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REVIEW ARTICLE

FACTORS AFFECTING IPO VALUATION: AN EMPIRICAL EVIDENCE FROM INDIA

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ABSTRACT

In this study, we examine the valuation of Initial Public offering (IPO) of 109 different companies during the three time periods - January 2014 to December 2014, January 2015 to December 2015 and January 2016 to December 2016. This period is designated as the period when India was regaining the political stability. Four fundamentals affecting the valuation of the IPO during this period were taken into consideration.Once we control four fundamentals (such as offer price, Operating Income or Profit before depreciation, interest, tax and amortization (PBDITA), Book Value per share, and insider retention) and allow for different valuation of these fundamentals across different time periods, average valuations of IPO' during the period were not statistically different. The determinants considered by us do not majorly affect the valuation of the IPO. However, the IPO valuation was influenced by the approaching political stability in the country. Due to increasing political stability the number of IPO' also increased.

INTRODUCTION

An initial public offering (IPO) happens when shares of stock in a company are sold to the general public, on a securities exchange, for the first time. Through this process, a private company transforms into a public company. IPOs have become one of the successful ways of raising capital for expansion, and tobecome a publicly traded company. The return comes in the form of dividend and share price appreciation for the investors. IPOs are also considered as one of the costliest source of capital. Yet the advantages offered by the process surpasses all the costs associated with it for the prospective companies. How to value an issue is very challenging as well as crucial for any company, because IPO provides first opportunity to outside public and investors to value their set of assets. The valuation of IPOs has generated significant interest in researchers and academicians. Part of the reason for the popular interest in IPO valuation is the public's interest in the current economy. In the current study, we examine the valuation of Initial Public offering (IPO) of 109 different companies during the three time periods - January 2014 to December 2014, January 2015 to December 2015 and January 2016 to December 2016. This period is designated as the period when India was regaining the political stability. Four fundamentals affecting the valuation of the IPO during this period were taken into consideration.

Literature Review

IPO valuation has attracted attention in the early1980s. The earlier studies examined the impact of ownership retention on IPO valuations. Most of these papers were based on seminal work by Leland-Pyle (1997). Leland and Pyle (1977) recommended a valuation model in which the value of the firmis linearly related to the stake (in percentage) of the issuers.As per their model the issuers know more about the expected cash flows of the firm than do potential investors.Hence greater stake of issuers in terms of equity ownership can send a credible signal of their confidence about the company's prospects to the outside investors and stakeholders and can leads to a higher IPO valuation. Ofek and Richardson (2003) supported Leland and Pyle (1977) that higher retention levels imply fewer shares available for trading. Consequently, shares become a scarce commodity and their price increases. Klein (1996) examined the relationship between stock price and several variables on 193 firms during 1980 -1991. The study concludes that the stock price is directly proportional to the EPS (earnings per share) before IPO and the book value of share equity before IPO.

Beatty, Riffe, and Thompson (2000), addressed the low relevance of historical accounting information in the pricing of IPOs. As they used only industry multiples in their regression, their model concentrates only on time and industry variation in pricing relations and does not consider the value relevance of firm-specific accounting information in each industry. Kim and R.Ritter (1999), asserted that the use of accounting information in combination with comparable firm multiples is necessary to valueany IPOs. They found that the Price/Earnings (P/E), market to Book, price to sales multiples of comparable firms have only modest predictive ability and hence should be used with accounting information.

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METHODOLOGY

Sample Construction: We obtain our initial sample of IPO on NSE and BSE from for the period 2014, 2015 and 2016 from CMI Prowess. From this data we exclude the 4 IPO' of which we could not gather the complete data. After these exclusions we are left with 109 samples. We were unable to obtain the offer price of the IPO from CMIE Prowess. This data was collected from National Stock Exchange website, Bombay Stock Exchange website and Money Control website. Also when we obtained data from CMI Prowess, 19 IPO' did not have the Profit before Depreciation, Interest, Tax and Amortisation. Hence, this IPO were reduced from the sample. Further, 11 IPO' did not have book value per share and Earning per share, which was also not available through other sources. So these 11 IPO' were deleted from the sample. After excluding all these IPO' we had 109 samples to conduct the further analysis.

Regression

Following Multivariate Regression Model was run to find out the effect of determinants of IPO valuation during the period of 2014, 2015 and 2016.

Ordinary least-squares (OLS): Ordinary least-squares (OLS) regression is a generalized linear modelling technique that may be used to model a single response variable which has been recorded on at least an interval scale. The technique may be applied to single or multiple explanatory variables and also categorical explanatory variables that have been appropriately coded.

Variables used in regression

The dependent variables represent the quantity we wish to explain variation in, or the thing we are trying to explain. The Independent Variables represents a quantity whose variation will be used to explain variation in the dependent variable. The relationship between the dependent variables and independent variables indicates the positive or negative relation between the two variables. While doing this regression equation, the Offer Price is considered as the dependent variable. The offer price is mostly influenced by the factors which are taken as independent variables. In the regression we considered the variables like PBITA, Book Value and Promoters Retentions.

IPO Valuation Model

Dependent variable: The first candidate for the dependent variable is the offer price per share. On econometric grounds, the offer price has attractive properties in that it has a close-to-normal distribution. As discussed in BRT, investment bankers estimate total offer value first and then partition it somewhat arbitrarily into price per share and shares to be outstanding.
A critical issue in the specification of an IPO valuation model is the designation of the dependent variable. Some authors, notably KR and PS, have designated the offer price or first day closing price per share deflated by earnings per share as the dependent variable. Because it is total offer value that investment bankers estimate, we consider total offer value defined as offer price multiplied by the post-IPO shares outstanding as the dependent variable.

There is an extensive literature on the determinants of IPO underpricing (see Ritter and Welch (2002), Purnanandam and Swaminathan (2003), and Ljungqvist and Wilhelm (2003)). However, the focus of this paper is on understanding the determinants of the levels of IPO values and not those of underpricing.

Determinants of IPO Valuation

The valuation of initial public offerings (IPOs) and the setting of IPO offer prices represent a challenging crossroads between valuation theory and practice. The valuation of any IPO is done taking in consideration different variables like Income, Book Value of equity, Sales, R& D, industry price to sales ratio, insider retention and investment banker prestige Ranking. In our study we do not evaluate all this variables of valuation but analyse only Operating Income, Book Value Per Share, Earning Per Share and Promoters Holdings.

PBDITA

The formula is: EBITDA = Revenue Expenses (excluding interest, taxes, depreciationandamortization) Earnings Before Interest, Taxes, Depreciation and Amortization. An approximate measure of a company's operating cash flow based on data from the company's income statement. Calculated by looking at earnings before the deduction of interest expenses, taxes, depreciation, and amortization. This earnings measure is of particular interest in cases where companies have large amounts of fixed assets which are subject to heavy depreciation charges (such as manufacturing companies) or in the case where a company has a large amount of acquired intangible assets on its books and is thus subject to large amortization charges (such as a company that has purchased a brand or a company that has recently made a large acquisition). PBDITA helps the organisation to understand the Operating profits of the firm and compare it to the industrial PBDITA and accordingly value the IPO and set the pricing for the IPO. For the period in which we collected the data does not shown positive relation between the pricing and the PBDITA of the company for that period.

Book Value per Share

Book value per common share is a measure used by owners of common shares in a firm to determine the level of safety associated with each individual share after all debts are paid accordingly.

Formula:

$$\text{Book Value Per Share} = \frac{\text{Total Shareholder Equity} - \text{Preferred Equity}}{\text{Total Outstanding Shares}}$$

Should the company decide to dissolve, the book value per common indicates the dollar value remaining for common shareholders after all assets are liquidated and all debtors are paid. Book value per share is just one of the methods for comparison in valuing of a company. Enterprise value, or firm value, market value, market capitalization, and other methods may be used in different circumstances or compared to one another for contrast. For example, enterprise value would look at the market value of the company's equity plus its debt,

whereas book value per share only looks at the equity on the balance sheet. Conceptually, book value per share is similar to net worth, meaning it is assets minus debt, and may be looked at as though what would occur if operations were to cease. One must consider that the balance sheet may not reflect with certain accuracy, what would actually occur if a company did sell all of their assets.

Earning Per Share

Earnings Per Share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.

Calculated as:

$$= \frac{\text{Net Income - Dividends on Preferred Stock}}{\text{Average Outstanding Shares}}$$

When calculating, it is more accurate to use a weighted average number of shares outstanding over the reporting term, because the number of shares outstanding can change over time. However, data sources sometimes simplify the calculation by using the number of shares outstanding at the end of the period. Earnings per share are the same as any profitability or market prospect ratio. A higher earnings per share is always better than a lower ratio because this means the company is more profitable and the company has more profits to distribute to its shareholders. Although many investors don't pay much attention to the EPS, a higher earnings per share ratio often makes the stock price of a company rise. Since so many things can manipulate this ratio, investors tend to look at it but don't let it influence their decisions drastically

Promoters holdings

Before the company goes public the owners so called as the promoters retain some of the shares with themselves. This benefits them in a way that they can retain the ownership of the company from being diluted to the extent they would not wish to do. When there is large percentage of shares retained by the promoters it indicates to the investors that the promoters are confident of the business model and the future prospects of the firm. Ideally higher the percentage of shares retained by the promoters has the higher demand for the shares and hence leading into increasing price of the shares. Shareholding pattern of a company shows how its shares are split among the entities that make up its owners. There are two main sections: the promoter and promoter group and the public shareholding.Promoters are the entities that floated the company, and to a large extent have seats on the Board of Directors or the management. Relatives of the promoters who hold shares also fall under this class and are termed the promoter group. Promoters are further split between domestic and foreign promoters. In the public shareholding section, first comes institutional shareholding or financial bodies that hold shares. Institutional and promoter holdings make up the bulk of shareholding, and these are the categories to which you must pay the most attention. Next, promoter holdings show the extent of control promoters have over running of the busines. A more diversified holding and a good presence of institutional investors indicates that promoters have little room to make and carry out random decisions that benefit them without gauging how it would affect earnings and other shareholders. Always compare holding patterns with those of the previous quarters to check how holdings have changed. Companies also disclose the individual entities (other than the promoters) that hold more than a 1 per cent stake. Companies further disclose the promoters' shares that have been pledged as debt collateral. Should there be a failure in making payments, the lender may sell the shares, prompting a fall in stock price. If prices of pledged shares fall below a threshold, promoters are required to make up for the difference. Share prices could suffer as a combined effect of the margin call on promoters and selling by the lender if the promoter fails to cover the difference. Pledges of shares, their revocation or invocation have to be announced as they occur.

Total IPO' during 2014, 2015 and 2016

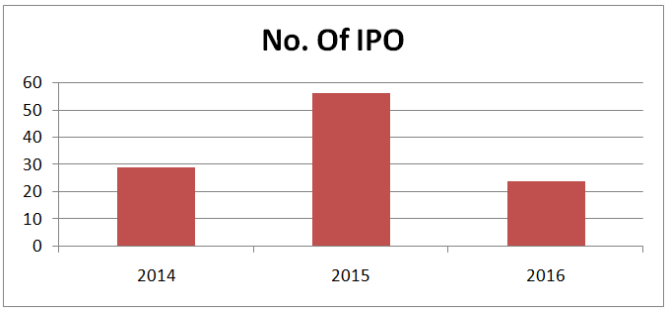

Figure 1. Number of IPOs between 2014 and 2016b.

RESULTS AND FINDINGS

After running analysis we find that the dependent variable i.e. Offer Price is having direct relation with the Independent variable and has significant impact on the valuation of the IPO' during these period. However one variable .i.e. Promoters Holdings do not influence the Offer price of the IPO during this period.

Table 1. Summary statistics

Variable	Obs	Mean	StdDev	Min	Max
Offer Price	108	86.7	142.318	10	850
PBDITA	108	285.4	1188.65	-36.3	11679
Book Value Per share	108	36.7	48	0	370.66
Earning Per share	108	3.05	7.81	-12.02	48.94
Promoters holdings	108	56.58	18.01	0	85.88

Table 2. OLS regression results

Offer Price	Coeff	Std Err	t	p>|t|
PBDITA	0.064539	0.007966	8.1	0
BOOK Value	2.625111	0.209428	12.53	0
EPS	-5.54179	1.734514	-3.2	0.002
Promoters holdings	0.25051	0.420207	0.6	0.553
cons	-32.0722	25.85226	-1.24	0.218

We examine the valuation of financial variables, growth opportunities, Operating Profit, Insider retention earning per Share and Book Value Per Share for the time period 2014, 2015 and 2016. Our major finding is as follows. Once we control all the fundamentals it was proved that these fundamentals drastically impact the valuation of the IPO' during the period. The maximum offer price of an IPO during

this period was the Rs. 850. This IPO was from team Lease Services Limited in the year 2016. This company had 45% of the Promoters holdings and had 190.64 Million Operating Profit before going public. During the period of 2014, 2015 and 2016,Promoters holdingsdid not impact the IPO valuation as we found the value of 0.55. As far as Book Value per share of the company and PBDITA is concerned, The IPO valuation was least influenced by these determinants with the**t** value of **0.** Promoters Holdings also played very little role in determining the valuation of IPO. With respect to inter Industry differences we do not document different sectors of the industry and thus are unable to comment on the difference in consideration of the factors for valuation in the different industry. However, as considered some of these factors which otherwise plays an important role in valuation of IPO, surprisingly contribute very little to the valuation of the IPO' during the period of 2014, 2015 and 2016. Promoters Retention is the only determinant which does not contribute to the valuation.

Conclusion

We tried to find out the Offer prices of the IPO's and the factors affecting the valuation of the IPO' during 2014, 2015 and 2016. The data for the research has been taken of total 109 IPOs listed on NSE between the periods 2014-2016. The valuation of average IPO during this period was having normal relation to the variables considered.

The regression analysis depict that there was significant relationship between factors viz. Book Value per share, PBDITA and Promoters share retention. It also indicates that the Indian IPOs were valued based on the economic conditions affecting the business of the firm. As the variables PBDITA, Book Value Per Share and Promoters Holdings are showing linear relation with valuation of the IPO the investors are advised to analyse these factors before investing in any IPO in the ongoing period.

REFERENCES

Beatty, R., Riffe, S. and Thompson, R. 2000. IPO pricing with accounting information. *Southern Methodist University Working Paper*.

Kim, M., and Ritter, J. R. 1999. Valuing ipos. *Journal of financial economics*, *53*(3), 409-437.

Klein, P. 1996. Pricing Black-Scholes options with correlated credit risk. *Journal of Banking & Finance*, *20*(7), 1211-1229.

Leland, H. E. and Pyle, D. H. 1977. Informational asymmetries, financial structure, and financial intermediation. *The journal of Finance*, *32*(2), 371-387.

Ofek, E.and Richardson, M. 2003. Dotcom mania: The rise and fall of internet stock prices. *The Journal of Finance*, *58*(3), 1113-1137.

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