Factors Predicting IPO Performance : An Analysis

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Abstract

IPO is one of the most crucial events in the life of a company. The performance of an IPO is reflected by the benefits investors reap from investing into it. One of the ways of measuring those benefits is through analyzing the dividends declared by the companies which opted for going public through an IPO issue. This study attempted to identify factors that can help predict long run performance of IPO. In this paper, initially, 75 companies were taken across various industrial sectors that brought up an Initial Public Offer in 2010. Since the paper studied the long run performance of IPOs via dividends, it was inevitable to screen out companies that never declared dividends till date. Another screening criterion was non availability of information with respect to market capitalization, grades assigned, and subscription status. Dividends declared by companies, which came out with an IPO in 2010, were analyzed. A waiting period of 3 years was allowed for the companies to emerge, grow, and start distributing dividends, and dividend yields of the companies were calculated from 2014-2015. Empirical evidences supported the hypothesis that the market capitalization of an issue and the grade assigned to it are the major factors contributing towards an IPO's success and thus, help in decision making by investors.

Keywords: **dividends, grading, IPO performance, market capitalization, subscription**

JEL Classification : G14, G15, G24

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The growth and development of any country is majorly dependent upon the growth of its industries and thus, it is in turn dependent upon the capital supply available in the economy so that the industries could have the unremitting supply of funds for production of goods and services. The financial markets serve as a mediator between the savers (funds - surplus units) and borrowers (funds - deficit units). The categorization of the financial markets includes primary market and secondary market, the former being associated with wealth creation and the latter being associated with trading of securities.

When a private company is performing well and wishes to go for expansion, one of the ways is to choose private placement while issuing shares. However, if it wants to raise money from the larger public and become a public listed company, then the first issue of shares done by it is referred to as an initial public offering (IPO). According to the Companies Act, 2013, if the allotment of shares is done to more than 200 persons, then it is referred to as a public issue, otherwise it is referred to as private placement. Any further issue after the first one is called seasoned offerings or further public offerings (FPO).

Whether an IPO is good or bad, its quality is sometimes reflected by the grade assigned to it by the credit rating

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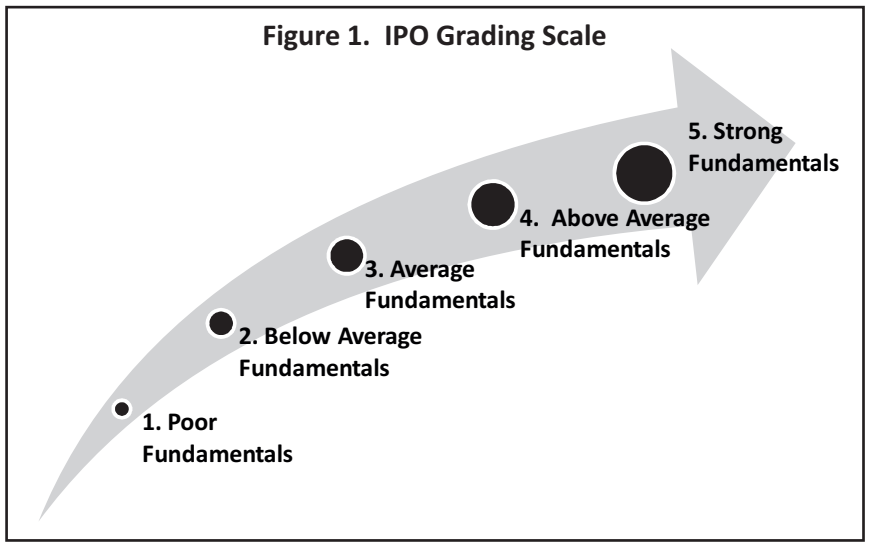

agency. A grade is a relative quality symbol representing the rudiments of the issuing company giving the investors a summary figure about the worth of the issue. The grades can only be assigned by SEBI approved rating agencies and serve only as an indicator of quality and not a recommendation to buy or sell the shares. The concept of grading was introduced in April 2006 on an optional basis but was made mandatory in April 2007. However, it was again resumed to optional basis in February 2014 by SEBI when it found that apart from several other reasons, it was not contributing to the investors' decision making, the main motive for which it was introduced.

The IPO grading scale is as follows (Figure 1). Return provided to investors can be in the form of dividends, capital gains due to stock repurchase and bonus shares. Dividends are per-share payments in the form of cash distributed among shareholders. Dividend disbursement is one of the primary decisions that key managers of companies makes, which is further reviewed and approved in Board Meetings by Board of Directors. They may be declared annually, half yearly or quarterly. The relevance of dividends has been empirically tested to be significant in determining firm valuation and an important indicator to performance of firm. Bird in hand argument, Signaling hypothesis, agency theory and presence of market imperfections validates the significance of dividends.

This study endeavors to identify factors that can help predict long run performance of IPO. The attributes selected after rigorously studying the literature, are checked for their significance in explaining IPO trend in the long run.

Literature Review

There have been several studies in the past identifying factors affecting the performance of IPOs along with analyzing their performance majorly through an examination of returns generated by them in the long run.

Ritter (1991) investigated the performance of IPOs with respect to returns generated in the long run and observed that firms which came out with an IPO underperformed in comparison to other firms of similar size and industry and the magnitude of underperformance was both economically and statistically significant.

The study used the technique of multiple regressions to check the degree and direction of association between three year total return which is the dependent variable and initial return, age, number of IPOs, year of issue, and various industry classifications as independent variables or factors affecting the performance. Firms were segmented on the basis of the issue size and data revealed that firms with smaller IPO size had the worst after market performance. Age was another factor used to determine the IPO performance and older firms performed

better than younger firms reflecting the over optimism of investors about the potential of young firms. Further, Levis (1993) checked for the validity of Ritter's (1991) conclusions for UK firms using the same proxies for long run performance as used by Ritter.

The results were consistent with Ritter's analysis as UK firms underperformed in the long run as holding period returns were significantly lesser than equivalent benchmark returns. Companies with lower asset size were found to be paying superior returns. The spreads in the returns were found to be highly sensitive to benchmarks used for comparison. No systematic association between volume of IPOs and long run performance could be detected. Initial returns and after market performance is found to be negatively related, that is, firms that experienced highest initial returns were found to have worst market performance.

Khurshed, Mudambi, and Goergen (1999) identified managerial performance prior to going public as a major factor determining the IPO performance. Positive significant relationship was found between the size of a firm before public offering and long run performance. Contradicting Ritter's findings, age of the firm was not detected to be a significant factor.

Other factors identified in the past studies are profitability, degree of multi-nationality, proportion of equity issued, and initial returns where in profitability, degree of multi-nationality, proportion of equity issued, and initial returns tend to have significant inverse impact on long run IPO performance, while degree of multi-nationality has direct relationship with the performance.

Sehgal and Singh (2008) analyzed performance of 438 IPOs issued over the period of June 1992 to March 2001. Cumulative abnormal returns were lower for the second year after listing while contradicting the results of IPOs issued in UK and USA, IPOs listed on BSE did not seem to be under performing third year onwards. The explanatory variables identified were price of issue, market capitalization at the time of issue, number of times IPO was subscribed, listing delay, and market conditions while buy and hold return was taken as dependent variable.

Consistent with other studies initial returns have inverse relation with performance. Number of times an IPO got subscribed explained the returns for first year after issue validating the over-reaction effect.

According to existing literature, grading also has been one of the crucial aspects to be tested as a factor affecting performance of IPOs. Many studies have tried to test the decision of mandatory IPO grading to examine whether it helped investors or just added to the cost of issuing companies.

In their analysis of the negative and positive aspects of IPO Grading, Jain and Sharma (2008) firstly favored grading calling it the only remedy available to give an easy evaluation of the complex financial health of any company to the investors. The grade had been essentially helpful for those investors who lack the ability of analyzing the financial statements of the company in an appropriate way. Secondly, due to the prevalence of information asymmetry between the issuers and investors, grading bridged the gap. However, it has not been free from drawbacks. Grading was a burden for small issuers who had to spend huge amounts as fees for getting their issue graded by a well-known rating agency registered under SEBI. Also, grading as a concept was usually applied to bonds and debentures and not to equity, thus making the essence of grading questionable due to its subjectivity while applying to equity. Lastly, the dubious role of rating agencies who had been getting paid by the issuers for giving a grade to their issue made the whole process of grading unreliable to an extent that conflict of interest could not be ignored. Hence, the study concluded that the decision of mandatory IPO Grading was flawed. Trivedi and Sheth (2013) also concluded that grading of IPOs was a myth and it in no way indicated the performance of any IPO whether in pre or post listing period.

Sharma and Gupta (2015) analyzed the impact of opening call auction on the efficiency of price discovery at the National Stock Exchange (NSE), India by studying the returns and volatility behavior of one benchmark index (NSE's Nifty) and 10 Nifty component companies selected on random. The paper used the closing prices for the period 3 years before and 3 years after the introduction of the call auction market in 2010. The paper found no significant difference in the returns during the two periods, though a reduction in volatility was observed. The

introduction of the pre-open auction market resulted in an improvement in the efficiency of price discovery of various stocks. The findings of the paper offer valuable inputs for stock market regulators as well as investors.

Murthy and Singh (2008) tried to explain the process and outcomes of IPO pricing in the capital market with the help of a basic model. With the help of certain cases, the study attempted to show that asymmetric information and informational inefficiency led to misallocation of capital, adverse selection costs, and moral hazard costs.

Murthy and Singh (2009) in their research found that the listing price was company driven and was inefficient because the investor could beat the market and have listing gains. They applied the sign test and conclusively proved that the way of looking at IPO pricing was to treat the difference between 'listing price' and short run price as the basis of 'overpricing' rather than treating the difference between 'issue price' and 'listing price' as 'underpricing'. Murthy and Singh (2014) evaluated the short run performance of IPOs by taking one-month performance in order to testify the notion that the performance of IPO stocks had improved in the short run after going public. However, they found that the price performance of IPO stocks and quality of issuers deteriorated in the years after going public. Although many of the IPOs had significant returns on the day of listing but thereafter they did not give much return in the short-run, it showed that market overreacted to the initial public offers. Another study conducted by Singh and Maurya (2018) to test the impact of corporate governance on the underpricing revealed that corporate governance also had an impact on underpricing and the information asymmetry was influenced more by the number of independent directors on board than the non-executive category. Also, investors only get influenced if the company goes beyond the minimum regulatory requirements. Hence, according to their study, corporate governance can help firms only if taken in true spirit.

Nagendra, Kumar, and Jayashree (2018) examined the practical usefulness of fundamental and technical analysis in order to take advantage of the stock price for the purpose of gaining in the market. For the purpose of data analysis and interpretation, five market capitalization services companies were selected. These are TCS, Reliance, Coal India, HUL, and Hindustan Zinc. Data for 10 years were collected for these companies. Stock market prices of 10 years of these companies were employed for the technical analysis. Also, balance sheets of 10 years of these companies were employed for fundamental analysis. In the study, it was found that both the analysis were useful in dealing with stock market activities.

Dhamija and Arora (2014) tried to find out whether a relationship existed between grades assigned to an IPO and its long run performance. Using a sample of 31 companies that came out with an IPO during May 2007 and January 2010 and had completed at least three years since the date of listing, cumulative average adjusted returns were calculated along with buy and hold returns, wealth relatives, and volatility of daily returns. The results showed no association between grades and long run performance as the IPOs which were graded high did not provide high returns to the investors and those graded low but priced reasonably outperformed in the long run. The findings thus suggested substantial variation across grades and recommended issuing companies to not go for aggressive pricing on the back of high grades.

Having reviewed the vast literature on performance of IPOs and factors affecting it, three crucial factors were short listed according to their role in impacting long run performance of IPOs :

(i) Market capitalization or size of issue,

(ii) Number of times an IPO got subscribed,

(iii) Grades assigned to an IPO.

As per the exhaustive review of existing research, long run performance of issue is judged by its' market performance and the presence of abnormal returns. However, the evaluation of issue performance is highly sensitive to the model used and benchmarks used as market proxies. The literature is divided for the use of cumulative abnormal return and buy-hold abnormal return. There are many ways of ascertaining the excess return like capital asset pricing model, Fama - French multi factor model, Jensen alpha, mean adjusted return,

market adjusted return model, and ordinary least square model. Another contentious issue while using abnormal return model is whether to use daily returns or monthly returns to check for presence of excess returns.

In the wake of presence of these ambiguities and ample use of abnormal return models in existing research to judge the issue performance, this study has identified that the literature has ignored the dividends received by shareholders annually while evaluating IPO performance. The relevance of dividends in firm valuation and market pricing has been empirically tested to be significant.

Lintner (1956), in his seminal work, assumed that the market put a premium on stability or gradual growth of dividend payouts and argued for progressive policy of achieving target ratio through continuing partial adjustment. Another school of thought held dividends to be a relevant signaling device where a dividend cut was interpreted negatively by market players. In presence of information asymmetry, managers believed that dividend conveyed information. Denis, Denis, and Sarin (1994) in their signaling effect hypothesis (SEH) posited that managers used change in cash dividends distributed rates as a means to deliver information to investors of company and further submitted that a company's share price rose instantly if company had announced for higher dividend payout rate. When a firm changed its dividends policy, investors assumed that it had been in response to an expected change in the firm's profitability which would last long. An increase in payout ratio signaled to shareholders a permanent or long term increase in firm's expected earnings.

Hence, considering the widely accepted relevance of dividends in literature and its evidenced significant role in affecting market prices, the study used annual dividend yield as a proxy to judge long run performance to bridge the research gap.

Objectives of the Study

The objectives of the study are as follows :

- To confirm if IPO size is a good estimator of IPO companies' long run performance.
- To confirm if quality of the IPO plays a significant role in determining the performance of IPOs.
- To confirm if the performance of IPOs is dependent on their subscription status.

Data Sources and Hypotheses

The study includes data of the IPOs launched in the year 2010. 75 companies across various industrial sectors came up with Initial Public Offer. Since the paper studies long run performance of IPOs via dividends; it was inevitable to screen out those companies that have never declared dividends till date. Another screening criterion was non availability of information in regard to market capitalization, grading assigned by credit rating agencies or subscription status.

IPO website Chittorgarh and money control have been two major sources for data. The data tested includes each firm's dividend yields beginning from year 2014-15. Three years of waiting period is allowed for the firm to emerge, grow, and start distributing dividends. Dividend yield calculated as annual dividend per share/closing market price per share of common stock as on March 31 each year. It is a continuous time series data for a period of 3 years.

There were 45 companies that had to be screened out attributing to the above mentioned reasons leaving the final sample to 30.

(1) Factors : This study provides an in-depth analysis of factors that one may consider while making an investment decision in IPO market (according to extended literature). Factors chosen are tested via long run dividend trend of the companies declared after 2 years of their launch. From the prior studies it is conspicuous that

IPOs can be evaluated using various factors but influence of IPO size, its quality and subscription status on long run performance of IPO have not been researched adequately.

Thus, the factors taken in this study are :

- Market capitalization of IPOs (issue size),
- Times of subscription (undersubscribed or oversubscribed),
- Grades assigned to the issues (taken as a proxy for quality).

Annual dividend yields are chosen as a surrogate for IPO performance. Market capitalization is a natural indicator to IPO size while grades assigned by a registered credit rating agency are used to judge the IPO quality, its fundamentals and growth prospects while subscription status is the number of times of subscription of an IPO.

(2) Hypotheses : This study posits that a larger IPO size and higher grade score imply a better performance of and IPO in the long run. This study also proposes that if the IPO performs better while listing, that is, number of times it is subscribed for is large, then it is going to perform better in the long run. Three hypotheses are tested for in the study. Null and alternate hypothesis can be written as follows :

- **H_{01} :** Dividend yields across three market capitalization categories are generated from the same population.
- **H_{a1} :** Dividend yields across three market capitalization categories differ significantly.
- **H_{02} :** Dividend yields across five grade classifications are generated from the same population.
- **H_{a2} :** Dividend yields across five grade classifications differ significantly.
- **H_{03} :** Dividend yields across three subscription categories are generated from the same population.
- **H_{a3} :** Dividend yields across three subscription categories differ significantly.

Methodology

Analysis of each factor chosen and to test its influence in the long run dividend performance of IPOs, one may use *F* - test. The use of *F* - test requires that populations sampled should be normally distributed and the variances across different groups are also equivalent. There is implied non normality in annual dividend yields as often firms retain the earnings which may result in skewed distribution.

This study uses the non - parametric test because of non-normality of population. The test used is Kruskal-Wallis one way analysis of variance (ANOVA) of ranks which is a distribution free test. The null hypothesis that *K* samples are coming from identical populations is tested via Kruskal - Wallis test by ranks. Since sample value varies, the test is used to check if those variations are by chance or there are statistically significant differences between two or more groups of an independent categorical variable on a continuous or ordinal dependent variable.

In this study, dependent variable is Annual dividend yield and independent categorical variables differ in each case. Although market capitalization and number of times IPO is subscribed is a continuous data but has been converted into categories to suit the requirements of the test. Test is applied separately for each factor. To use this test each of the observation of dividend yield is replaced by its rank and an aggregate rank score is computed for each factor classification and then checked if those aggregates are so divergent that it is likely they were not all generated from the same population.

Assumptions of Kruskal - Wallis test :

(1) Dependent variable should be a continuous ratio data and independent variables must be categorical

independent groups. In our study, annual dividend yield is a dependent continuous variable while independent variables which differ in each case are categorical in nature.

(2) Minimum groups required to perform this test is 3. In this study there are 3 classifications in two cases while 5 classifications in one of the 3.

(3) There is no relationship between the observations in each group or between the groups themselves. It was tested that sample data had similar distribution.

Analysis and Results

(1) Market Capitalization : IPO size is measured by market capitalization of the issue while it was launched. There are three categories: Category I comprises of companies with IPO size below 200 crore, Category II comprises of those with IPO size ranging between 200 crore and 1000 crore, while Category III pertains to companies whose IPO size was beyond 1000 crores. As exhibited, out of 30, 16 companies fall under first category comprising of IPOs whose market cap is less than 200 crores and nine companies fall under second with market cap falling within 200 to 1000 crores. Remaining five companies in third category with market capitalization of more than 1000 crores. It was a pre- requisite to have at least three categories to apply the Kruskal- Walis(K - W) test which has been explained in detail in further sections.

Table 1. Market Capitalization (in ₹ crores)

Name of the Company	Market Capitalization (crores)	Category
RPP Infra Projects Ltd.	48.75	I
Gravita India Ltd.	45	I
BS Transcomm Ltd.	190.45	I
VA Tech Wabag Ltd.	125	I
Gallantt Ispat Ltd.	40.5	I
Career Point Infosystems Ltd.	115	I
Prakash Steelage Ltd.	68.75	I
Mandhana Industries Ltd.	107.9	I
Talwalkars Better Value Fitness Ltd.	77.44	I
Goenka Diamond & Jewels Ltd.	126.51	I
Intrasoft Technologies Limited	53.65	I
Persistent Systems Limited	168.01	I
Man Infraconstruction Ltd.	141.75	I
EmmbiPolyarns Limited	38.96	I
Thangamayil Jewellery Limited	28.76	I
Infinite Computer Solutions India	189.8	I
Punjab & Sind Bank	470.82	II
Claris Lifesciences Ltd.	300	II
Ashoka Buildcon Ltd.	225	II
Gujarat Pipavav Port Ltd.	500	II
Bajaj Corp Ltd.	297	II
Hindustan Media Ventures Ltd.	270	II

IL&FS Transportation Networks	700	II
United Bank of India	324.98	II
Jubilant Foodworks Ltd.	328.72	II
MOIL Ltd.	1,237.51	III
Prestige Estates Projects Ltd.	1,200.00	III
Oberoi Realty Ltd.	1,028.61	III
Coal India Ltd.	15,199.44	III
Satluj JalVidyut Nigam Ltd.	1,062.74	III

Source: Compiled from The Economic Times

(2) Grades Assigned : Grades assigned by registered credit rating agencies are used as proxy for fundamental strength of the company and growth opportunities. Grading scale ranges from 1 to 5, 1 being the poorest implying weak fundamentals and low growth avenues, while 5 being the best in terms of fundamentals. Out of 30 IPOs dataset, only one IPO's grading was not available. Therefore, we made the grade categories of IPOs considering 29 IPOs only. None of the 29 IPOs chosen for the study falls under grade 1. Table 2 represents the number of IPOs falling under different grade categories.

Table 2. Number of IPOs Falling Under Different Grade Categories

Grade	Number of IPOs
1	0
2	6
3	11
4	10
5	2
Total	29

Source: Compiled from www.chittorgarh.com

(3) Number of Times Subscribed : Another factor that fly buy investors consider as most important while making an investment decision is the number of times the IPO has been subscribed for. This has also been demarcated into three categories for the purpose of the study. Demarcation has been done in such a way that the number of IPOs falling under each category is not skewed (see Table 3).

Table 3. Number of Times Subscribed IPOs on BSE & NSE

Category	Subscription Times	Number of IPOs
A	0-10	11
B	10 - 30	8
C	30-100	11
	TOTAL	30

Source: Compiled from www.chittorgarh.com

Findings

This study has considered cash dividend distributed in the survey period. It is inclusive of special dividends paid

by the companies but does not constitute bonus share and stock repurchases which are indirect measures of increasing wealth of share holders.

(1) Market Capitalization : This study hypothesizes that dividend yield of companies whose IPO size was large differ significantly from those of the companies whose IPO size was small. It is posited that companies whose market capitalization at the time of issue was high performed better than those whose market capitalization at the time of issue was low.

The mean rank can be seen (in Table 4) as increasing along the category for each year which can be interpreted as higher dividend yields of the companies falling in category 2 and 3 in comparison to category 1 with only the exception in year 2015-2016 where dividend yields are higher for the companies falling in category 1 as compared to those in category 2.

The *p* - value on application of Kruskal -Wallis Test is less than 0.05 for 2 years out of 3 as can be seen in Table 4.Therefore H_{01} is rejected as evidence to our hypothesis that dividend yields across market capitalization categories differ significantly is conclusive and as per the comparisons of mean rank estimates, we can conclude that IPO with larger market capitalization performs better in the long run and distributes better dividends attributed to better growth opportunities.

Table 4. Market Capitalization as an Indicator of IPO's Long Run Dividend Performance

	Category	*N*	Mean Rank		
			2014 - 2015	2015 - 2016	2016 - 2017
Dividend yield	1	16	15.03	13.44	11.88
	2	9	13.83	14	19.56
	3	5	20	24.8	19.8
	Total	30			
	p-value		0.432	0.033	0.047

(2) Grades Assigned by Registered Credit Rating Agencies : This study hypothesizes that dividend yield of companies whose IPOs were ranked with better grades differ significantly from those of the companies whose IPOs had lower grades. It is posited that companies whose grading at the time of issue was more than 3 performed better than those whose grading was less than 3.

The mean rank of annual dividend yields which can be seen in Table 5 as increasing along the increasing grades for each year can be interpreted as higher dividend yields of the companies with better grades. So, companies with better grades perform better in the long run and grading can form an important performance predictor. Results are overwhelming as there is no exception to the aforesaid statement.

Table 5. Grading as an Indicator of Long Run Dividend Performance of IPO

Grade		*N*	Mean Rank		
			2014-2015	2015-2016	2016-2017
Dividend yield	2	6	16.08	10.17	7.67
	3	11	11.91	12.09	11.77
	4	10	15.85	18.50	20.45
	5	2	24.50	28.00	27.50
	Total	29			
	p value		0.246	0.021	0.002

Table 6. Number of Times IPOs are Subscribed as an Indicator of Long Run Dividend Performance of IPO

Category		*N*	Mean Rank		
			2014-2015	2015-2016	2016-2017
Dividend Yield	1	11	13.73	14.18	13.00
	2	8	16.75	13.06	18.50
	3	11	16.36	18.59	15.82
	Total	30			
	p - value		0.697	0.329	0.382

The *p* value on application of Kruskal -Wallis Test is less than 0.05 for 2 years out of 3 as can be seen in Table 5. Therefore, H_{02} stands rejected as evidence to the hypothesis that dividend yields across grade categories differ significantly is conclusive and as per the comparisons of mean rank estimates, we may conclude that IPO with better ranks distribute larger dividends in the long run.

(3) Number of Times IPOs are Subscribed : This study hypothesizes that annual dividend yields are higher for those companies whose number of times its IPO got subscribed for, is large. No increasing pattern in mean rank of dividend yields is evident across categories in Table 6 for any of the years. Though dividend yields are lower in category 1 as compared to category 3 in all the years, there is only a modest evidence to support for higher dividend yields in higher subscription category.

The *p* - value on application of Kruskal-Wallis Test is more than 0.05 for all three years. Dividend yields across this factor do not differ significantly for any of the years and hence, number of times IPO is subscribed is not a strong predictor of long run performance of IPOs. Therefore, we could not reject H_{03}, that is, dividend yields across three subscription categories are generated from the same population.

Conclusion

The performance of an IPO is reflected by the benefits the investors reap from investing into it. One of the ways of measuring such benefits is through analyzing the dividends declared by the companies which opted for going public through an IPO issue. In our study, we analyzed the dividends declared by the companies which came out with an IPO in 2010 and after allowing a waiting period of three years for the companies to emerge, grow and start distributing dividends, we calculated dividend yields of the companies in our sample from 2014-2015 onwards.

Through the analysis, market capitalization at the time of issue and grading have been identified as significant factors affecting the long run performance of the issue, both having a positive relationship with the same. On the other hand, the number of times an IPO got subscribed plays an insignificant role in determining the long run performance of the issue. Although the results for the third factor are statistically insignificant, the annual dividend yields for the companies with higher subscription were found to be higher.

The results direct towards the conclusion that the market capitalization of an issue as well as the grade assigned to it can contribute as major factors reflecting the likelihood of the IPO's success, thus helping in decision making of the investors. These results are in agreement with past studies validating issue size to be an important predictor towards performance of IPOs.

Research Implications

A momentous growth has been observed in the Indian IPO market since 1992. A myriad of unsophisticated retail

investors invest in the IPO market everyday making it imperative to identify some basic indicators that can reasonably predict and guide such investors to anticipate the performance and invest wisely. Asymmetric information and informational inefficiency render fundamental analysis to anticipate IPO performance incomprehensive and useless for retail investors leading to misallocation of capital and adverse selection costs. The empirical evidences in the study indicates that issue size and grade assigned to the IPO can reasonably predict IPO performance. Findings in the study can be profitably employed by retail investors to distinguish potential losers by comparing issue size, that is, market capitalization at the time of issue and grades assigned by credit rating agencies.

Limitations of the Study and Scope for Further Research

The study employs annual dividend yields as the proxy to judge long run performance assuming dividend to be the only certain and tangible return against investment made for a longer horizon. Wealth appreciation on account of notional capital gain has been ignored due to its volatile nature while other research studies have employed capital gains as a measure to assess the performance. Such studies can also apply total return index that tracks both the capital gains of a group of stocks and cash distributions, that is, the dividends of the underlying companies of the index are added back into their share prices. Another limitation lies with the extension of research findings and conclusions from the study to the population at large as only those companies that issued IPO in 2010 have been analyzed. Smaller sample size affects generalizability of the conclusions drawn. The study can be extended vertically and horizontally by including capital gain as another variable to assess performance of IPOs and increasing the sample size i.e. including IPOs launched in subsequent years for further analysis and validation of results.

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