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AFTERMARKET PERFORMANCE OF IPOs: A REVIEW

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Abstract: The primary market of securities and shares play a vital role in the development of an economy. The IPOs act as a platform for new capital inflows for the start-up organizations to enable the growth of an economy. Secondly, they prove to be a systematic mechanism that helps the owners to realize returns for their investments and efforts. The IPOs have been a key source of financing for a longer time, especially in corporate terms. Nevertheless, there have been puzzling scenarios around the pricing of the IPO and it had led to pervasive efficiency in the market. . There have been multiple studies in the market around this premise that examines the IPO's performance. There has been specific focus on the behaviour of the stock in the initial days of listing, short run and long run aftermarket performance of the IPO. This paper is an attempt to summarise the existing research of aftermarket performance of IPOs.

Keywords: ipo pricing, underpricing, aftermarket performance

I. INTRODUCTION

The primary market of securities and shares play a vital role in the development of an economy. The IPO (Initial public offering) of shares is issued by the companies in these markets and they mobilize the financial resources from the public and invest in varied development projects across the nation. IPO, in real terms, has two objectives associated with it (Aggarwal R. , Allocation of Initial Public Offerings and Flipping Activity, 2003). The IPOs act as a platform for new capital inflows for the startup organizations to enable the growth of an economy. Secondly, they prove to be a systematic mechanism that helps the owners to realize returns for their investments and efforts. The IPOs have been a key source of financing for a longer time, especially in corporate terms. There have been puzzling scenarios around the pricing of the IPO and it had led to pervasive efficiency in the market (Benveniste, Erdal, & Wilhelm, 1998). There are few anomalies that have bothered the researchers from IPO's perspective. They are known as the under pricing or positive mean initial return. Others are long run underperformance and the hot issue markets. There have been multiple studies in the market around this premise that examines the IPO's performance. There has been specific focus on the behavior of the stock in the initial days of listing. The results of the various researches highlight the concept of positive initial returns (Aggarwal, Leal, & Hernandez, 1993) (Ritter, 1987) (Tinic, 1988) (Levis M. , The Long-Run Performance of Initial Public Offerings: The UK Experience 1980-1988, 1993).This concept is known as the under pricing of IPO. In the long-term, such issues are not known to be good investments. There has been a significant amount of research that has taken place which talks about the purchase of IPOs of common stocks in order to earn more abnormal returns in the early phase of the after-market period. However, it has been observed that there are no signs of compensation of losses that occur due to price decline subsequently in comparison to the early price appreciations. There have been confirmations around the short run under pricing by (Chalk & Peavy, 1987) (Miller & Reilly, 1987), for IPOs in US. Such confirmations have also been mentioned by Lee for IPOs in Australia (Lee, Taylor, & Walter, 1996). In case of common stock IPOs, the size of under pricing is related to the market type under study, issue size, overall risk of issue measured in terms of SD or standard deviation of the returns from aftermarket, ownership distribution, reputation of the auditors and the underwriters, offering methods and lastly, listing requirements of the exchange. On the other side, long-run underperformance of the IPOs has also been articulated as a global phenomenon. There have been instances marked by researchers like (Ritter,1987), (Loughran & Ritter, 1995)where the IPOs in US have underperformed significantly in an after-market period of 2-5 years. There are certain findings for other countries as well such as Germany, New Zealand, France and Finland that match to US evidences (1993), (Keloharju, 1993), (Leleux & Murzyka, 1993), (Firth,1997)and (Ljungqvist, 1997). On the contrary, it has been reported by Korea, Spain, Japan and Malaysia that the IPO stock performed better in the period of 2-5 years of aftermarket. These findings by (Hwang & Jayaraman, 1992)and (Kim, Krinsky, & Lee, 1995) contradicts the findings from US. The researchers are still finding correct answers that explain the underperformance of new issues in the long term. There have been multiple proposals in this context but none have been found applicable for the entire universe. There are various other studies that examine the long and short run performance of the firms issuing the IPOs. There have been instances that indicate that in case of Indian IPOs, the initial returns have been very high and this substantiates the fact that the phenomenon of under pricing exists in the capital markets of India. In cases where the investor holds the money till the end of fifth year, his earnings would have been more than the market returns. From an

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Indian context, there have been multiple researches that have been done to gauge the long-run performance and majority of the instances were taken within a period of three years of listing. In a study conducted by (Madhusoodan & Thiripalraju, 1997)on BSE IPOs during the period of 1992-1995,the results showed that there is a higher return yielded in comparison to the negative returns recorded in most parts of the globe. Another research showed that the IPOs in India are underpriced and there has been a long-run underperformance reported. As per the academicians, the phenomenon of IPO under pricing has been observed in each country across the globe.

II. EMPIRICAL EVIDENCE ON AFTERMARKET PERFORMANCE OF IPOs

As per the analysis of Kothari and Warner (2005), it stated that event studies contribute significantly in the capital market research. It enables researchers to test the results efficiently. Moreover, while evaluating the performance of any specific investment tactic, researcher needs to consider two aspects, 1) return generated from certain investment and 2) risk related with the procedure. As a result, there are two different methods of calculating adjusted return of investment against benchmark. One of the methods is BHAR, which specifically calculates the long run IPO price in term of monthly abnormal returns after adjusting for essential corporate activities. These activities include divided paid by company and bonus share of stock split performed by the corporate. Apart from this one more method of calculating aftermarket performance is CAR; cumulative abnormal returns. The study is typically divided into two famous abnormal return models: (i) cumulative abnormal return (CAR) and (ii) buy-and hold abnormal return (BHAR).

Based on previous researches, it was observed that there is a contradictory view on adopting either CAR or BHAR for calculating abnormal return in case of even study methodology. Lyon, Barber and Tasi (1999) stated that if the research question is related to whether the investors is getting enough abnormal return on investing for a particular tenure, one has to use BHAR model to conclude the results. When the research question aims to evaluate whether the sample organisation is getting adequate abnormal return, it is advisable to use CAR approach to answer the question. However, there are multiple studies stated several reasons for adopting particular models. But these are the core reasons to differentiate CAR from BHAR.

According to the research done by Mitchell and Stafford (2000), the study drives the conclusion that BHAR model leads to have poor statistical interpretation and often reflects biased results on considering random samples. They reviewed that long-term abnormal return is a result of major corporate event and decision taken in the industry. As a result, the long run even study can probably enable research to evaluate the overpricing or under-priced IPO issues with following major corporate decision taken by the top management of particular organisation. However, the findings strongly contradict the views of Kothari and Warner and Ritter. They utilised both CAR and BHAR models in calculating the excess return under the notion of stick market.

Moreover, Fama (1998) is also observed to be a strong supporter of CAR approach over BHAR, with the similar reason of poor statistical inference of the tool in evaluating long run performance. Overall, it was observed that (Kothari & Warner, 1997)and several other famous authors have been utilising BHAR methodology over CAR methodology. Whereas, (Fama & Jensen, 1983) and (Mitchell & Stafford, 2000)have been suggesting to use CAR model over BHAR methodology to calculate abnormal return for long run. Subsequently, (Loughran & Ritter, 1995)has utilised both models in their study and designed specific criteria to utilise CAR and BHAR similar as (Chorruka & Worthingtonb, 2013), When the research question aims to evaluate whether the sample organisation are getting adequate abnormal return, it is advisable to use CAR approach to answer the question. However, there are multiple studies stated several reasons for adopting particular models. But these are the core reasons to differentiate CAR from BHAR. There are multiple ways with which the excess return can be calculated. They are (1) capital asset pricing model based abnormal return model (2) market adjusted return model (3) OLS based model (also known as ordinary least square) (4) French multifactor return model.

One more study reviewed which was basically conducted research to evaluate aftermarket performance of IPO in UK market for the duration of first day, first month and for 36 months. Total 712 IPOs were selected from the London stock exchange between the years of 1980 to 1988. The study noticed the average returns of 14% on the day of issue. It was studied that there were number of IPOs which were observed to be underperformed based on the number of elements taken in to consideration and predefined benchmark prices. The study has also addressed the research gap occurred in the Aggarwal and Rivoli research. It was observed that beyond the 36 months, there are several factors which come in the picture while measuring IPO aftermarket performance. The actual composition of the sample may have changed during that lengthy period enhance it is important to be cautious while calculating return in short and long run.

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Furthermore, it was observed that in the firm such as “The body shop” which carried highest initial returns tends to reflect poor aftermarket performance in the industry, because there are high chances of intended under-pricing approach (Levis, The Long-Run Performance of Initial Public Offerings: The UK Experience 1980-1988, 1993).

The study conducted by Sehgal & Singh, on the concept of measuring initial and aftermarket performance of the Indian IPOs. The author had selected 438 IPOs listed in the Indian financial market between the years of 1992 to 2006. The author has considered the Under-pricing of an IPO as the return on the initial day trading. In order to measure the long-run performance of the stocks, three different measurement models were considered such as Buy-and-Hold Abnormal Returns (BHAR) and Cumulative Abnormal Returns (CARs). The research was based on the secondary data collection; the information was extracted from Indian capital market of 120 months. Based on the calculation, it was found out that benchmark initial return was around 100% that aligns the previous research findings. Whereas BHAR was observed to be negative after between 18 to 40 months of the trading. It has been observed that such stocks last for 3 years in the market and to check the efficiency of the results, CAR was also calculated. The CAR also reflects the underperformance in the second and third year of the IPO. Hence it was concluded from the study that long run underperformance can exists in 2^{nd} and 3^{rd} years, afterwards it dies out in the 4rth and 5^{th} years considering the context of Indian capital market (Sehgal & Singh, 2007).

The research was conducted to study the short run and long run performance of the IPOs operating in Tunisian capital market. The study presented the details of the under-pricing and aftermarket performance of the selected 12 company stocks between the years 1992-1998. The measurement was done with the help of Initial returns, Abnormal returns, WR. Significant positive abnormal return was gained after calculating the values for short run and it is in line with the previous researches. Moreover, the aftermarket return was found 11.04% which confirms under-pricing yet contradicts the several related study. The author has recommended certain recommendation to minimising the under-pricing and develops mechanism which helps company to offer share at appropriate price to institutional and individual customers (Naceur, 2000). One more research was conducted on the 258 IPO companies which acquired capital from the market for the first time. The IPO is synonymous for the stock market launch for the company in the capital market. It has been observed that Indian financial system has been growing over a period of time and since the Decade it has brought significant changes. The research was carried out between the years 2007 to 2014. The study was divided in to two parts, the initial performance of the IPO and after market performance of the stocks. The result denotes that the IPOs which were under-priced in the initial listing tend to be underperformed in the long run. With the help of foregoing analysis, it was found out that there are certain IPOs which are under-priced and shows underperformance in the market. The Indian IPOs which are under-priced in the initial days are observed declining gradually in the long run. Overall, it was found out that there are several elements which influence the performance of the IPOs in the long term. It includes the issuance of the stocks, initial offer price, and size of the issue and duration of offering and listing in the market (RAJ, 2017).

While the research was conducted with the Johannesburg security exchange market, the author had selected 313 companies listed the between the time duration of 1996 to 2007 to analyse aftermarket performance. The market performance was assessed with calculating BHAR and CAR evaluation methodology. It was found out those stocks in the Johannesburg market underperformance in the initial three years and five years. The result was first three years were 65.60% and 64.3759.76% and 7.78% for CAR. Furthermore, it was found out that IPOs in the JSE capital market tend to outperforms with 116.23% (using CAR). It was observed that in the initial years the BHAR results of the IPO was affected by market period where as there was no substantial impact of market period on CAR. The research concludes that even though the IPOs were observed underperforming in the initial four years, after that from the fifth year onwards, it gains positive returns. Hence investors are recommended to invest in the four or more years older securities (Neneh & Smit, 2004).

According to the study of (Berk & Peterle, 2015), it was observed that under-pricing and volatility, both were significantly high in case of CEE than the developed capital market of Europe region. Furthermore, the author has investigated relationship with the market period for both Central Union and Eastern European union. It was observed that in the long run, IPOs belong to CEE were less existed than the developed capital market central union. Total 172 and 76 samples were taken respectively for Central and Eastern Europe (CEE) and the market performance was measured based on calculating Index and CAPM adjusted return, BHAR, and IPO value weighted returns.

One more research was conducted where the author (Schuster, 2003) had compared the market performance of different countries in latum region. There are number of IPOs reflected positive returns either in short run or long run. There are ample of research which reflects the same. However, return represents the efficiency of the market. The paper has primarily studied 62 Brazilian IPOs, 36 Chilli stocks offerings, 44 Mexican IPOs as a part of the research. The duration varies with each country IPOs.

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During the 19th century, all the three-stock exchange were performing high and operating efficiency in the industry. Those were well-known and high performing exchange in the respective region. Two offering techniques were studies along with studying the abnormal returns, WR of the IPOs. Based on the calculation, the annual return for Brazil, Mexico and Chile were found out 151.6%, 103.0% and 90.1% respectively. It was observed there is a high scope of portfolio diversification in respective region (Reena Aggarwal, 1994). The similar research was conducted with the European continental markets and the research concluded the impact of IPOs characteristics on market return. Along with that the aftermarket was evaluated with taking 973 samples and IR, CAR, BHAR, Regression model. The result concluded the significant return of BHAR and CAR and association with respective region (Schuster, 2003).

The particular study had conducted to analyse the market performance before, during and after NASDAQ was introduced. While observing the scenario when the IPOs were not systematically measured or analysed, the research tried to shed light on the certain facts whether the poor performance is driven by particular fundamental event in the market. The study reflects on the fact whether the performance is influenced by some behavioural anomaly or rather is just an idiosyncratic feature of the recent time period. Total 3661 IPOs were selected as a part of the study between the time period of 1935 to 1972 and performance was evaluated with adopting CAR and BHAR methodology. It was analysed that IPOs were underperforming in the pre-Nasdaq period when BHAR was used. The underperformance disappears when the technique of cumulative abnormal returns was used to calculate the values. Apart from this the calendar-time analysis was also conducted and it concluded that IPOs return was consistent as the market over the entire sample period. And when the intercept values of CAPM and Fama-French three-factor regressions were observed, they were substantially different from or even greater than zero. In short, it was concluded that relative performance was observed based on the methodology which the author uses thru out the research (GOMPERS & LERNER, 2003).

Based on the previous researches, it was found out that the particular research was aimed to analyse the price behaviour in the aftermarket performance for the IPOs operated in Warsaw Stock Exchange between the time periods of 2004 to 2009. The research primarily emphasis on the IPO phenomenon explained in the context of Poland. It assesses the association of size and profitability of the organisation with the aftermarket price performance. The researcher focuses on three major questions, whether there was a short-term under-pricing and long run underperformance was observed for polish stocks. The next was to check whether the elements of anomalies exist in the IPOs. The third is to assess whether there is a change of profitability before going to public due to size of the IPO. The questions were assessed with the help of IR and BHAR techniques. It was found out that pre issue size affects the under-pricing of IPOs for small medium enterprises. While considering the similar factor in case of BHAR, the opposite relationship was observed. However, the polish IPO market is still young in the industry and the samples were too small to conclude the results accurately. There are questions which were unanswered for the specific market generally belongs to the empirical study (Joanna & Leszek, 2014).

The study done by (Rebecca Abraham, 2016)has aimed to analyse the IPO performance at the initial day and after market in the capital market. The author has identified the impact of informed traders returns and uninformed trader return in the short run. Along with the performance the volatility among the group was also assessed. Post IPO the growth strategies of the equity stocks were also evaluated and measure till what extent the strategies to minimise the volatility influence the market performance. Total 468 IPOs were considered as a sample listed between the years 2009 to 2014, and the results were calculated based on abnormal return and multiple regressions. The IPOs which had informed traders tends to be less volatile while comparing with uninformed traders. The ability to grab the market opportunity and investor attention lies with the return of investment values and these values are associated with stock volatility, assets, cash flow and profitability (Rebecca Abraham, 2016). Let us study the evaluation conducted by the (HSIEH, 2002) in the region of Singapore, the study has designed the hypothesis based on evaluating short run and long run after market performance criteria. Total 105 IPOs were selected to evaluate the short run performance in the market which was operating between the years 1980 to 1996. Moreover, author has categorised the samples based on industry and evaluated with the help of CAR, BHAR and market adjusted return. It was found out that IPOs in Singapore tend to have negative association between initial return and long run performance. When the author tried to find values with using different techniques, the abnormal return varies with each technique being used.

According to the research done by (Das, Saha, & kandu, 2016), the authors have intent to analyze the long run performance of initial public offers, with using monthly return techniques in the region of India. There were three techniques used and discussed throughout the research article. BHAR, WR and CAR. Total 115 samples were taken and analyzed the effectivity of returns with above given methods. It was observed that CAAR was positive at the end of the research but it varies significantly from first year to next four years. However, in compare with CAAR, the BHAR method for calculating after market performance has also been getting extensive acceptance for measuring performance of IPO. But it was pointed out that BHAR has poor statistical properties than CAR techniques.

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CAR shows negatives returns of selected IPOs. But CAR and BHAR showcased significant positive abnormal return for the selected stock in the longer duration (Das, Saha, & kandu, 2016).

The study conducted by Boonchuaymetta and Chuanrommanee, intent to discover the association among six major variables of IPO with its performance in the region of Thailand. The six substantial elements of the IPO considered in the study, these are the reputation of underwriter agent, the extent of ownership concentration, process of book building, procedure of IPO allocation, short or long duration of lock period, and the interest of investors and issue of under-pricing. Total 153 samples were selected based on given criteria between 2001 to 2011. Two types of methodology, MAIR (the market adjusted initial return of company) and initial return were used to measure the impact and performance of the study. However, Cross-sectional analysis concludes that the allocation method of IPO is the strongest association with the performance and negative relationship with under-pricing. The duration of lock period, industry, size of the stocks are reflecting positive association with under-pricing. The investors are observed to play limited role in the performance; change of ownership does not reflect the performance of under-pricing (Boonchuaymettaa & Chuanrommaneeb, 2013).

In the research of underpricing and IPO performance in the region of China, the author (Mok & Hui, 1998) has studied the features of Chinese IPO and its effect on underpricing. There are two kinds of stock purchased and sold in the market which as personal share A and B. there could be two reasons behind the high underpricing; 1) strategy of underwriters to reflect higher return on later stage or 2) inefficiency of aftermarket. with the help of Average model relative, the aftermarket performance was measured. Throughout the study it was observed that chinse stock market is like a casino, it however does not give significant opportunity to study the speculative bubble hypothesis. The hypothesis was analyzed with the help of cumulative average excess market returns _MACR for 123 sample IPOs. Overall, it was observed that A shares were underprized by 289% against the B shares of 26% (Mok & Hui, 1998). The study conducted by the (Wang, 2005)states the similar result.

The research study on underpricing and aftermarket performance of American depository receipts, commonly known as ADR by DemissewDiroEjara and Chinmoy Ghosh aims to examine the aftermarket and pricing of the foreign IPOs in form of ADR issued in US Capital markets(Ejara & Ghosh, 2004). The research study presents a comparative view of the pricing and the aftermarket performance of the IPOs by ADRs and associating a sample of US organizations from the time period of 1990-2001. ADR IPOs are usually offered by large organization by means of a detailed scrutiny process. They incur significant costs while in the pre-IPO period in the process of recasting the financial statements in accordance with the US GAAP and the SEC rules. The research study considers the ADR issuing countries to be developed or emerging and the sample under consideration in the research considers the privatization of many organizations owned by the state. The research findings and analysis indicate that there is underpricing issue with IPOs from developed countries. Moreover, in comparison to the US IPOs, the ADR IPOs are less underpriced. Furthermore, the research study reveals that in comparison to non-privatized IPOs, the privatized IPOs are less underpriced. The research was aligned with a purpose to study the aftermarket performance and pricing of foreign IPOs. The research revealed that average underpricing of US organization's IPOs is around ~19% in the period of 1980-2001. Even the cumulative performance for the IPO is around 22% over the three years. This is significantly low with respect to seasoned organizations with similar market caps along with the overall market (Ejara & Ghosh, 2004).

In a research by Jeong-Bon Kim, Itzhak Krinsky, and Jason Lee, the researchers try to investigate the IPOs of the Korean exchange. The sample size considered for this research was 169. All the organizations under consideration were listed on the Korean stock exchange. The 169 firms considered were listed in the period from 1985 to 1989. The results showed that the IPOs in Korea outperform the organization that possess similar characteristics. Majority of the overperformance takes place in the first month of seasoning. The results also indicate that the current theories pertaining to the long term performance do not necessarily apply to the IPOs in Korea. There was a mixed impact on the aftermarket performance due to the deregulation that took place in 1988. The impact on the Korean IPOs eventually reduced the degree of initial underpricing. However, there was no impact on the long run performance of the IPOs (Kim, Krinsky, & Lee, 1995).

The study conducted by Chang, wang and Wei, aims to analyse the under-pricing and long-term performance of IPI in the region of china. As it is known that there are two kinds of stock in China A share and B share. The selected sample period of A share was from Jan 1993 to Dec 1998 and the selected sample period of B share was 1992 till 1995. It was observed that the average undermines for both shares were 176% and 11%. the study conculcated that under-pricing of A share shows positive relationship between offering and listing duration, investors interest and negative relationship with number of shared issued. In case of B share, none of the above features were related to the level of under-pricing (Chana, Wangb, & Weia, 2004). There was one more research conducted where IPO in china and IPO in US were compared and evaluated based on the under-pricing and aftermarket performance. The research had selected 1078 total IPOs where 75 Chinese stocks as compared against 900+103 US IPOs listed between 1996-2011.

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The initial day return was calculated and it was observed that the US bound Chinese IPO offers showcased lower under-pricing than US counterparts (Haggard, Walkup, & Xi, 2015).

This paper published by (Chorruk & Worthington, 2010)analyse the impact of pricing and performance of initial public offerings (IPOs) on the Stock Exchange of Thailand (SET). The sample duration was selected between 1997 to 2008. The study was being assessed with adapting techniques of monthly cumulative abnormal returns, buy-and-hold returns, and wealth relatives. The under-pricing was being calculated with utilising headlines under-pricing, issuer loss, loos by market, and loss observed by price. It was concluded that under-pricing was influenced by headlines under-pricing by 17.60%, issuer loss by 5.01%, loss by market by 6.94%, loss by market by 6.68% and loss by price by 16.10%. The result shows significantly lower under-pricing than it was researched before the year of 1997 during Asian financial crisis. The study overall concludes that IPO was generally observed to outperform for initial one year and then underperforms for rest of the time period (Chorruk & Worthington, 2010).

The research conducted by the (Corhay, Teo, & Rad, 2002)reflects the Long Run Performance of Malaysian Initial Public Offerings (IPOs) during 1992 to 1996. Th study primarily assess the value and growth of IPIs in particular four-year period in Malaysian stock market. While analysing sample of 258 IPOs with cumulative adjusted market return (CAR) method, it was observed that selected IPOs outperformed the market positively by 41.7% since the day of listing till three years. However, the results contradict from the common empirical research point of view because the financial analysis reflects that growth IPOs are underperforming the value of IPOs during the time period when. The major deciding factors were growth and value of IPO for its measurable performance in the market. Moreover, size of an IPO plays an essential role in deciding CAR. The regression analysis denotes the positive relationship between CAR and book-to-market. And similar conclusion being drawn from using earnings-to-price (E/P) and cashflows-to-price (C/P) methodology (Corhay, Teo, & Rad, 2002).

The research conducted by Shailesh Jaitly, explores the methods of pricing IPO and its aftermarket measurement. The study basically evaluated the Indian equity market and the association among book values, market value and issue price of an IPO on the day of trading. The 39 samples were studied throughout the study. It was also evaluated that till what extend the process of under-pricing affects the performance of the IPO on the first day of trading, it resulted in 72% on an average. With the government intervention the return could have reached to 160%. The study even investigated the relationship between the two group of companies issuing share price below and above benchmark. The results denoted that there is not significant difference on its first day performance between two group of companies (Shailesh Jaitly, 2004). The study conducted by (Gasbarro, Bundoo, & Zumwalt, 2003)has primarily studied the aftermarket and under-pricing of IPOs in Mauritius market. the research conducted the study over 39 samples from the emerging market, based on the evaluation it was found out that initial under-pricing is positively associated with the financial stability of the firm. Since the ratings of bond does not exist in the selected region, the method of Altman's z score is adopted to measure the performance of the stocks. With the help of Z score, it was analysed that net income is important for strong organisation. When the net income is removed from the criteria, it was observed that dividend was more valued as a part of the measurement (Gasbarro, Bundoo, & Zumwalt, 2003).

According to the research conducted by Levis, the study is based on the criteria of the sources of finance and represents the association with capital financing with IPO performance. The research basically measures the performance of the stocks which are equity backed up, venture capital baked up and sourced by other sponsors (Bergström, Nilsson, & Wahlberg, 2006). The three groups were evaluated with the First day returns, BHAR, Fama and French calculative models. Moreover, the study has assessed 1595 samples of the London stock exchange between 1992-2005 years in order to conclude the research more efficiently. It was observed that IPOs which are equity back up tends to have better performance with compared to other group companies. The criteria for performance measurements were market size, industry classification and first day returns. Private equity based up IPOs were observed to have better sales, profitability and first day returns. While being listed in the public market, they tend to perform better for initial three years with compared to other initial public offering in the industry (Levis, 2010).

Along with, Mauritius, Thailand, London, the research was conducted to study the aftermarket performance of IPO in Brazilian market (Freitas, Savoia, & Montini, 2007). It was observed that the author has assessed the trends of stock prices in the initial year when the company goes for the public at the very first time. Each country has its different method and process to analyse the market performance. Such as in Brazil, the author represents the evidence from the international financial market and studied the features of the IPO. Gradually, the author has analysed the return of the 30 selected companies in the market with the help of raw market adjusted returns. it studied the trends in the market between 2004-2006 years. It was concluded that initial public offering leads to have positive return in short run and long run in Brazil market.

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If an individual inspires to analyse the long-run performance of IPO in the industry, researcher has to review lengthy literature and theory associated with event study methods. The effective market hypothesis supposed to be framed in order to conclude useful evidence with regards to stock prices and performance.

In the study of (Mumtaz, Smith, & Ahmed, 2016), the author has aimed to study the stocks of Karachi capital market. The research primarily studied the short run performance of the IPOs issued in Karachi stock exchange in the region of Pakistan. The research period was extended from 3 moths to 3 years, here 86 stocks were selected and evaluated based on the EBA- Extreme Bounds Analysis. Moreover, the researcher has considered the variable for investor sentiments and underwriter reputation for designing hypothesis. The EBA methodology evaluates the 15 variables which possibly influence the IPO performance. It was found out that there are six major elements of the IPO which significantly affect the overall performance of the company; those are risk taking capacity, size of the firm, return on assets, the issue price, subscription ratio. And promotor's holding.

This research done by Chorruka & Worthingtonb basically analysed the impact of pricing and performance of initial public offerings (IPOs) for small and medium size firm listed in the Stock Exchange of Thailand (SET). The sample duration was selected between 2001 to 2008 with 53 IPO stocks. The study was being assessed with adapting techniques of monthly cumulative abnormal returns, buy-and-hold returns, and wealth relatives.

The under-pricing was being calculated with utilising headlines under-pricing, issuer loss, loos by market, and loss observed by price. It was concluded that under-pricing was influenced by headlines under-pricing by 12.69%, issuer loss by 5.01%, loss by market by 4.74%, and loss by price by 11.40%. The result shows significantly lower under-pricing than it was researched before the year of 2002 during Asian financial crisis. The study overall concludes that IPO was generally observed to outperform for initial one year and then underperforms for rest of the time period (Chorruka & Worthingtonb, 2013).

The research which was conducted by (Morton, 1998), aims to study the aftermarket performance of hot and cold market. the author has used multifactor logit model to analyse the several elements of the hot and cold capital market. It partially covers the macroeconomic factors of the economy which possibly influence the performance of the stocks. Total 301 samples were considered as a part of the study listed between 1984-89.

Combining the practical implication of logic model with empirical theory of risk aversion and utility maximization, it was observed that investors who are investing in cold market are observed to be more risk averse than are the investors who are investing in hot market. there are different researches available in the industry based on initial day return and after market performance and very few views and opinions were universally accepted, this research has aimed to used multifactor model to conclude the range of elements which influence IPO returns. That in turns, IPOs become seasoned in the aftermarket.

III. CONCLUSION

In summary, it was analysed that there is a list of mixed findings concluded by the different researchers in case of IPO and its market performance in long run. The findings were different across the different countries across the globe. (Levis, The long-run performance of initial public offerings: The UK experience 1980–88, 1993)And (Espenlaub, Gregory, & Tonks, 1998)(Aggarwal & Rivoli, Fads in the initial public offering market, 1990)stated that there is a limited description over the existence of long-run performance evaluation of overpriced IPOs in UK.

Furthermore, (Aggarwal & Rivoli, Fads in the initial public offering market, 1990), (Ritter, 1987) and (Loughran & Ritter, 1995)had conducted similar research studies in US and analyzed that there is a similar output received in that region. Research conducted by Ibbotson stated that there is a negative relation between initial return on IPO and long run performance in US (Price, 1975). The study conducted in Australia show that overpriced IPOs result in poor performance in the long run (Lee, Taylor, & Walter, 1996).

As per the research of (Hwang & Jayaraman, 1992) and (Kim, Krinsky, & Lee, 1995), the overall performance of IPO stocks in the region of Japan, Spain, Malaysia and Korea seems better than non-IPO stocks. There are several factors which play an essential role and affect the performance of the IPO. The Factors are brand image of underwriters, ownership structure (issuance procedure) and hard luck (Brav, Geczy, & (2000)., 2000), (Carter & Frederick, 1998), (Jain & O Kini, 1994); (Shaw, 1994). Several other study materials and academic researchers reflects that the IPOs are normally underpriced in short run, however there are certain securities which are observed to be overpriced.

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BIOGRAPHY

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