I. Introduction
Capital market in India has been growing since liberalization from 1991. Many companies tap the capital market every year to raise their resources. Participation in the fresh capital issue from the non-promoter segment is increasing every year. Entry of National Stock Exchange (NSE) and introduction of screen-based trading system were the key drivers for the growth of Indian capital market. Financial literacy initiatives taken by the Government of India and the market regulator (Securities and Exchange Board of India) increased the interest among the researchers to conduct various studies on different parameters of Indian capital market. As far as the capital markets are concerned, India is one of the most prominent and promising emerging market.

The main objective of this paper is to find out the future directions for further research in Indian IPOs. For this purpose the paper is divided into 4 sections i.e., section 1 deals with introduction, section 2 deals with features of the Indian IPO market, section 3 examines the research articles on IPO performance and section 4 concludes the paper and also suggest directions for further research in this field.

II. Features of Indian IPO Market
Effective functioning of the capital market is vital to an economy, in order to achieve an efficient transfer of monetary resources from those who save money towards those who need capital. The capital market can influence the quality of investment decisions, i.e., the reallocation of those that are insufficiently or inefficiently used.

Across the world there was a transformation in the financial intermediation from a credit based financial system to a capital market based system which was partly due to a shift in financial policies of financial repression (credit controls and other modes of primary sector promotion) to financial liberalization. This led to an increasing significance of capital markets in the allocation of financial resources.

The Indian capital market is the barometer of the country’s economy and provides a mechanism for capital formation. Since 1980s the market has been growing in leaps and bounds and has aroused the interests of the investors. The reason for such development was an increasing opportunity caused due to liberalization and globalization policies adopted by the nation. Liberalization and globalization has opened the gates to the following three broad channels for financing the private sector and public sector namely;

a) Domestic capital market
b) International capital market (American depositary receipts and Global depositary receipts)
c) Foreign Institutional investment (FII).

Trends in the Indian Capital Market in the Pre and Post Liberalization period
In India, stock exchanges originated in the latter half of the 19th century. The first organized stock exchange was set up in Mumbai in 1875 by the Native Share and Stock Brokers' Association. Subsequently, an accelerated pace of trade growth led to an increase in the volume of stock trading. The stock exchanges were established in various centers such as Chennai, Delhi, Nagpur, Kanpur, Hyderabad and Bangalore. And these stock exchanges were regulated by the Securities Contract (Regulation) Act 1956.

The Indian stock market in the pre liberalization period was affected by many factors, viz., regulatory problems, lack of transparency in the activities of stock market participants, and the open outcry trading system. In this era, the stock market was wrongly perceived by the public as a place for the ‘rich men’s club’.

The outcome of the revamping of the capital market on the new issues market during pre-liberalization period is that the total amount of investments in New Issues Market has depicted an increasing trend during 1951-90. The capital raised during 1951-60 was to the tune of Rs.285 crores which increased to Rs. 23,357 crores during 1981-90. In every decade a significant rise could be observed in terms of quantum of capital raised and yearly average. (Refer Table 1)

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Year</th>
<th>Capital raised (Rs. in crore)</th>
<th>Yearly Average (Rs. in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1951-60</td>
<td>285</td>
<td>28.5</td>
</tr>
<tr>
<td>2</td>
<td>1961-70</td>
<td>728</td>
<td>72.8</td>
</tr>
<tr>
<td>3</td>
<td>1971-80</td>
<td>992</td>
<td>99.2</td>
</tr>
<tr>
<td>4</td>
<td>1981-90</td>
<td>23,357</td>
<td>2335.70</td>
</tr>
</tbody>
</table>

Source: Reports on Currency and Finance, 1960-90, RBI
The state of new capital raised from the market by the Indian companies in the post- liberalization period has been increasing year by year. It is evident that the yearly average of capital raised in the new issues market increased from Rs.10679.90 crore during 1991-2000 to Rs.23,338.8 crore during 2001-2010 (refer table 2).

### Table 2: Quantum of Capital raised in the New Issues market by Indian companies during the Post - liberalization period (1991-2010)

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Year</th>
<th>Capital raised (Rs. in Crore)</th>
<th>Yearly Average (Rs. in Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2000</td>
<td>1,06,799</td>
<td>106,799</td>
</tr>
<tr>
<td>2</td>
<td>2001-2010</td>
<td>2,33,388</td>
<td>233,388.80</td>
</tr>
</tbody>
</table>

Source: Handbooks on the Indian securities market published by the SEBI during 1991-2010

From the above table it could be inferred that an aggregate of Rs. 1,97,107 crore was raised by the Indian companies during 2010-14 and the annual average stood at Rs. 49,276.75 crore (refer table 3).

### Table 3: Quantum of Capital raised in the New Issues market by Indian companies during 2010-14

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Year</th>
<th>Capital raised (Rs. in Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010-11</td>
<td>67,609</td>
</tr>
<tr>
<td>2</td>
<td>2011-12</td>
<td>48,468</td>
</tr>
<tr>
<td>3</td>
<td>2012-13</td>
<td>32,455</td>
</tr>
<tr>
<td>4</td>
<td>2013-14</td>
<td>48,575</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,97,107</td>
</tr>
</tbody>
</table>

Source: Handbook on the Indian securities market published by SEBI from 2010-14

From the above table it could be inferred that an aggregate of Rs. 1,97,107 crore was raised by the Indian companies during 2010-14 and the annual average stood at Rs. 49,276.75 crore (refer table 3).

### IV. EARLIER STUDIES ABOUT INDIAN IPOS

**Ajay Shah (1995)** studied the basic time-series properties of the number and value of Indian IPOs per month, variation in issue and listed price, determinants of listing delay, and modeling the cross-sectional variation of issue and listed price. 2056 IPOs traded and listed during 1991 – 1995 were chosen by the researcher in which 1819 (88.5%) gave positive returns from issue date to listing date and the aggregate variation between issue price and listed price was 105.6%. Time series analysis revealed a dramatic increase in the number of IPOs per month from 20 a month before the abolition of Controller of Capital Issues in May 1992 to the region of 80 a month from the later part of 1993 onwards due to the introduction of the free pricing of securities.

**Arwah Arjun Madan (2003)** assessed the long run performance of IPOs in the Indian primary market during the pre and post liberalization era. A sample of 1597 companies having made IPOs during 1989 to 1995 at the Bombay stock exchange were studied. Considering the net return, 79.4% of the total 1597 IPOs registered a positive return on the listing day and 20.6% of IPOs registered negative returns.

**Saurabh Ghosh (2005)** examined the performance of Initial Public Offerings from the banking sector in Indian Capital Market. The researcher investigated the changes in accounting parameters i.e., profitability and efficiency during post listing. For this analysis, data from 24 banks (both public and private banks) that went public were used. Buy and hold returns for individual stocks (risk unadjusted) and index returns (market returns and risk adjusted) were calculated and found that the stock return performance did not differ across bank groups (public and private sector banks). An ordinary least square equation was used to find out the operating performance of the banks after listing and it was also found that all performance indicators showed signs of improvement in the next five years immediately after the IPO.

**Ajay Pandy (2005)** studied initial returns (difference between issue price and listing price) and long run performance of IPOs. The researcher considered 84 IPOs from the period 1999 - 2002, coming out with fixed price and book building route from the Indian capital market. The study found that the IPOs offered through fixed price method mobilized only a small amount of capital. In contrast, IPOs offered through book building method mobilized a larger quantum of capital. It was further found that IPOs offered through both fixed price and book building method under performed in the first two years subsequent to the listing.

**Kumar (2007)** analysed the short-run and long-run performance of IPOs issued through book building method. For the analysis, offer to close return, open to close return, buy and hold market adjusted return and monthly market adjusted returns were computed for 156 IPOs listed from 1999 to 2007. It was found that in the short-run, IPO listing didn’t provide economically significant trading opportunities for day traders and in the long-run, IPOs beat the market after two years of listing.

**Shikha Sehgal & Balwinder Singh (2007)** investigated the initial and long-run performance of 438 IPOs listed on the BSE from 1992 to 2006. To examine the long-run performance of Indian IPOs, Buy-and-Hold Abnormal Returns (BHAR) and Cumulative Abnormal Returns (CARs) were calculated for 120 months. Buy-and-hold returns was found to be negative between 18 and 40 months of holding. After 40 months, the underperformance of IPOs has disappeared, i.e., in India, underperformance persists for about one-and-a-half years to a little more than three years.

**Priyanka Singh & Brajesh Kumar (2008)** investigated the short run as well as long run performance of the Initial Public Offerings in the Indian Capital market. The study proposed a model taking oversubscription variables along with age and issue size to explain the performance of IPOs in India. Since different sectors have different level of private and public information, the researchers performed industry wise analysis. The period for the study was 22 months (Jan, 2006- Oct, 2007) considering 116 IPOs. It was found that both short and long run return of IPOs are positive for this period. In the short run, only 18% of IPOs listed price was more than offer price and in the long run, it was only 11.5%. Oversubscription variables, namely, total oversubscription, institutional investors and retail investors oversubscription, were found to be the main determinants for listing and offer price performance of Indian IPOs. Infrastructure, financial and entertainment sectors with positive long run return fell under this category for the period of study. On the contrary, IT sector gave higher initial return but negative return in the long run.

**Seshadev Sahoo and Prabina Rajib (2010)** attempted to specify the relationship between post-issue promoter groups’ retention and IPO performance on listing. The researchers investigated the impact of financial variables i.e., offer size, times subscribed, age of the firm, book value, leverage, market volatility, ex-ante uncertainty and the post issue promoter group holding on listing performance of an IPO. 92 IPOs from manufacturing and non manufacturing sectors were used as sample and found that in 46.55% of IPOs, listing price was more than the offer price during 2002 - 2006. The study documented a positive relationship between post-issue promoter group holding and IPO performance on listing. The results further indicated that offer size, times subscribed and post-issue promoter group holding were statistically significant in influencing the performance of listing.
Bandgar & Atul Rawal (2012) studied the impact of pricing of Banks IPOs in long and short run. The researchers also evaluated the effect of size and issue nature (par, premium or at discount) of IPOs on its pricing. A sample of 10 banks were selected randomly which issued their equities through initial public offering (IPO) during the period 2000 – 2010. It was found that the average return in short run was at -8% and long run was at -53%. Further findings from the study revealed that big issue size IPOs got listed with a higher listing price and the small issue size IPOs got listed with a lower listing price. IPOs with lower issue price gave more returns on the listing day than the IPOs with higher issue price. Private sector banks IPOs gave higher return than the public sector banks IPOs during the study period.

Ganesamoorthy & Shankar (2012) attempted to study the price behaviour of IPOs and its persistent effect after listing. For this purpose a standard event study methodology by taking market adjusted return model was used. As per the methodology, Annual average abnormal return (AAR) and cumulative average abnormal return (CAAR) were calculated along with the t-statistics for testing significance. The study covered a ten years period from 2001 to 2010. 219 initial public offerings made by Indian companies during the period were selected as sample for the study. The overall result indicated that the issue price was more than listed price for the Indian IPOs during 2001 to 2010. Even though the AAR on the first trading day was more than one per cent, in the subsequent days the price was adjusted by the market. CAAR at the end of the event window (75th day) stood at -10.7 per cent. The negative CAAR of 68 days out of 75 days were found to be significant, which strongly indicate the underperformance of Indian IPOs during the period.

Baluja Garima (2013) examined the efficacy of IPO grading mechanism by using a sample of 50 graded IPOs listed with BSE from 2007 to 2010. The researcher identified that the IPO grading is not an effective mechanism in reducing information asymmetry. The One Way ANOVA result exhibits no significant difference in listing price performance of the different graded IPOs. Hence, listing price performance of different graded IPOs varies due to chance or due to other some factors such as subscription level, issue size, age of the firm etc. but it was irrespective of level of grades obtained by IPOs.

IV. Conclusion & Directions for Further Research

After reviewing all the studies, it is observed that listing price is more than the issue price in all Indian IPOs. Buy and Hold Abnormal Returns (BHAR) was commonly applied in most of the research studies. Nature of issues (fixed price and book building) is also indifferent in underperformance. Short and long run performance of IPOs were studied in the research papers. On the listing day, the IPOs resulted with positive returns.

From the above literature survey, it is clearly indicated that comparison of domestic and international IPO performance can be studied in detail. There is a lot of scope for studying the performance of IPOs from a particular industry and disinvestment by Public sector undertakings. Promoters and Non promoters participation in IPOs can be studied elaborately.

References:
6. Handbook on the Indian Securities market by SEBI from various years