vis-à-vis their performance prior to the IPO. In this study, we used the univariate and difference-in-differences regression (DID) method to analyze the long-term operating performance of firms that had an initial public offering (IPO). This was done after controlling for the ownership structure and size of the firms. According to the findings of our research, the ROA and turnover ratios (TOR) of IPO companies experience a decline after the issuance of their shares, while the ratio of net operating cash flows to total assets (RCFA) experiences a decline in the first year after the issuance of their shares but then recovers in the years that follow. At the same time, there has not been any statistically significant drop in return on sales (ROS). According to our findings, a significant portion of the decline in asset-scaled performance variables such as ROA can be attributed to the IPO firms' faster expansion of their asset bases immediately following the issuance of their initial public offerings. When scaled by sales, however, the decline is not seen to be occurring. In addition, when initial public offering (IPO) companies are matched on the basis of pre-issue performance, as suggested by Barber and Lyon (1996), the decline in ROA is less severe. This study makes a significant contribution to the existing body of literature in two important ways: first, the study discovers that the ROS of Indian IPO firms do not decrease after the issue, and second, the decline in asset-scaled variables is moderate when firms are matched in terms of ROA. The vast majority of the research that has been done since Jain and Kini (1994) has concentrated on ROA; therefore, it is essential to locate a stable ROS. This is the first study that we are aware of that analyzes the performance of initial public offering (IPO) firms that were launched during the post-reforms regulated era. Additionally, the study controls for natural bias by analyzing sales-scaled variables in addition to asset-scaled variables. This is done by comparing the two sets of variables.

Review of Literature:

Ajay Yadav, Sweta Goel (2019)according to their research article, there are a number of ways to raise money from the primary market, but IPOs are the most frequently used tool by businesses to raise money from the public market for the initial sale of stock by private companies. Being a developing country with a thriving corporate network, India is concentrating on IPO. The goal of this investigation is to comprehend the case of underpricing in order to determine whether or not an Indian IPO will occur and what effect the administrative system will have on IPO underpricing. Information about the examined enterprise is organized using a descriptive and comparative methodology. In the Indian market, underpricing predominates over overpricing.

Tanted N, Mustafa S (2019)they conducted a study to determine the difference in returns between the IPO offered price, Listing day opening price, and closing price for their research article titled "A Study of Returns Between IPO Issue Price and Listing Day Price" (2019). The study's objective was to help investors decide whether to purchase a security through an initial public offering (IPO) or directly from the secondary market. For the review of all IPOs released over a ten-year period, data is gathered. The study came to the conclusion that there was no statistically significant difference between the price offered by the IPO, the open-day listing price, and the closing-day listing price. The median price on the open price listing day was greater than the IPO's price. When compared to the listing day open price, the mean value for the closing price was higher. When the IPO offered a high price, the mean value for the closing price on the listing day was also high.

Aloysius Edward J (2019) the researcher examined how the capital market fosters economic growth by encouraging savings and raising productivity in their article. The primary market, including IPOs, began to emerge as one of the major sources of funding for Indian companies and as a significant

opportunity for retail investors to allocate their funds for higher return. This is one of the major reforms. Since 2012, SEBI has switched the basis for IPO distribution to retail investors from a pro-rata basis to a lottery method in order to address one of the issues raised in this paper. Book building and fixed price issues are the two most frequently used methods for an IPO. 14 businesses out of the 132 that raised capital through an IPO are selected for study based on the size of the issue. It has been discovered that the companies that saw listing gains also saw increases in current market value. Companies with significant oversubscription experienced gains in listing and current market price.

Ashish Kumar Suri and Bhupendra Hada (2018) according to their research paper, they evaluated 107 initial public offerings (IPOs) that were launched between June 2011 and June 2017 based on two performance indicators, namely over-subscription and listing day gains. This study compares the IPO performance for the two time periods of June 2014 to June 2017 and January 2011 to May 2014. According to the study's findings, the performance of initial public offerings (IPOs) that were launched between June 2014 and June 2017 significantly outperformed those that were launched between May 2011 and May 2014. Additionally, it was looked into how much money was raised through IPOs and how many of them there were for the two periods.

Gowtham Ramkumar (2017) in their article "Influences of Stock Market Factors on Investor Perception," the authors came to the conclusion that whether or not these factors have a significant impact on investors' investment decisions, it can be advantageous for those who trade stocks.

Garima Baluja, Balwinder Singh (2016) according to their research paper, the post-SEBI era of the IPO market has seen significant fluctuations. Nevertheless, a number of new products have entered the market during this time, but only a select few have done so successfully. Numerous studies have supported the aftermarket performance of these IPOs, but the phenomenon of IPO survival has not received enough attention in India. Investigating the causes of new product failure and success in the market becomes necessary as a result. In order for IPOs to survive in the aftermarket, this paper will critically analyze their journey.

S.Poornima, Aalaa J. Haji, Deepa (2016) Initial public offerings (IPOs) are becoming more and more popular around the world as a way for businesses to raise money to accelerate their growth by putting new ideas into practice. They are also seen as a crucial tool for investors because they can generate significant profits on the day of the listing. In this study, both long-term performance and short-term performance of the companies are examined in order to understand the anomaly of abnormal returns and the performance of IPOs over the long term. The study period runs from January 2013 to December 2014. Nine companies that were listed on the National Stock Exchange of India during the study period make up the sample for the study. The findings of this study will shed light on the performance of initial public offerings (IPOs), which are primarily thought of as speculative tools and help investors make better decisions. The results will also be used to determine whether IPOs can be used as a long-term investment tool or as a chance for speculators to make explosive profits.

Mayur and Mittal (2014)they discovered controlling managers' entrenched behavior in India in their research article. Studies in India have primarily concentrated on asset-scaled variables, in keeping with the body of existing literature. There is no consensus on the reasons for the operating return decline in IPO firms after issue, despite the near unanimity in the literature survey on this topic.

Malhotra and Premkumar (2017) discovered that IPOs underperformed over time. Furthermore, they found no discernible correlation between firm age, company size, or time lag and IPO issue performance. Over a two-year period, underperformance of matured firms was observed by Hoechle, Karthaus, and Schmid (2017). According to Poornima, Haaji, and Deepha (2016), IPOs can be used as a speculative and long-term investment tool. According to Ambily (2016), the majority of initial public offerings (IPOs) generated positive returns, and most investments in these IPOs were made based more on the reputation of the company than on a fundamental analysis. Devarajappa and Tamragundi (2014) discovered that a number of variables, including corporate performance, speculation, and other external factors, have an impact on the fluctuations in returns from a specific stock. In an effort to understand the influence of performing sectors on underperforming sectors, Mittal, Gupta, and Sharma et al. (2013) looked at the performance of IPOs across a range of industries and time periods. The study's findings showed that public sector stocks outperformed other sectors and did well in both the short and long terms. The manufacturing industry seemed to be doing the worst both in the short and long term.Sahoo and Rajib (2010) examined the price performance of 92 initial public offerings (IPOs) made between the years 2002 and 2006 for a total of 36 months, including the day of listing. According to the study, Indian IPOs were 46.55 percent underpriced on the day of listing compared to the market index. The study also revealed that investors who made direct subscription investments in IPOs saw positive returns for the full 36 months, while those who made listings-date investments in IPOs saw negative returns for the first 12 months before seeing positive returns. Sabarinathan (2010) investigated the changes in the traits of businesses that went public between 1993 and 1994 and 2008 and 2009. The study came to the conclusion that although fewer firms had gone public over time, their sizes had grown at the same time. According to Vong and Trigueirosn (2009), the majority of investors, with the exception of small investors, were unaffected by risk-free rates of return and transaction costs, and IPO returns continued to be positive in terms of expected returns. From January 2006 to April 2007, 110 initial public offerings (IPOs) were examined by Anjana and Kunde (2009). They discovered that 104 IPOs out of 110 saw gains on the opening day of trading. Additionally, they discovered that IPOs had strong long- and short-term performance. On the day of listing, these stocks saw average returns of 33%. Ishwara (2009) examined the results of 107 initial public offerings (IPOs) during the fiscal year 2007-2008. According to the study, only 86 companies had positive returns on the day of listing on the NSE and BSE, and the remaining stocks had negative returns. Additionally, they discovered that the majority of the companies were traded at high prices and gave investors positive returns during bullish

market conditions. Deb (2009) examined the underpricing for 187 initial public offerings (IPOs) between 2001 and 2009. Even though nearly half of the initial public offerings (IPOs) were underpriced during the study period, the underpricing quickly corrected itself, preventing investors from long-term gains from excess returns. Ex ante and ex post measures of uncertainty were found to have a significant positive relationship with underpricing. According to Pande and Vaidyanathan (2009), there is a correlation between the first day underprice and the listing day, the amount of money spent on marketing by businesses, and the demand created during the book building process. For 1,963 IPOs listed on the BSE, Shelly and Singh (2008) investigated the relationship between over subscription and various variables. They discovered a strong correlation between underpricing, the lead manager's reputation, the company's age, and oversubscription for particular IPOs. The stocks were significantly underpriced in the short term and overpriced in the long term, according to research by Garg, Arora, and Singla (2008). The study also discovered that there was no discernible difference between underpricing in hot and cold periods, as well as between opening price returns and closing price returns. The study did find, however, that the underpricing varied significantly between bullish and bearish markets. Firth and Wang (2008) investigated the applicability of price earnings multiples on the initial public offerings (IPOs) made in China between 1992 and 2002 as disclosed by managers in IPO prospectuses. The study discovered that price earnings multiples had an effect on how securities prices were determined. The level of pre-IPO earning management and abnormal return had no significant relationship, according to Xiaozhou, Jin, and Hong's (2008) research. Dolvin and Pyles (2007) discovered a significant level of underpricing for initial public offerings (IPOs) that took place in the fall and winter. The study also discovered that buyer emotions had an impact on IPO pricing. According to Paleari and Vismara (2007), post-IPO growth was less than anticipated and forecast errors were influenced by anticipated growth, market sentiment, and firm size. Hill (2006) discovered that there was no correlation between selected firms' post-IPO shareholding patterns and IPO underpricing. According to Prasad, Vozikis, and Ariff (2006), Malaysia has higher underpricing than other developing countries. They also came to the conclusion that first day underpricing and government regulatory intervention have a positive relationship.

Theories related to the study:

The theories of underpricing are closely related to this study. The IPO Underpricing Theories can be broadly divided into (2) Institutional Theories and (1) Theories of Information Asymmetry. (3) Theories of Ownership and Control (4) Theories of behavior. Information asymmetry theories are supported by the following theories: (a) Principal-Agent theory (b) Ex-ante Uncertainty theory (c) Book-Building theory (d) Signaling theory (e) Certification (f) Winner's Curse theory (g) Entrepreneurial Wealth loss theory (h) Partial adjustment theory. Lawsuit avoidance theory, price stabilization theory, and tax argument theory are the theories that underpin institutional theories.Entrenchment Managerial Control Theory and Agency-Cost Theory are the theories that underpin ownership and control theories, respectively. The information cascade theory, investor sentiment theory, and prospect theory are the theories that underpin behavioral theories. All of the aforementioned theories attempted to explain why IPO Underpricing occurs as well as the variations in IPO Under-pricing among various firms in various nations. Despite a sufficient amount of evidence of underpricing, all the research papers in existence demonstrate that there are no common causes for IPO underpricing.

Statement of problem:

IPOs are frequently viewed as a speculative opportunity to achieve extraordinary gains on the listing day. The effects of various determinants, including issue size, over subscription, business age, holding of promoters post-issue, and various other fundamental factors, on the success of IPOs are, however, uncertain. Investors are also uncertain about whether to sell the stock on listing day or hold it for a brief period of time. Investors might not be able to properly analyze the stock when coming up with an investment strategy if these issues are not resolved.

Major objectives of the study:

Theobjectivesofthestudyare:

- To evaluate the short-term performance of Indian IPOs
- To assess the significance of IPOs' abnormal returns
- To research how promoter holdings, oversubscription, profit after tax, issue price, and market returns affect IPO performance

Scope of the present study:

ThescopeofthestudyislimitedtotheIPO’s listed only in the Bombay StockExchange (BSE),India.

Hypothesis of the study:

H0=ThereisnoassociationbetweenIPOsperformance and various determinants.

H1 = There is significant associationbetween IPOs performance and variousdeterminants.

Research Methodology adopted for the purpose of study:

ResearchDesign:

The effectiveness of IPOs and the effects of various determinants, such as issue size, over subscription, listing delay, age of the firm, and post issue promoter's holding on IPO performance, are assessed using a descriptive research design.

Period of study:

ThestudycoversaperiodfromJanuary2018toDecember, 2020.

DataCollection:

This study only used secondary data for its analysis. The list of IPOs for the duration of the study, the daily stock price, and information on the nifty market index are all gathered from the official NSE India website. Information on the listing date, issue size, company age, and promoter's holding can be found in the red herring prospectus that the company has released. Data on oversubscription and the date of listing are gathered from the NSE website.

SampleSelection

All Indian companies that issued initial public offerings (IPOs) and were listed on the Bombay Stock Exchange (BSE) between January 2018 and December 2020 make up the sample. The number of IPOs that have been listed is depicted in the table below.

Year	NumberofIPOslistedinNSE
2020	13
2019	16
2018	23

Sample Details:

Sr.No.	Nameoftheissue	Year of Issue
1	Burger KingI ndiaLimited	2020
2	Gland Pharma Limited	2020
3	Equitas Small Finance Bank Limited	2020
4	Mazagon Dock Shipbuilders Limited	2020
5	Likhitha Infrastructure Limited	2020
6	UTI Asset Management Company Limited	2020
7	Angel Broking Limited	2020
8	Chemcon Speciality Chemicals Limited	2020
9	Computer Age Management Services Limited	2020
10	Route Mobile Limited	2020
11	Happiest Minds Technologies Limited	2020
12	Rossari Biotech Limited	2020
13	SBI Cardsand Payment Services Limited	2020
14	Prince Pipesand Fittings Limited	2019
15	Ujjivan Small Finance Bank Limited	2019
16	CSB Bank Limited	2019
17	Vishwaraj Sugar Industries Limited	2019
18	Indian Railway Catering and Tourism Corporation Limited	2019
19	Sterling & Wilson Solar Limited	2019
20	Spandana Sphoorty Financial Limited	2019
21	Affle India Limited	2019

22	Indi aMART Inter MESH Limited	2019
23	Neogen Chemicals Limited	2019
24	Polycab India Limited	2019
25	Metropolis Healthcare Limited	2019
26	Rail Vikas Nigam Limited	2019
27	MSTC Limited	2019
28	Chalet Hotels Limited	2019
29	Xelpmoc Design and Tech Limited	2019
30	Aavas Financiers Limited	2018
31	Garden Reach Shipbuilders & Engineers Limited	2018
32	CreditAccess Grameen Limited	2018
33	HDFC Asset Management Company Limited	2018
34	TCNS Clothing Co. Limited	2018
35	Varroc Engineering Limited	2018
36	Fine Organic Industries Limited	2018
37	RITES Limited	2018
38	IndoStar Capital Finance Limited	2018
39	Lemon Tree Hotels Limited	2018
40	ICICI Securities Limited	2018
41	Mishra Dhatu Nigam Limited	2018
42	Sandhar Technologies Limited	2018
43	Karda Constructions Limited	2018
44	Hindustan Aeronautics Limited	2018
45	Bandhan Bank Limited	2018
46	Bharat Dynamics Limited	2018
47	H.G.Infra Engineering Limited	2018
48	Aster DM Healthcare Limited	2018
49	Galaxy Surfactants Limited	2018
50	Amber Enterprises India Limited	2018
51	Newgen Software Technologies Limited	2018
52	Apollo Micro Systems Limited	2018

Data Analysis and Interpretation:

Short Term Returns:

The approach taken to examine the short-term performance of IPOs has been kept straightforward and is based on the approach taken by many of these earlier researchers. Based on the formulas listed below, returns for the first 22 trading days for stocks and the market are computed.

Thelogarithmicreturnsforstock"i"attheendof thed^{th}dayiscalculatedas:

$R_{i,\,d} = \text{Ln}\,(P_1) - \text{Ln}\,(P_O)$

Where,

$R_{i,\,d}$ is the return on "i" at the end of the d^{th}day,

P_1 is the closing price of the stock i at the d^{th}day

P_0 is its issue price

	MeanReturn	StandardDeviation	MaximumReturn	MinimumReturn
1stDayIPOreturn	0.135176555	0.267211081	0.821636587	-0.231511801
2stDayIPOreturn	0.138804673	0.269524012	0.993251773	-0.182988446
3stDayIPOreturn	0.145209899	0.288717181	1.17557333	-0.192254597
4stDayIPOreturn	0.138537195	0.289069073	1.070441412	-0.21511138
5thDayIPOreturn	0.135911097	0.288348604	0.986669309	-0.206587809
6thDayIPOreturn	0.126191699	0.293770569	0.970660539	-0.259560252
7thDayIPOreturn	0.127412562	0.299398605	1.06096811	-0.279243204
8thDayIPOreturn	0.135573507	0.304805068	1.149780575	-0.307654206
9thDayIPOreturn	0.142207082	0.300671205	1.10359983	-0.346436974
10thDayIPOreturn	0.143013634	0.313326566	1.089683658	-0.351844017
11thDayIPOreturn	0.136946997	0.313906472	1.05836883	-0.383048751
12th Day IPO return	0.14042296	0.317532567	1.073864119	-0.365185634
13th Day IPO return	0.136603236	0.31700323	1.073294481	-0.360313517
14th Day IPO return	0.134223039	0.31453043	1.06096811	-0.338083704
15th Day IPO return	0.136140386	0.309573389	1.048779915	-0.277157011
16th Day IPO return	0.140541135	0.3086986	1.042629654	-0.284675843
17th Day IPO return	0.144733859	0.298825346	1.030809185	-0.271430664
18th Day IPO return	0.140758343	0.299290713	1.013304006	-0.401169711
19th Day IPO return	0.139421127	0.297469408	7.763361387	-0.40285263
20th Day IPO return	0.136330806	0.294437117	1.069977018	-0.349886308
21th Day IPO return	0.128285621	0.30031662	1.069065466	-0.422613678
22nd Day IPO return	0.134471621	0.294468608	1.04215216	-0.366711602

Above table showing mean stock returns

Thelogarithmicreturnonthemarketindex(NIFTY50)duringthesametimeperiodis:

$R_{m,\,d}=Ln\,(I1)–Ln\,(I0)$

Where,

$R_{m,\,d}$ is the return on index at the end of thed^{th} day,

I1 is the closing S&P CNX Nifty value at thed^{th} day and

I0 is the closing S&P CNX Nifty value on theoffering day of the stock

	Mean Return	Standard Deviation	Maximum Return	Minimum Return
1st Day Index return	-0.000239568	0.03719721	0.062578406	-0.203134758
2st Day Index return	0.001265956	0.042072951	0.076310101	-0.228498845
3st Day Index return	0.000913966	0.049010167	0.082843963	-0.285666771
4st Day Index return	-0.000487073	0.053204622	0.090967553	-0.310213417
5th Day Index return	0.003095826	0.046657506	0.097671075	-0.253522028
6th Day Index return	-0.000270926	0.064132301	0.099075973	-0.39255957
7th Day Index return	0.000601537	0.062088806	0.099373474	-0.367797253
8th Day Index return	0.003193764	0.055577417	0.102431344	-0.303651785
9th Day Index return	0.00422715	0.050445082	0.077848052	-0.2654852

10th Day Index return	0.005148893	0.050413866	0.084852363	-0.263312002
11th Day Index return	0.005189893	0.056653815	0.094211235	-0.308079783
12th Day Index return	0.007937803	0.054302659	0.096209565	-0.270555052
13th Day Index return	0.008016622	0.058418915	0.09963738	-0.311381893
14th Day Index return	0.006787963	0.062309666	0.096180145	-0.332193534
15th Day Index return	0.01028846	0.053787357	0.099025682	-0.248190628
16th Day Index return	0.009822065	0.055223456	0.085302848	-0.25314476
17th Day Index return	0.012368779	0.052732012	0.095587356	-0.39255957
18th Day Index return	0.011649458	0.053729611	0.08205567	-0.225514583

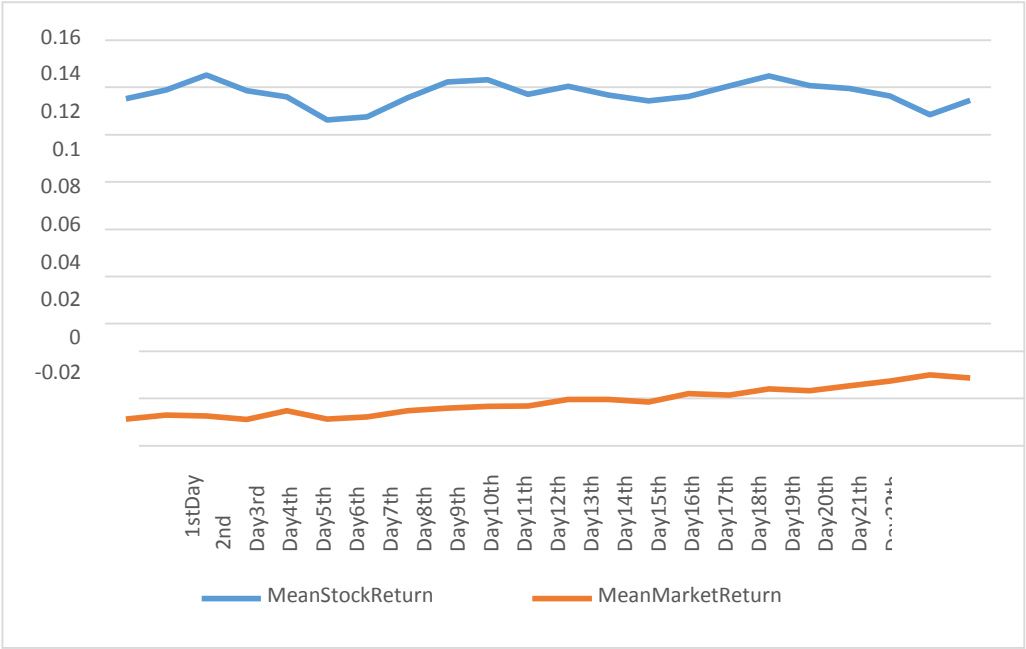
Above table showing Mean Index Returns

Interpretation:

The aforementioned tables display a variety of statistics, including mean return, minimum return, maximum return, and standard deviation, for the stock price and index value over the course of the first 22 trading days. After the first trading day, it was noted that the stock returned, on average, 13.52 percent, with a standard deviation of 26.72% and a range of -23.15% to 82.16%. For a comparable first trading day, the index returns averages out at -0.0%, with a standard deviation of 3.72% and a range of -20.31% to 6.25%. As a result, we can say that on the first trading day, the IPO outperformed the market. On the third trading day, the highest returns are typically seen. The returns ranged from -19.22% to 117.55% on average, with a standard deviation of 18.57%. The average index return for the comparable third trading day is 0.09%, with a standard deviation of 4.90% and a range of -28.56% to 8.26%.

The average stock return on the fifth trading day was 13.59%, with a standard deviation of 28.83% and a range of -20.65% to 98.66%. The average index return for the similar fifth trading day is 0.30%, with a standard deviation of 4.66% and a range of -25.65% to 9.76%. As a result, we can say that after one week of trading, IPOs still outperformed the markets.The average stock return on the 22nd trading day was 13.44%, with a standard deviation of 29.44% and a range of -36.67% to 104.21%. For the same 22nd trading day, the index return average remained at 1.70%, with a standard deviation of 5.47% and a range of -19.61% to 10.10%. This suggests that the performance of has slightly declined when compared to the first and fifth trading days. In comparison to the larger market, the IPO underperforms.

Graphical Representation of mean IPO return and market return



Interpretation:

We can see from the graph above that IPOs outperform markets in the short term. During the first three trading days, it is evident that the IPO generated superior returns. On the third trading day, returns are at their highest. After the third trading day, there is a slight decline in the IPO's returns, which

may be the result of investors taking their profits. The decline lasts through the sixth trading day. The returns then gradually begin to rise once more.Additionally, it has been noticed that the returns start to fall off toward the end of the month. The returns from the IPO are marginally lower on the 22nd trading day of the month than they are on the first day.

Market-adjusted Short Run Performance & Wealth Relative Model:

On the dth day of trading, the market-adjusted short run performance for each IPO is calculated as follows using these average stock returns and market returns:

$$MASRPi,d=\{[(1+Ri,d)/(1+Rm,d)]–1\}$$

This model calculates initial trading returns that have been adjusted for market returns. The short-term performance of IPOs with risk adjustment has frequently been measured using this method in previous studies, with the assumption that the newly listed stock's systematic risk is equal to 1.

The formula uses MASRPd, a performance index, to represent the average of market-adjusted short run performance return for the dth trading day. Actually, it is the excess return on investment over the market divided equally among n new:

1N MASRPi, d = MASRPd

The associated t statistic is calculated to determine whether the MASRP is equal to zero:

(MASRPd) / (S/N) = t

Where,

S is the MASRP, d standard deviation for all companies, and N is the sample size.

The wealth relative model has also been used to gauge the short-term success of a group of initial public offerings (IPOs).

WRd is equal to (1+ 1/N Ri,d) / (1+ 1/N Rm,d).

The Wealth Relative for the dth trading day is WRd and n is the total sample size of initial public offerings.

A wealth relative score of greater than one indicates that, during the study period, IPOs outperformed the market. A wealth relative index score of less than one denotes subpar market performance.

	MASRP	**Standard Deviation**	**T Statistic**	**Wealth Relative**
1stDay	0.135263416	0.260982919	3.737403077	1.135448572
2stDay	0.138041713	0.26551783	3.749024856	1.13736482
3stDay	0.145479396	0.285833472	3.670202932	1.144164172
4stDay	0.14131695	0.290834566	3.503885506	1.139092015
5thDay	0.134300055	0.289359206	3.346883201	1.132405367
6thDay	0.129250726	0.294750885	3.162128725	1.126496896
7thDay	0.129061616	0.29794282	3.123675032	1.126734789
8thDay	0.133038114	0.299793279	3.200043321	1.1319583
9thDay	0.137382327	0.291759427	3.395530556	1.137399125
10thDay	0.136730333	0.302121694	3.26350762	1.137158527
11thDay	0.129794731	0.296716283	3.154404295	1.131076829
12thDay	0.129882508	0.298488422	3.13779703	1.131441798
13thDay	0.125996657	0.2960764	3.068717437	1.127563982
14thDay	0.12460119	0.290439504	3.093628606	1.126575884
15thDay	0.121970405	0.284652512	3.089876467	1.12457029
16thDay	0.126345627	0.281505169	3.236499271	1.129447626
17thDay	0.128267608	0.274045403	3.375173838	1.130747888
18thDay	0.124296655	0.273935463	3.271996677	1.127622157
19thDay	0.120342883	0.269360954	3.221717389	1.124022861
20thDay	0.115654487	0.267940693	3.112615552	1.118816558
21thDay	0.104962368	0.275972613	2.742643151	1.08080132
22ndDay	0.115750762	0.288380924	2.894403003	1.11545951

Above table showing Market-adjusted Short Run Performance & Wealth Relative Model

Interpretation:

The market-adjusted initial returns, standard deviation, wealth relative index, and t-statistic are displayed in the table above. The first, fifth, and 22nd day's market-adjusted short run performances are 13.52%, 13.43%, and 11.58%, respectively, which simply indicates that the abnormal returns are gradually decreasing as the month comes to an end. The wealth relative index, which is 1.14, 1.13, and 1.11 for the appropriate days, demonstrates a similar outcome. T's critical value is 2.009 at a 95% confidence level. The calculated values for every day are seen to be higher than the critical value. As a result, we can say that the returns are substantial.

Graphical Representation of Market Adjusted Short Run Performance

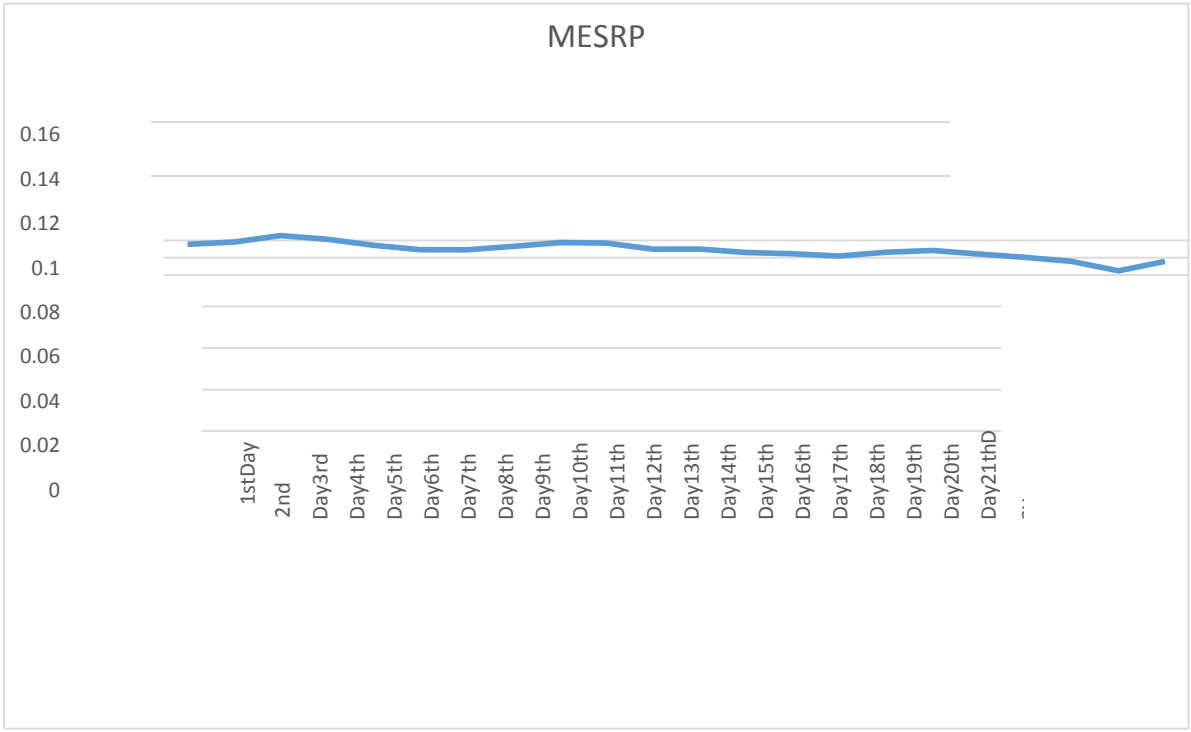


Figure 2: Graphical Representation of Market Adjusted Short Run Performance

Interpretation:

The market adjusted sort run performance of the IPO increases between the first and third trading days, as shown in the graph above. The third trading day has the best performance.The market adjusted short run performance is declining as the month draws to a close, which indicates that the IPO's returns relative to market returns are gradually declining.

CalculationofAbnormalReturns:

The discrepancy between a security's actual return and its expected return is known as the abnormal return. "Events" can sometimes cause abnormal returns. Events such as mergers, dividend declarations, company earnings declarations, increases in interest rates, legal proceedings, etc., all of which can result in an abnormal return. In the world of finance, events are essentially information or occurrences that the market has not yet priced.

The formulas listed below are used to calculate both individual abnormal returns and cumulative abnormal returns.

AbnormalReturn

=ActualReturn

−ExpectedReturn

Expected Return=$\alpha+\beta(R_m)$CumulativeAbnormalReturn

n

$=\sum ActualReturns$

t=1

Below table showing Abnormal Returns

	Mean Abnormal Return	T Statistic	Mean Cumulative Abnormal Return	T Statistic
1st Day	0.110973429	3.676746088	0.110973429	3.676746088
2nd Day	-0.001356318	-0.2009212	0.109617111	3.719650864
3rd Day	0.002410338	0.347329173	0.112027449	3.581725823
4th Day	-0.015364303	-2.82861117	0.096663146	3.292774471
5th Day	-0.003561295	-0.704068393	0.093101851	3.203551401
6th Day	-0.00667685	-1.473656201	0.086425001	2.913613707
7th Day	-0.006017799	-1.07247467	0.080407201	2.784940297
8th Day	0.001131914	0.211469888	0.081539116	2.996099875
9th Day	0.000258713	0.04035626	0.081797828	3.287126872
10th Day	-0.002864881	-0.587957588	0.078932947	3.204838078
11th Day	-0.012519802	-2.26514627	0.066413146	2.948515075
12th Day	-0.003812589	-0.78503934	0.062600557	2.863991811
13th Day	-0.009548172	-2.393292513	0.053052385	2.590531479
14th Day	-0.003914079	-1.068033435	0.049138305	2.637202943
15th Day	-0.005091027	-1.025542605	0.044047278	2.685677785
16th Day	-0.002804946	-0.471727879	0.041242333	2.725007987
17th Day	-0.001502377	-0.269304445	0.039739956	3.186840388
18th Day	-0.013449416	-2.272526489	0.02629054	2.49034637
19th Day	-0.008632904	-1.738109719	0.017657636	2.233883785
20th Day	-0.00625037	-1.110245764	0.011407266	1.405939814
21th Day	-0.010790681	-1.834146816	0.000616585	0.112928156
22th Day	-0.000616585	-0.112928156	-4.49944E-17	-2.869959313

Interpretation:

We can see from the above table that the IPO delivered notable abnormal returns on the first trading day. On the first trading day, the average abnormal returns were 11.09%. The abnormal returns are negative starting on day two. It is noted that the cumulative abnormal returns are approximately equal to zero at the conclusion of the 22nd trading day.

T's critical value is 2.009 at a 95% confidence level. The calculated T value for the mean abnormal return is seen to be higher than the critical value for just the first day. As a result, only the first day's mean abnormal return is noteworthy.For the first 19 trading days, the critical T Value is exceeded by the T statistic of the mean cumulative abnormal returns. The only Mean Cumulative Abnormal Returns that are noteworthy are those from the first 19 days.

Graphical Representation of Cumulative Abnormal Returns

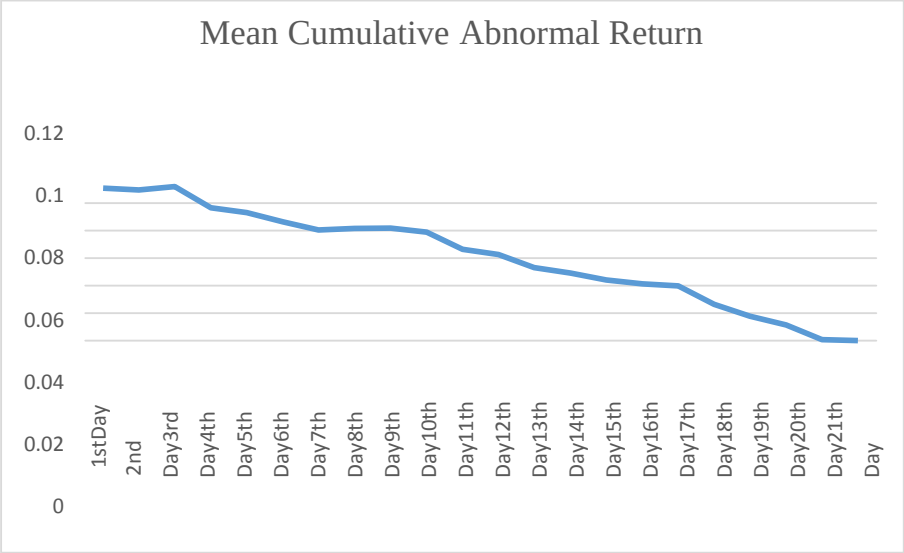


Figure 3: Graphical Representation of Cumulative Abnormal Returns

Interpretation:

The graph above shows that the first trading day has the highest mean cumulative abnormal returns. The total abnormal returns have since been declining. The total abnormal returns at the end of the month are roughly equal to zero.

DeterminantsofIPOperformance:

The impact of the issue price, oversubscription, profit after tax, post-IPO promoters' holdings, and market returns on the IPO returns at the end of 22 trading days has been investigated using multiple regression analysis. With the aid of several independent variables and the dependent variable, this technique aids in determining the strength and direction of the relationship. The R square and adjusted R square it produces show how much of the variation in the dependent variable can be accounted for by the independent variables.

Hypothesis:

H0 = There is no association between IPOsperformance and various determinants.

H1 = There is significant association between IPOs performance and various determinants.

Stock Returns = Constant + β1 (ln_IP) + β2(ln_OS) + β3 (ln_PAT) + β4 (ln_PH) + β5 (Market Returns)

Where,

ln_IP = Natural Logarithm of the issue priceln_OS = Natural Logarithm of the over subscription

ln_PAT = Natural Logarithm of the profit after tax

ln_PH = Natural Logarithm of the promoters'holdings

Market Returns = Mean Market returns

Regression Equation:

Dependent Variable: STOCK_RETURNSMethod: Least Squares
Date: 01/19/21 Time: 22:52Sample: 1 52
Included observations: 52

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	0.169906	0.185754	0.914682	0.3651
LN_IP	-0.041541	0.033594	-1.236547	0.2225
LN_OS	0.102113	0.017603	5.800997	0.0000
LN_PAT	-0.009459	0.007932	-1.192583	0.2391
LN_PH	-0.030540	0.031277	-0.976432	0.3340
MARKET_RETURNS	1.155253	0.606814	1.903801	0.0632
R-squared	0.464877	Mean dependent variable		0.134472
Adjusted R-squared	0.406712	S.D.dependent variable		0.294469
S.E.of regression	0.226815	Akaike info criterion		-0.021197
Sum squared resid	2.366473	Schwarz criterion		0.203947
Log likelihood	6.551113	Hannan-Quinn criteria.		0.065118
F-statistic	7.992317	Durbin-Watson stat		1.926161
Prob(F-statistic)	0.000017			

Above figure showing results of regression analysis

Interpretation:

From the probability values, it is observed that except over subscription (P =0.0000), all the other factors like Issue Price (P = 0.2225), Profit after tax (P= 0.2391), promoters holdings (P= 0.3340) and market returns (0.0632) have no impact on IPO returns. For 1 unit increase in the over subscription causes 0.102-unit increase in the IPO returns. Looking at the Adjusted R squared value i.e. 0.406712, we can say that around 40.67% variations can be explained from allindependent variables.

F Statistics probability i.e. 0.000017 alsoshows that when independent variables are taken simultaneously they are equal to zero

Findings of the study:

i. The study discovered that IPOs outperform the markets on the first trading day based on the daily IPO returns (listing gain). The average stock return on the first trading day was 13.52%, with a standard deviation of 26.72% and a range of -23.15% to 82.16%. For a comparable first trading day, the index returns averages out at -0.0%, with a standard deviation of 3.72% and a range of -20.31% to 6.25%.

ii. On the third trading day, it was discovered that IPOs offered the best returns. The returns ranged from -19.22% to 117.55% on average, with a standard deviation of 18.57%. The average index return for the comparable third trading day is 0.09%, with a standard deviation of 4.90% and a range of -28.56% to 8.26%.

iii. According to the study, IPO returns started to slightly decline after the third trading day. The IPO returns at the end of the month were marginally lower than the returns on the listing day.

iv. The market-adjusted short-term performance is discovered to begin declining on the third trading day. This demonstrated that, as a result of the decline in the abnormal returns, the IPO returns relative to market returns are gradually declining. The market adjusted short run performance is found to be significant by the "t" test.

v. The wealth model indicated that initial public offerings (IPOs) outperformed the market in their first month of trading.

vi. The first trading day is when abnormal returns are found to be the highest. The total abnormal returns have since been declining. The total abnormal returns are roughly equal to zero at the end of the month.

vii. At a 95% confidence level, it is discovered that the critical value of "t" is 2.009. The calculated "t" value for the mean abnormal return is seen to be higher than the critical value for just the first day. As a result, only the first day's mean abnormal return is noteworthy.

viii. For the first 19 trading days, the critical T Value is exceeded by the T statistic of the mean cumulative abnormal returns. As a result, only the first 19 days' worth of mean cumulative abnormal returns is noteworthy.

ix. The regression analysis's findings indicate that the only factor affecting IPO performance is oversubscription. The IPO returns increase by 0.102 units for every unit increase in the over subscription. The other variables, such as issue price, profit after tax, market returns, and promoter holdings, have no bearing on IPO returns.

Conclusion:

There are several reasons for a company to go public, and they differ from one company to another.Growing business owners approach the new issue market to finance their operations while also gaining recognition and exposure on a global scale by listing their company at the stock exchange. Diversifying the equity base, attracting and retaining better management and employees through liquid equity participation, facilitating acquisitions, and increasing the liquidity of the investments for the previous owners are just a few additional specific advantages (for a company to launch an IPO) to consider.From their point of view, investing in IPOs currently gives them a stake in the company and gives them hope that they will one day share in its future profits. They aim to get the best possible return on their investments. Therefore, a successful IPO is essential for both a company's growth and investors' confidence. This study looked again at the post-issue performance of IPO firms in India. Researchers from all over the world have discovered a sizable discrepancy between the issue price and the comparably higher listing price, or "under-pricing," known as. This significant difference increases the appeal of investing in IPOs on the Indian stock market and gives investors the chance to realize good listing gains quickly. These quick profits drive investors crazy to invest in IPOs. The study's analysis of performance variables scaled by sales as well as asset-scaled performance variables sets it apart from earlier studies. To evaluate performance, it looked at turnover ratio, return on sales, and sales growth in addition to return on assets and the operating cash flow to total assets ratio. We can infer from the study that an initial public offering is a fantastic way for investors to make quick money. The investors sell off their shares on the day of the listing because they see this as a chance for speculation. On the day of listing, abnormal returns are also at their peak before gradually declining. The over subscription is one of the most important factors a potential investor should take into account when applying for an IPO because it significantly affects the IPO's performance.

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