The long-run underperformance of IPOs

Hassan Basodan

Abstract- This research has been conducted to determine the long run performance of IPOs (Initial Public Offerings) listed in NYSE (New York Stock Exchange). Three years data has been collected for assessment of IPOs, which were listed in between 1994 to 2005. The sample of 229 IPOs was taken. Two methods such as BHAR (Buy and Hold Abnormal Returns) and CAR (Cumulative Abnormal Returns) have been used to investigate the scenario. It is concluded by the study that IPOs performed poorly by the result of BHAR and CAR as 50% and 47% respectively. The NYSE All Share Index has been used as the threshold by the researchers. Different returns have been found due to fluctuations with the passage of time (Aggarwal, Leal, & Hernandez, 1993).

Introduction

The concept of Initial Public Offerings (IPOs) has emerged when the companies expanded their business and they needed more capital to invest. Initial Price Offerings is actually the sale of stock to the public by issuing equity to raise money. In an IPO, the issuing companies contact with underwriting firms to consult whether they should issue common stock or preferred stock as well. IPOs are used by the smaller and young private corporations to convert themselves in public corporations as well (Spindt & Lawrence, 1989).

Long run under performance of IPOs means that the returns of corporations that used IPOs are not low. Initial Public Offerings is actually connected with three phenomenon named as initial under pricing, long term under performance and hot issue. These entire three phenomenons are related to the behavioral finance. Initial under pricing takes place when the price to be offered is too low. In this situation, the price will go down due with the passage of time that gives birth to long term under performance.

It is perceived by public that IPO is considered an evitable stage for firm life cycle, which means that all private firms are using IPO process. The main objective of the study is to observe the IPOs connectivity with under performance in long run. The purpose is to check the level of long-term performance after IPOs announcement (Nanda, Yi, & Yun, 1995).

Aim of the Study

The results of the study can be used by the investors and other interesting authorities, persons and organizations that have the same industrial structure as is used in the study. All investors who belongs to the countries which have same financial another resources is same as USA and their stock market are so stable like NYSE can use this research findings for their future decision making as well. The findings of this study could not be generalized in under developed countries as well (Kunz & Aggarwal, 1994).

Limitations of the study

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Research Question

 Why organizations are under performing in long run after IPO announcement?

Outlines of the paper area as follows: section two will provide previous literature, section three will provide the description of the data and methodology, section four will provide the findings of the study and final section five will provide the crux of the study as well.

Literature Review

In USA where many researches have been collective concluded that IPOs under perform for first five years almost after offering and returns are calculated from the second day of offerings. This trend also has been seen in other markets of the words. (Bravo, 1998) Conducted a research and found that the returns of 3556 IPOs during 1967-1987 were very low at worse level. He inserted that before IPOs these organizations were earning 76.23% as compared to 17.29 after IPOs and this return ratio is too low. An study was conducted in USA at NASDAQ which did used the data between 1970-1990 and found that the average rate of return was 5% in comparison with 12% which organizations were earning before the IPOs announcement (Dawson, 1987).

Another study was conducted in USA in New York Stock Exchange (NYSE) which used the data between 1975-1987 and five years returns have been considered for evaluation then study concluded that 47% under performance have been found up to five years and as for as same industry was concerned 41% under performance has found. It is asserted that when companies use more aggressive accounting the ratio of under performance is greater.

Muhammad nawaz (2014) inserted that between 1926 and 1933 the ratio of underperformance remained high up to 60 months. The ratio of under performance is not low only in USA but it has extended its roots all over the world. A research was conducted in Australia, which used the data of 93 IPOs between 1966-1978, and three years performance has been evaluated. They concluded that 6% return was under performance which not significant statistically. Another study has been conducted in UK by (Kunz & Aggarwal, 1994)which found that due to issue of 712 IPOs during the period of 1980-1988 the return of these firms was in between 8% to 23 % these rates are different depending upon the threshold chosen.

Finn, (1988) conducted a research in Swiss; this research used the data between 1983 and 1989 of 42 IPOs, which concluded that the ratio of underperformance remained 6.1%. Another research which was conducted in Australia by considering 93 IPOs in their study during the period of 1966-1978 concluded that purchasing at the end of listing month and keeping hold up to end of first year gained the return of 6.52% under the indices and statistically it is not considered significant loss. This trend of under performance is not limited to the boundaries of developed countries but it has enlarged its branches even in developing countries also (Loughran & Ritter, The new issues puzzle, 1995).

Aggarwal, Leal and Hernandez (1993) conducted a study on Brazilian IPOs and concluded that there is a 47% performance of three years after IPOs announcement. They also conducted researches in Chili and Mexico and found that there was a 19.6% and 23.7% under performance after one year of IPOs call. Dawson (1987) conducted research in three different countries named as Hong Kong, Singapore and Malaysia to find the adjusted returns after the announcement of IPOs to see the trend of IPOs are under performing or under pricing etc. They used the data between 1978-1984 and found that the under performance ratio in Hong Kong was 9.3% while 2.7% under performance has been found in Singapore. They also concluded that there was positive significant over performance has been found in Malaysia with the ratio of 18.2%. The above two countries ratio was also not significant under performance. The author told that the index, which used in Malaysia, was not according to the world market wide it was industrial index (Finn, 1988).

Carter, Dark, & Singh (1998) conducted a research in India by considering the 2056 IPOs between the periods

of 1991-1995 and found that there was significant positive out performance of IPOs to first 200 days and after 400 days, the return rate was same as on the trading one day before IPOs announcement. It is also found in more of the researches that most countries IPOs under perform during the first five years after the announcement of IPOs. IPOs return ratio varies more than the change in the other stocks as well.

IPO under pricing is the also a great phenomenon in the IPO market as well. Many theorists insisted that the issuer of IPOs is more informed as compared to those who are going to invest in IPOs about the money which has been missing on the table of dialogues by under pricing can do work as a gesture of superior quality (Kunz & Aggarwal, 1994). Other researchers are of the view point that when investors are more informed about the market conditions than the sellers means owner/firm then they discount is allowed to investors on these IPOs (Benveniste, Lawrence M., & Wilhelm, 1990).

The importance of IPOs cannot be ignored in Mergers and Acquisitions cases. Due to Mergers and Acquisitions the underperformance may tends to be different and to connect the mergers and acquisitions with IPOs is something boring. Many of the research studies has been conducted which found that many acquiring firms under perform in the long run (Benveniste, Lawrence M., & Wilhelm, 1990). Bravo, (1998) conducted a study and found that the acquiring firms underperform after IPOs because the managers of these firms feel over confident to achieve their task and destroy the wealth by paying more to acquire the firms. Many other researchers are supporting the above line-acquiring firm's managers overconfident.

Following are reasons of underperforming in long run that different researchers found in their researches. These reasons include Short Selling, Seasoning, Volatility, Firm Age, and Industry and underwriters reputation as well. The lending of securities is not forbidden by in but organizations make this practice rarely. Securities are later borrowed from the market to make the short sale delivery possible. Moreover, after that these all securities are bought in open market to change the borrowed securities. Seasonality also has a great impact on underperformance because seasoned companies trading history tells that beta and liquidity can be evaluated from past statistics data and investors do not believe on it (Kunz & Aggarwal, 1994).

Price and return volatility is considered important is used commonly to estimate the risk and uncertainty. Therefore, it is not easy to find volatility before the organization is going to IPOs. Firm sizes an firm age are also the reason of under performance in IPOs in long run. Some researchers are of the view that the small firms and having low age under perform in long run after IPOs announcement. Industry also varies in underperformance.

The industries such as financial institutions, insurance companies and restaurants under perform in long run after IPOs. Benveniste, Lawrence M., & Wilhelm, (1990) concluded in their researches that if under writers do not have market reputation and the deals which they make of IPOs the IPOs underperforms in long run.

Hypothesis Development

Hypothesis is a supposition that is used to verify the research questions in the study. Hypotheses are developed after studying the previous literature relevant to specific variables. This developed the following hypothesis based on past theoretical grounds:

H1: Is there a relationship between IPOs and long run underperformance.

Research Methodology

The purpose of this research study is to analyze the underperformance of IPOs in long run. This research is secondary research in nature because many other researches have been conducted by many researchers in different countries. This is a quantitative research also because the data is consisted of numbers. It is empirical in nature and the research is trying to investigate the association between IPOs and Performance of the organizations. Research hypothesis will be verified in form of acceptance and rejection, which have been defined already. This study will provide the directions relevant to current scenario. Two methods such as BHAR (Buy and Hold Abnormal Returns) and CAR (Cumulative Abnormal Returns) have been used to investigate the scenario (Loughran & Ritter, The new issues puzzle, 1995).

Data and Sample

Sample is the representative part of the population. This study takes the sample data for 35 years of US IPOs, which have been announced and completed between 1994 to 2005 from a database of Financial Securities Data Company (FSDC) by Thomson. Three annual return and dollar value proceeds, which have been raised, been included in the sample. The price histories of trading have been taken from Centre for Research in Security Prices (CRSP), which is also a database. The Return or value proceeds of 229 IPOs have been taken as sample. This study uses the random sampling technique to choose the sample from the population of different IPO in the USA (Welch I. , 1989).

Findings of the Study (See Appendix 1)

Description of Table.

Many studies have been conducted on underperformance of IPOs in long run and concluded different results as well. The researchers named as Loughran and Ritter (1995) have already been used the variables such as industry, market value and book value in their research to investigate relationship between IPOs and underperformance in long run. But this study uses every year and average of three years return to verify the acceptance or rejection of predefined hypothesis. There were some years missing data that have not been included by this research study. But an effort has been made to bring all the historical data which is anyway available into consideration for analysis especially of returns histories as well (Welch & Ivo, 1992).

In the above table, the BHAR and CAR values are 50% and 47% respectively. And the t-value is -28.308 which greater than the standard value of 1.96 at five percent confidence interval in BHAR while the t-value in CAR is 4.187 this is also greater than the t threshold value of 1.96. It is also concluded that based on BHAR the long run performance has a inverse relationship as on the basis of CAR there is strong positive relationship as well. Therefore this study results match with the studies, which have been described above in the literature review (Teo, Welch, & Wong, 1998).

This study uses general approach to take the returns for computation regarding analysis. Some researchers used under pricing also in their studies along with under performance and tried to take the same variables as well. No doubt, these two terms are relevant to each other. This study used Regression analysis to find the results as well. It is concluded in the table available above that those under performance of IPOs in long run is occurred. It means when IPOs are announced the acquiring organizations performance goes down form many period as well (Spindt & Lawrence, 1989).

It has also been seen that when there is high a trend of high price of stock is charged the acquiring firm's performance reduces up to three years after IPOs deal. It has also been concluded from the research that when there is low price trend of stocks exist then the IPOs acquiring companies returns may be stable or may reduce but at very low rate. It has also been seen that high volume acquired by acquiring company's performance may also be decreased as well. Some other researchers are of the viewpoint that long run performance would also be poor at the time when IPOs are going to be issued when companies are converting themselves from private to public. It is also been concluded that all the firms issue their stocks at the time when they think there stock is at high price level (Spatt, Chester S., & Srivastava, 1991).

Discussions and Conclusion

It is suggested by the researcher that due to IPOs issuance the performance of organization went to low in long run, which might have other factors involved when

IPOs are announced. This study recognized the investigation of underperformance of IPOs in long run. Many factors are responsible for under performance of IPOs in long run. We concluded different factors such as under pricing, over pricing, volatility in risk, season of stock issue, competency of management, which play major role in reducing the performance of organization after IPOs announcement. This study used BHAR and CAR to evaluate whether the post performance of organization is affected by IPOs (Simon, 1989).

It is suggested by the study that management should not over confident when they announce IPOs. It is said in previous researches that the small organizations management becomes over confident after over confident and they do not know how to utilize the stocks money. They make sometimes very loss able decisions which harm the organization performance. It is also suggested that the reputation of underwriters is important factor that influences the performance of firms after IPOs announcement (Shah, 1995).

It is also proposed by the researcher of this study that when organizations are going to announce IPOs they should take care when appointing underwriters for IPOs. They should choose those underwriters, which have market reputation due to which they price of IPOs, could be enhanced and management of underwriters can provide best investment of money in their business. At the end, it is concluded that after IPOs announcement the firms' individual and cumulative returns do not remain same they fluctuate but this fluctuation remains below the returns which were before the IPOs announcement (Servaes & Rajan, 1997).

The short selling is found another factor that may be reason of poor performance after IPOs. If short is not allowed this poor performance could be decreased. The factor such as size of the firm is also have a greater impact on if the firm size is high then the performance may not be low as compared to that when there is big size firm. The type of industry such as finance, insurance and restaurant cannot maintain their performance better after IPOs. These all above discussed factors are involved in this poor performance of organization after IPOs (Carter, Dark, & Singh, 1998).

Finally, this study results showed that the post returns of IPOs are not so satisfactory in the organizations despite of the factors such as firm age, firm size, firm industry, volatility, underwriter's reputation and management competency.

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Appendix 1

Month	BHAR	t stat	CAR	t stat
1	0.02	0.476	0.02	0.452
2	0.04	0.717	0.02	1.382
3	0.04	0.790	0.01	0.871
4	0.06	1.011	0.02	1.501
5	0.09	1.329	0.03	1.799
6	0.14	1.972	0.06	4.113
7	0.13	1.825	0.05	4.616
8	0.09	1.285	0.03	2.180
9	0.09	1.190	0.03	1.829
10	0.08	0.982	0.03	1.546
15	-0.01	0.146	-0.11	-8.970
20	-0.09	0.772	-0.26	-18.002
25	-0.34	3.372	-0.37	-17.407
30	-0.40	3.774	-0.43	-17.277
31	-0.44	4.145	-0.45	-28.521
32	-0.43	3.806	-0.44	-25.189
33	-0.45	3.972	-0.44	-25.918
34	-0.48	4.417	-0.46	-23.874
35	-0.48	4.217	-0.47	-20.290
36	-0.50	4.187	-0.47	-28.308

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