BFSI sector in India: A study of the post offering performance of IPO

Dr. Amit Kumar Singh, Dr. Arun Kumar Attree and Shubham Singania

Abstract
With the advent of the growing financial markets as well as the growth of the BFSI (Banking, Financial services, Insurance) sector owing to wide spread Digitization in the Indian economy, the BFSI sector has become the major sector for raising funds from the Public. The recommendations of the expert committees on the BFSI sector encouraged the BFSI firms to raise funds from the capital market through IPOs, due to the increase in the role of online services such as credit score analysis, fraud detection, automation of loan etc. Out of the seven IPOs in Indian markets in 2018-19, three have been from the BFSI sector including the vastly-oversubscribed IPO of HDFC Asset Management Co. Ltd. The other two BFSI deals were those of Indo Star Capital Finance Ltd and Credit Access Grameen Ltd. This paper concentrates on IPOs from the BFSI sector from the period 2012-2016. In a developing country, the role of the BFSI sector for economic development is undisputed. In view of its importance in economic resource allocation and empirical evidences of IPO underperformance in the developing countries in the background, this paper analyses the BFSI sector IPOs in detail. The IPOs’ pre and post listing performances have been evaluated based on certain accounting measures that impact operating performance. As per the results, the key accounting parameters showed improvement in the performance of the BFSI in the post listing period.

Keywords: Underperformance, post listing performance, IPO, BFSI

Introduction
The IPO literature has been emphasizing on the informational gap between the issuers and investors to be the main cause of the anomalies present in primary equity market. Asymmetric information about the companies’ reliability, earning potential and authenticity of the information disclosed are the major factors driving the uncertainty among the investors. One of the anomalies documented in the IPO markets is referred as underperformance. The available evidences shows that the IPO firms’ stock return performance and operating performance deteriorates in the years after going public. While no unanimous explanations yet provided for, studies generally hold window dressing of accounting figures (to take advantage of investors optimism), and agency problem with disperse ownership after going public, as the major reasons for underperformance. Through our study we aim to analyse the post offering performance of the IPOs made by the companies in the primary capital market. The market for IPOs is characterised by high information asymmetry as the companies which approach the primary capital market do not have a very strong and renowned background. This is the main cause of uncertainty among the investors as they do not have any insight into the company’s financials, governance norms or credibility of the issuers. It has been observed that the firms going for IPOs generally underperform in the consequent years after going public, owing to the information asymmetry between the investors and the issuers. In our paper, we have catered to the firms in the BFSI sector as this sector acts as a catalyst for the overall economic development of the nation.

BFSI is an umbrella term for all the firms in Banking, Financial Services and Insurance sector providing range of such products and services as the name suggests. Banking may include core banking, retail banking, private banking, corporate banking, cards, investments and the likes. The financial services sector caters to stock-broking, payment gateways, mutual funds etc. Insurance includes both life and non-life insurance.

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Owing to the Digitization in the Indian economy, this sector has become a major source of raising funds from the public.

**Objective**
- The objective of this paper is to analyse the Post-IPO performance of the firms in the BFSI sector between the years 2012 to 2016. In view of its economic importance, we have taken up the IPOs in the BFSI sector and have carried out a detailed regression analysis.
- The post-IPO performance has been measured in terms of Return on Assets (ROA), Basic EPS and Return on Capital Employed by taking a dummy variable (Pre and Post Listing), Debt-equity ratio and Total Assets as some of the control variables.

**Literature Review**

**Declining Performance Post listing**

IPO under-pricing has been a widely investigated topic for decades (Ritter and Welch, 2002) [14]. A vast literature, providing an insight into the post IPO performance mechanism is available. Declining and very low PE ratios, earnings per share, Market value to Book value ratio has been recorded after going public, in a large number of cases. Singh et al (2018) [13] in their Indian study have shown that IPOs on NSE posted a very few gain of 4.63% in case of short run performance as one-month return. Out of 95 IPOs introduced on NSE, (61) 64.21% were underpriced and (33) 34.74% overpriced and there was only one IPO whose issue price was not different from the listing price. Jain and Kini (1994) [8], while investigating post IPO operating performance, observed a huge decline in post IPO performance leading to equity retention. Coakley, Hadass and Wood (2007) [7] also highlighted a dramatic under performance of IPOs in the bubble years between 1998-2000, while IPOs have performed normally thereafter. In another study of IPO firms carried out in USA between 1975-2004, it was observed that on an average the firm profitability declines on an average after IPO, especially in case of firms with highly volatile profitability (Pastor, Taylor and Veronesi, 2009).

In a recent study by Teoh, Welch and Wong (1998), it has been observed that the issuing companies usually report high accruals in their annual reports before and at the time of IPO issue and later exhibit a very poor performance in their post IPO years. Investors rely on these pre-IPO accounting accruals to discriminate among issuers, which misleads them to choose poor quality firms that underperform in years subsequent to the IPO. As a result, when such firms come up with a seasoned equity offering, investors tend to resent putting their money in such firms, which affects the overall financial health of these firms. However, information asymmetry is not the only driving force behind many IPO phenomenon (Ritter and Welch, 2002) [14]. There are a plenty of new firms which are financed by Venture Capitalists. Venture Capitalists provide capital to small and new but quality firms for starting their business. Such VC-backed IPOs are likely to be positively affected by VC’s reputation. In a survey of the Chinese capital market, it was observed that IPO firms which have better financial performance in the pricing-period, are likely to have worse post-IPO performance and lower first-day returns (Kao, Wu and Yang, 2009). It has also been found that many of the IPOs have significant returns on the day of listing but thereafter they do not give much return in the short-run, it shows that market overreacts to the initial public offers (Bhanumurthy and Singh Amit.K, 2014).

**Post IPO Positive Performance**

Krishnan, Ivanov, Masulis and Singh (2011) have spotted a positive relation between the reputation of VC-backed IPOs and long run performance. As reputable venture capitalists are more actively involved in the governance of firm post IPOs and thus are likely to influence long run performance positively in post IPO period. Many firms before going public appoint underwriters to the issue. Carter, Dark and Singh (1998) [11] envisaged that IPOs handled by reputable underwriters exhibit less severe under-performance in the three-year holding period subsequent to the issue. (Murthy and Singh Amit.k) (2012) have shown that in the Indian capital market IPOs are overpriced in comparison to their true price irrespective of the boom or recession in the market. Ghosh, while investigating the post IPO performance of the banks found no conclusive evidence of a significant under-performance. Rather key indicators like ROA, EPS etc. have shown key improvement in the post IPO years. Lowry (2003) [9] analysed the relationship between IPO volume and post IPO stock return to find that the demand for capital by firm and the investor sentiments influence the IPO volume and the economic effects are very small after IPOs. These results are contrary to the Indian and global scenario of IPO under-performance in general context. The above literature review can be summarized by stating that firms generally under-perform post IPOs. Low quality and small companies usually window dress their annual reports and financial statements to present a manipulated image of the company, signalling the investors of a strong financial background, which tempts the investor to subscribe to the newly issued stock. Such companies usually under-perform in the long run. The analysis undertaken by Bhanu Murthy, Singh Amit.K and L.Gupta (2016) shows that for IPOs listed from 2000 to 2003, the long run variables have no relationship with short-run variables. With some of the variables, it has positive relationship. The theory supports the view that for IPO markets to be efficient there should be low listing gain, moderate short-run gain and high long-run gain. Only then there will be long term development of IPO market. But the actual situation is opposite. The companies have listing gain, short-run gain but they are not able to give long run gain.

Although, we do have good literature that analyses the post- IPO performance of the firms and IPO under-pricing, but most of it is limited to countries like USA, UK and a very few cater to the firms in developing countries. Moreover, not much research has been done with regard to IPOs in the BFSI sector in the Indian context and hence our investigation caters to the IPOs in the BFSI (Banking, Financial Services and Insurance) sector. The banking, insurance and financial services are important from the economic point of view and thus affect the national income and the growth prospects. Hence we have chosen a sample of IPO firms in BFSI sector to analyse their performance after going public. This paper is a form of exploratory
research to get an answer to the question whether our results would match with the already existing theories about post IPO performance or not. Never the less it shall enable future researchers to build a base for their research in the BFSI sector by taking inputs from such a study. Moreover, in the context of Indian new issues market, Singh Amit.k and S. Maurya (2018) (13) found that presence of independent directors on board was more informative than presence of non-executive directors for determining the post IPO performance. Also, merely meeting the regulatory requirement while determining the board composition did not send a quality signal, but only those firms which go beyond the minimum regulatory requirements pertaining to corporate governance norms catch some attention of investors.

Research Methodology
Multiple regression technique has been selected for our data analysis. This method of data analysis uses more than two independent and control variables to find out their impact on the dependent variable. Panel Ordinary Least Square method is used to run the regression tests. Multiple regression examines how multiple independent variables are related to one dependent variable. Once each of the independent factors have been determined to predict the dependent variable, the information on the multiple variables can be used to create an accurate prediction on the level of effect they have on the outcome variable.

Data Sources and Sample Size
To run the test, we have collected figures of Return on Assets (ROA), Earning per share (EPS), Debt equity ratio, Total assets and Return on capital employed. We have used secondary sources of data for proceeding with our study. Data about IPOs is retrieved from www.chittorgarh.com. We have also used the annual reports of the companies and www.moneycontrol.com.
A sample of 23 BFSI sector firms has been chosen to find out their post-IPO performance. The companies chosen went public through an IPO during the period 2012-2016. The BFSI sector has immensely grown after digitisation and its effect on post-IPO performances is analysed through our investigations.

Variables used for analysis
Since we are judging the firms for their post IPO performance, we will use such dependent variables that symbolise their accounting performance. Thus, return on assets (ROA), Earning per share (EPS) and Return on capital employed are used as the dependent variables in the regression model as they reflect the firms’ financial performance in an accounting sense. The EPS has been calculated by dividing the earnings available for equity shareholders by the total equity shares issued. ROA has been calculated as the percentage of profit earned against the total assets employed in a firm. Return on capital employed is calculated as ratio of Earnings before interest and tax to capital employed where capital employed is sum total of shareholder’s equity and debt liabilities. The leverage is calculated as the ratio of debt to equity.

The independent variables are the ones which would affect the movement of the dependent variable. Here, we are trying to judge the impact of a scenario on the performance, the scenario being the pre-IPO scenario and the post IPO scenario. Whenever the value of a dependent variable is analysed with respect to a situation, we introduce a Dummy variable as an independent variable. In research design, a dummy variable is often used to distinguish different treatment groups. In the simplest case, we would use a (0,1) dummy variable where value of 0 is given to variables in control group which is the period before IPO/listing and 1 is assigned to the variables in treated group which is the period subsequent to IPO/listing. We have assigned value=0 to pre-IPO years and value=1 to post-IPO years. The performance of all these 23 firms have been analyzed for 2 years before the IPO and 2 years after the IPO to examine the variation in pre and post IPO performance.

The variables like Total assets and Debt-Equity ratio have been used as control variables in our regression models which act as a catalyst in analysing the financial performance.

Hypothesis
Using the above variables, we have arrived at 5 hypotheses to analyse the post IPO performance of the firms.
H01: Listing of BFSI firms does not affect ROA of firms.
H1: Listing of BFSI firms affects ROA of firms.
H02: Listing of BFSI firms does not affect EPS of firms
H1: Listing of BFSI firms affects EPS of firms
H03: Listing of BFSI firms does not affect Return on Capital employed of firms
H1: Listing of BFSI firms affects Return on Capital employed of firms
H04: Size of the firm does not impact the financial performance of BFSI firms
H1: Size of the firm impact the financial performance of BFSI firms
H05: Leverage of firm does not impact the financial performance of BFSI firms
H1: Leverage of the firm impact the financial performance of BFSI firms.

Result Analysis and Interpretation
We have run multiple tests to find out the impact of independent and control variables on the dependent variable.

Table 1: Panel Least Squares test to find out impact on ROA

<table>
<thead>
<tr>
<th>-Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.959362</td>
<td>0.684266</td>
<td>-1.402032</td>
<td>0.1659</td>
</tr>
<tr>
<td>DUMMY_VARIABLE</td>
<td>2.954990</td>
<td>0.877778</td>
<td>3.366443</td>
<td>0.0013</td>
</tr>
<tr>
<td>TOTAL_ASSETS_IN_CRORES</td>
<td>-0.000160</td>
<td>0.000335</td>
<td>-0.476348</td>
<td>0.6355</td>
</tr>
<tr>
<td>TOTAL_DEBT_EQUITY__X</td>
<td>0.343504</td>
<td>0.075192</td>
<td>4.568337</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
In the first model, we find out the impact of dummy variable acting as an Independent variable and total assets and debt-equity ratio acting as control variables on the Return on assets. The p value of dummy variable (0.0013) is statistically significant and henceforth, we reject null hypothesis (Ho1) which implies that the listing of BFSI firms affects ROA positively. The p value of Total assets (0.6355) is insignificant due to which we accept null hypothesis (Ho4) that size of the firm does not impact the ROA of BFSI firms. The debt equity ratio’s p value is zero and is significant, thus the null hypothesis Ho5 stands false and leverage positively affects the ROA.

In the second model, by taking EPS as the dependent variable and other variables remaining constant, it has been observed that the dummy variable is insignificant (p value= 0.2675) that leads us to accept the null hypothesis (Ho2) that listing of BFSI firms does not affect EPS of firms. However total assets having a p value of zero are significant and thus rejecting the null hypothesis Ho4, we conclude that the size of the firm does affect the EPS. The p value of debt-equity ratio is 0.1152 which is insignificant leading to acceptance of null hypothesis Ho5 which means leverage has no effect on the EPS.

<table>
<thead>
<tr>
<th>-</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.573864</td>
<td>1.380662</td>
<td>-1.139934</td>
<td>0.2587</td>
<td></td>
</tr>
<tr>
<td>DUMMY_VARIABLE</td>
<td>1.981570</td>
<td>1.771118</td>
<td>1.118824</td>
<td>0.2675</td>
<td></td>
</tr>
<tr>
<td>TOTAL_ASSETS_IN_CRORES</td>
<td>0.003244</td>
<td>0.000677</td>
<td>4.793351</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>TOTAL_DEBT_EQUITY__X_</td>
<td>0.242368</td>
<td>0.151718</td>
<td>1.597497</td>
<td>0.1152</td>
<td></td>
</tr>
</tbody>
</table>

In third model with Return on capital employed as the dependent variable, the regression test gives conclusions similar to first model. The p value of dummy variable is 0.0010, which is significant and rejection of Ho3 makes us conclude that listing of BFSI firms will affect their return on capital employed positively. Similar results have been observed with respect to leverage with p value (0) resulting in acceptance of null hypothesis Ho5 indicating that leverage will positively impact return on capital employed. The p value of total assets (0.7075) is insignificant and therefore, we accept null hypothesis Ho4. This implies that size of the firm will not affect the return on capital employed.

<table>
<thead>
<tr>
<th>-</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.178888</td>
<td>0.779721</td>
<td>-1.511935</td>
<td>0.1356</td>
<td></td>
</tr>
<tr>
<td>DUMMY_VARIABLE</td>
<td>3.471429</td>
<td>1.000229</td>
<td>3.470633</td>
<td>0.0010</td>
<td></td>
</tr>
<tr>
<td>TOTAL_ASSETS_IN_CRORES</td>
<td>-0.001444</td>
<td>0.000382</td>
<td>-0.376969</td>
<td>0.7075</td>
<td></td>
</tr>
<tr>
<td>TOTAL_DEBT_EQUITY__X_</td>
<td>0.408321</td>
<td>0.085682</td>
<td>4.765554</td>
<td>0.0000</td>
<td></td>
</tr>
</tbody>
</table>

To sum up, we can say that the listing of BFSI firms are likely to affect it’s ROA and ROCE but won’t affect EPS. This is because, with IPO, there is a simultaneous rise in the equity shareholders, the capital and the earnings of firms, as a result of which, EPS will remain unaltered. The size of the firm also does not impact ROA and ROCE whereas it influences EPS. The leverage affects ROA and ROCE not the EPS where as there are sufficient theories to prove that leverage magnifies EPS. This may be because of the presence of financial distress costs, bankruptcy costs and agency costs associated with high use of debt. The beta component for the dummy variable is positive in all the three models which signals a positive performance of firms post going public through issue of IPOs.

Table 4: Descriptive Analysis showing statistical findings

<table>
<thead>
<tr>
<th>Basic EPS</th>
<th>Roa</th>
<th>Roce</th>
<th>Total Assets</th>
<th>Debt Equity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.718523</td>
<td>2.4475</td>
<td>2.629886</td>
<td>287.4581</td>
</tr>
<tr>
<td>Median</td>
<td>0.305</td>
<td>0.785</td>
<td>0.82</td>
<td>27.98</td>
</tr>
<tr>
<td>Maximum</td>
<td>48.39</td>
<td>31.54</td>
<td>38.07</td>
<td>7763.21</td>
</tr>
<tr>
<td>Minimum</td>
<td>-54.17</td>
<td>-25.31</td>
<td>-25.72</td>
<td>0</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>11.1393</td>
<td>6.692085</td>
<td>7.500443</td>
<td>1142.604</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.594619</td>
<td>1.613292</td>
<td>1.868821</td>
<td>5.194795</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>15.51036</td>
<td>12.67176</td>
<td>13.0822</td>
<td>30.28898</td>
</tr>
</tbody>
</table>

Descriptive Analysis
The table 4 gives the statistical findings for the dependent, independent and control variables in the form of mean, median, maxima, minima, standard deviation etc. using 88 observations. On an average, the earning per share offered to investors is Rs 2.718 approximately. The average leverage comes out to be 1:401:1 which is significant of firms’ solvency. The mean of return on assets and return on capital employed is 2.45% and 2.63% with average total assets about Rs.287.4581 crores. Hence, the statistics show a positive performance for the firms in terms of EPS, profitability (depicted through ROA and ROCE) and solvency (Debt-Equity ratio).
Conclusion
Our studies reveal an entirely different scenario than what has been prevailing worldwide. This could be caused due to growing demand for the services in the BFSI sector after the advent of mass digitisation in our country. The existing literature advocates under performance of firms in the initial years of going public. However, we have come up with a contrary view point where various techniques and analysis signal a positive performance of the firms in BFSI sector in the post IPO years. The listing of BFSI sector firms is going to have a positive impact on the ROA and the ROCE making the firms financially healthy after an IPO. Although, listing of BFSI firms has no effect on EPS, but the positive value of beta component speaks about no negative effects either. The leverage has positively impacted ROA and ROCE implying that higher the debt, more will be the returns. The size of the firm has a direct relation with the EPS as larger firms will have more quantum of earnings leading to magnification of EPS.

It is not necessary for a firm to experience very poor listing returns or under pricing of the IPO in the years subsequent to it going public. Just like in our case, the BFSI sector has shown a drastically different scenario than what believes exist in general business world. We can owe the healthy financial conditions of the BFSI firms post their IPO, to the gigantic opportunities they have opened up in the economy through their services. If finance is the life blood of any economic activity, then banks, insurance companies, other financial institutions and service providers are the blood banks. Due to their importance to the economy, BFSI firms experience more returns as they manage to win the faith of public at large.

Limitations and Scope of future research
- Despite of our contribution to the existing literature on the post IPO performance of the firms, there are numerous unexplored areas that open up opportunity for future research.
- Although, in this research data of some prominent firms were used, but a sample of 23 firms is small to represent the behaviour of general population. Hence future research can be done with data of a greater number of firms.
- The number of BFSI firms deciding to go public may be higher in future opening up a chance for better studies. In this research the analysis of the IPOs is done only for a time span of 5 years from 2012-2016
- A long-term analysis would have given extensive information on IPOs and the post performance.
- The paper has also analysed firms for their short-term post IPO performance only. All these gaps can be bridged with the relevant and extensive future research.

References