

Trend Analysis of the Indian Capital Market

R. P. Tulsian¹

Rohit Kumar Shrivastav²

Abstract

In the present world, not only trade barriers are being removed, but the reduction in capital control norms can also be experienced. Basically, the changed world economic outlook has totally transformed the perception of investors too in the light of these recent policies. It has been experienced in the past that investors did not only show cautious behaviour, but also tried to invest in other countries too apart from their own country. This has increased the scope of foreign capital inflow, which is much needed for the development of the capital market of countries like India. The present study conducted a trend analysis of the Indian capital market. For this purpose, based on the review of literature, six variables were identified namely, debt private placement offerings, rights issue offering, preferential equity, overseas capital market offering, buyback offering, and further public issue (FPO) and data were gathered for the period from January 2001 – December 2019. Further, growth rate analysis on the basis of cumulative annual growth rate (CAGR) and graphical analysis has been conducted. From the analysis and interpretation, it was observed that the market segments : debt private placement offerings, rights issue offering, preferential equity, overseas capital market offering, buyback offering, and further public issue (FPO) of the capital market drove the market, and as a result, the Indian capital market showed a positive growth rate during the period from 2001 – 2019. Further, these segments reported a growing trend in the market, which actually helped the capital market to grow over time.

Keywords : Indian capital market, initial public offerings, private placement offerings, CAGR, overseas market offering

JEL Classification : G10, G12, G15, G17, G23

Paper Submission Date : June 20, 2020 ; **Paper sent back for Revision :** July 3, 2020 ; **Paper Acceptance Date :** July 15, 2020

In the present economy, not only trade barriers are being removed, but the reduction in capital control norms can also be seen overseas. This policy has enabled investors to go beyond the conventional mode of investments out of savings. Basically, the change in the world economic outlook has totally transformed the perception of investors too in the light of these deviations. It has been experienced that the investors have now become more cautious of their trading and investment strategy and are more prone to risk, provided the return should be commensurate with the risk that they are ready to take.

In the recent past, it was observed that investors were more reluctant to take risk, and as a result, they tried to opt for only those investment avenues where the safety of capital was ensured along with the fixed return. This is the reason why people in the previous decade invested more in fixed-income securities like government bonds, fixed deposits, and other instruments of such nature for having a fixed amount of returns and ensuring the safety of their capital too. But the main problem in this kind of investment behaviour is that although you are getting a fixed return, but is this fixed return able to fight with the current living cost and inflation ? This is the big question which has been raised before the traditional investors, and hence, this actually prompted the discussion among the investors that whether they should look at the only conventional mode of investments, or they should go for the

¹ *Associate Professor*, Department of Commerce, Shaheed Bhagat Singh College, University of Delhi, Press Enclave Marg, Near PSRI Hospital, Phase II, Sheikh Sarai, New Delhi -110 017. (Email : rptulsian@gmail.com)

² *Ph.D Research Scholar*, Department of Commerce, Delhi School of Economics, University of Delhi, Delhi - 110 007. (Email : rohitkshrivastav@gmail.com)

DOI : 10.17010/ijrcm/2020/v7i2&3/154511

capital market, more precisely, the equity market, to have more amount of returns, keeping in mind that investing in equity is riskier than investing in any other security available for investments in the market. Keeping in view all these facts and the relevance of the capital market in an economy, the present study tries to explore the trend of India's capital market.

Review of Literature

Shanmugham (2000) conducted a survey of individual investors with an aim to find out what information foundation investors depended on. The outcomes clarified that they had to be cost effective as well as there were sociological and psychological reasons which controlled investment choices.

Das, Mohanty, and Shil (2008) examined selection behaviour of retail investors of India in order to look at the scenario of mutual funds and life insurance specifically during the post-liberalization period. They found that Indian investors were not more prone to mutual funds ; rather, they preferred bank deposits. Sehgal and Singh (2008) investigated the determinants of underpricing and long run performance of 438 IPOs of the Indian market. A very high mean underpricing of 99.2% was found as compared with the international market. This study helped in examining the overreaction hypothesis. It revealed that the Indian IPO underpricing levels were very high. Singh and Bhanumurthy (2012) reiterated that the efficiency of the primary market is based on IPO pricing. If it is not rational, then it will not signal proper development of long-term capital market. The authors opined that extant studies concentrated mostly on how listing gains can act as a criterion to assess market efficiency. From the period of 1992 – 2010, three variables were studied with the help of semi-log equations. The study observed that there was a rapid decline of about 18% in the number of issues, while, on the other hand, the market capitalization witnessed an upsurge at 7.6% per annum. This resulted in larger gains for the company issuing the IPO. Contrary to that, there was ambiguity in the investors' gain as rational pricing had not taken place.

Wadhwa (2014) tried to determine the components of underpricing of IPOs which were listed on the NSE. The study examined 92 IPOs listed during the period from 2009 – 2011 in terms of trading volume on NSE. The results indicated the fact that the merchant bankers had an offer price fixation generally towards the upper side of the band in the book building process. The investors could not use ex-ante results to make gains since the offer price was disclosed and set after the book building closure. Malhotra and Nair (2015) attempted to analyze the book building process of IPO issues. They further examined how it leads to efficient price discovery. The sample included first day returns of 288 IPOs issued through the book built method for the period from 2004–2010. The rate of underpricing for this period was 22.44%. The excess returns were taken out to be 21.73% – the set of observations revealed that the IPOs were underpriced in the Indian market. The authors concluded that the investors overreacted to the market.

Jain and Bothra (2016) observed that due to the financial crisis of 2007–08, the Indian economy experienced downward sentiments of the investors in the market, and as a result, the foreign capital outflow took place in India. Jindal (2017) focused on price performance of IPOs, that is, whether it was overpriced or underpriced during January 2014 – November 2015. The IPO price performance was calculated by IPOs' post listing data. It was found that IPOs were underpriced, and the investors earned profits from their rational IPO investment decisions.

Paul (2017) studied the IPO underpricing in context of India's capital market. The author observed that underpricing of an IPO gave short-term investment benefits to the investor. The study performed the descriptive analysis of IPO underpricing in India and discussed various reasons for IPO underpricing, such as, the presence of asymmetric information either between the issuer and the underwriter or between the informed or the un-informed investors. Singh and Shrivastav (2018) opined that post year 2000, the Indian economy registered more growth in the capital market and experienced huge amount of foreign capital inflows too. So, they observed that foreign capital inflow pushed more financial infrastructure development in India.

Singh, Kalra, and Jham (2018) observed that performance of an IPO was reflected by the benefits investors reap from investing into it. They analyzed that the performance of IPOs was also a key factor for inviting more capital into the system by the investors. George and Suresh (2018) examined the long memory possibilities in the Indian market across various indices representing market coverage, market capitalization, and liquidity based portfolios, both in the pre and post financial crisis period of 2008. The study observed varying degrees of persistence across the market cap, and liquidity based portfolio indices and persistence were found to be higher in the post-crisis period.

Singh, Maurya, and Mohapatra (2019) investigated the predictive power of corporate board related governance variables in estimating the listing day return. Results of logistic regression on a sample of 87 mainline Indian IPOs listed on NSE during 2011 – 2017 indicated that gender diversity on board and independent board leadership were significant predictor variables. However, board independence measured by proportion of non-executive directors reported insignificance in reducing the likelihood of underpricing. In another study, Singh and Kumar (2019) examined the trend in the IPO market of India. The study attempted to establish the role of composition of underwriters in issues of IPOs and studied various factors which determine underpricing of IPOs across small, medium, and large firm base. The findings revealed that in India, the IPO market had a huge growth potential. The book running lead managers (BRLMs) deployed in the large firms were more numerous than those deployed in small and medium firms.

Objective and Hypotheses

Objective of the Study

The primary objective of this study is to conduct the trend analysis of the Indian capital market. In order to achieve this objective, the different segments in the capital market shall be analyzed. These segments are : debt private placement offerings, rights issue offering, preferential equity, overseas capital market offering, buyback offering, and further public issue (FPO).

Hypotheses

In order to achieve the stated objectives, different hypotheses have been framed. These are stated below :

- ↪ H_{01} : There is no upward trend in the debt private placement offerings of India over a period of time.
- ↪ H_{a1} : There is an upward trend in the debt private placement offerings of India over a period of time.

- ↪ H_{02} : There is no upward trend in the rights issue offering of India over a period of time.
- ↪ H_{a2} : There is an upward trend in the rights issue offering of India over a period of time.

- ↪ H_{03} : There is no upward trend in the preferential equity of India over a period of time.
- ↪ H_{a3} : There is an upward trend in the preferential equity of India over a period of time.

- ↪ H_{04} : There is no upward trend in the overseas capital market offering of India over a period of time.
- ↪ H_{a4} : There is an upward trend in the overseas capital market offering of India over a period of time.

- ↪ H_{05} : There is no upward trend in the buyback offering of India over a period of time.
- ↪ H_{a5} : There is an upward trend in the buyback offering of India over a period of time.

↪ H_{06} : There is no upward trend in the further public issue of India over a period of time.

↪ H_{a6} : There is an upward trend in the further public issue of India over a period of time.

Research Methodology

In order to analyze the trend of the Indian capital market and testing the stated hypotheses, the time period that was chosen for the study is from January 2001 – December 2019. The variables that have been taken into consideration are : debt private placement offerings, rights issue offering, preferential equity, overseas capital market offering, buyback offering, and further public issue (FPO). The data were collected mainly from the National Stock Exchange website (NSE), Securities and Exchange Board of India (SEBI), Reserve Bank of India (RBI), and other government agencies' published reports. Furthermore, in order to analyze the gathered data, growth rate analysis on the basis of cumulative annual growth rate (CAGR) and graphical analysis have been conducted.

Data Analysis and Interpretation

The trend analysis of different segments of the Indian capital market namely, debt private placement offerings, rights issue offering, preferential equity, overseas capital market offering, buyback offering, and further public issue (FPO) has been conducted and analyzed in the following sections.

Debt Private Placement Offerings

Debt private placement is one of the financial instruments where firms issue securities or bonds to institutional investors to raise capital. A private placement is the private sale or issue of corporate debt to select investors but not a public offering. These funds are raised mainly for the expansion of business and to meet the working capital requirements. This method is adopted to avail the benefit of interest rate differential between a corporate bond and bank loans. Hence, firms raise fresh capital as well as issue securities and bonds to institutional investors.

The results of the growth rate analysis of debt private placement in terms of both, that is, value and number of the issue (as per Table 1) clearly indicates that over a span of 19 years, both are increasing at an exceptionally good rate.

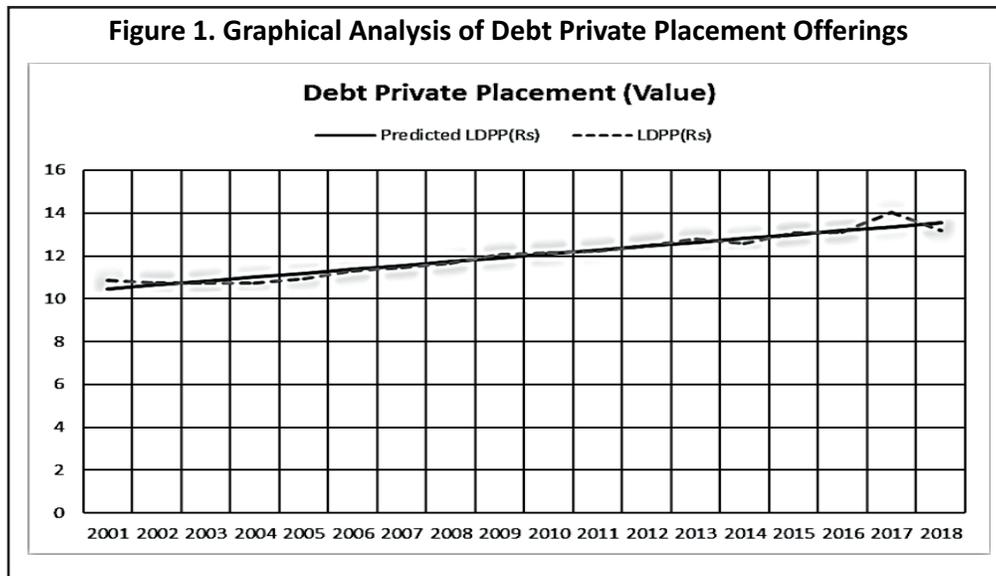
Table 1. Growth Rate Analysis of Debt Private Placement Offerings

Variable	Growth Rate	P-value
DPP (value)	18.17%	0.00%
DPP (n)	13.21%	0.00%

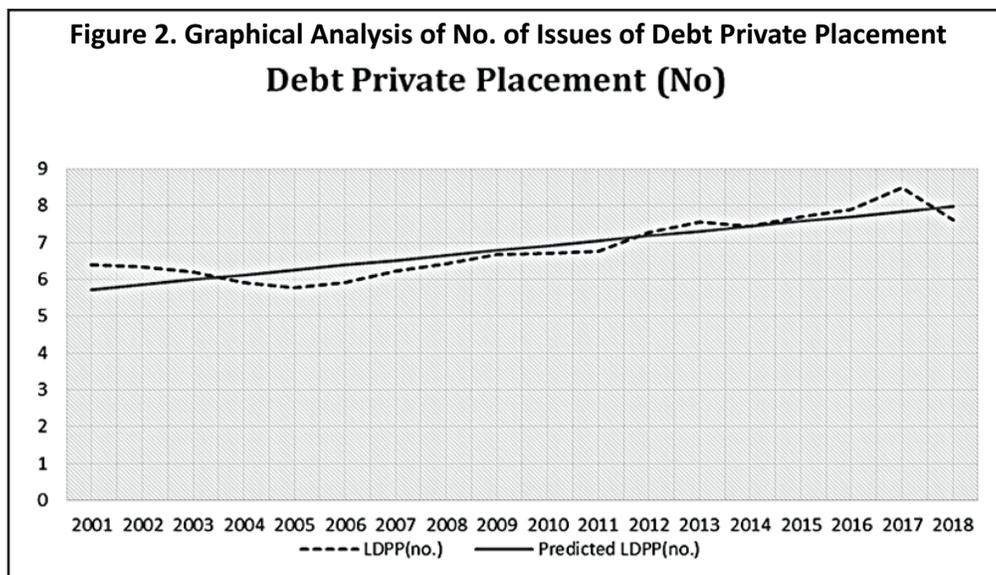
On the one side, debt private placement in terms of rupees is growing at a rate of 18.17% and it is significant even at 1%. On the other hand, in terms of number, debt private placement is growing at a little slower rate, that is, 13.21%, although, it is also significant at 1%. Overall, the results of the preliminary analysis indicate the importance of debt private placement in raising capital from the market.

Graphical Analysis

(1) Debt Private Placement (Value) : Figure 1 depicts that the growth rate of debt private placement offerings that has been rising over the period of time during the period from 2001 – 2019. It can be further observed that this rising trend (in value) is a good sign as growth in this segment will lead to growth in the capital market.



(2) Debt Private Placement (No. of Issues) : The results of graphical analysis (Figure 2) indicate that overall, there is an upward movement in debt private placement over a period of 19 years. It also shows that firms have a preference for debt private placement as compared to other sources of financing. The private placement has emerged as a major alternative source of funds for firms. In terms of value, the private placement is second to bank financing. The number of issues and gross amount mobilized by corporates through debt private placement has recorded a secular increase. GDP growth rate is one of the prominent factors, which has contributed to the growth of private placement. So, on the basis of the above analysis, the hypothesis H_{01} is rejected and H_{a1} is accepted.



Rights Issue Offering

The rights issue is a kind of right of offering to the existing shareholders of a company to buy shares in proportion to their existing stock holdings. This process is adopted by companies to raise funds and capital without incurring

underwriting fees. Generally, such types of issues take place when a company wants to expand its operations and needs huge fresh capital. It strengthens the equity base of a company and helps in improvising its debt-to-equity ratio. It also provides better leveraging opportunities and opens up future scope for raising funds through debt.

Table 2. Growth Rate Analysis of Rights Issue Offerings

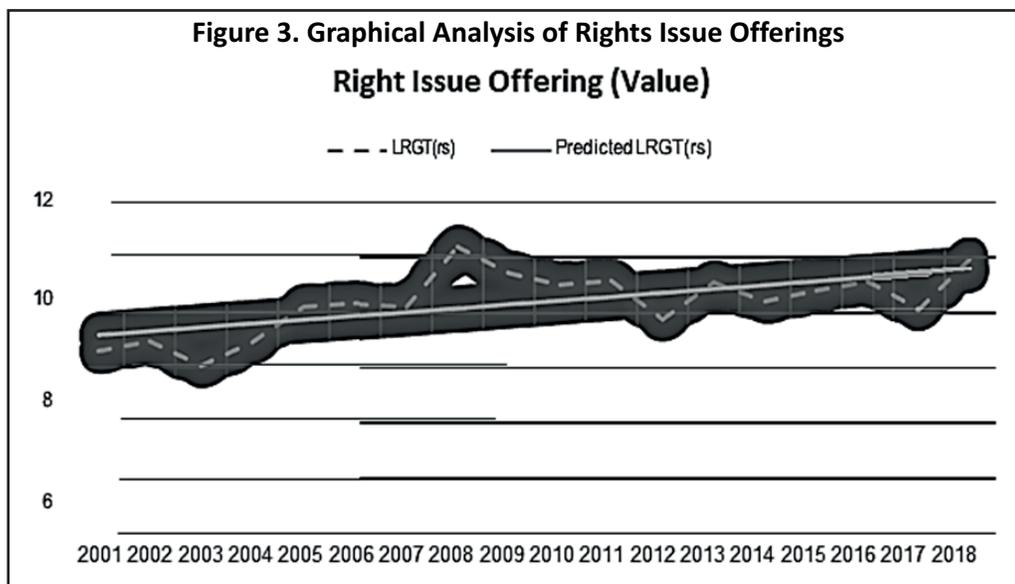
Variable	Growth Rate	P-value
RGT (Value)	4.18%	0.00%
RGT (n)	-3.06%	0.08%

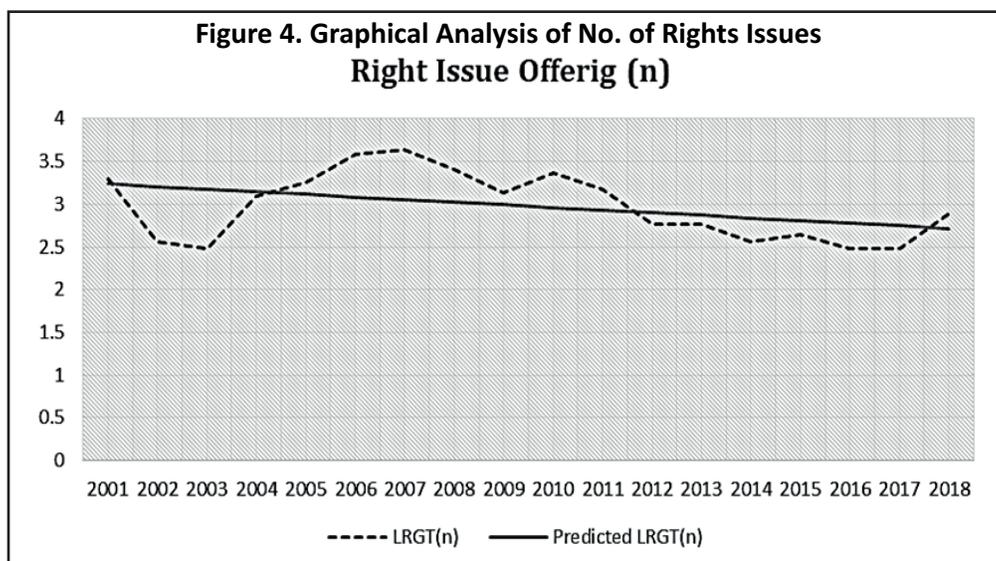
The results of growth analysis for the rights issues are presented in Table 2. RGT (value) presents a growth of the rights issue offerings in terms of value; whereas, RGT (n) shows the growth of the rights issue offerings in terms of a number of issues. Offering of the market in the form of the rights issue is growing at a fairly reasonable rate, that is, 4.18% and it is significant at 1%. However, contrary to the value, the number of the rights issues offered to subscribe is declining at a rate of 3.06% per annum. One possible reason of decline could be estimated from the fact that generally, rights issues are offered by the promoter in the subsequent year after a company faced a huge loss ; however, there is a need to determine the concrete reason for the same.

Graphical Analysis

(1) Rights Issue Offerings (Value) : Figure 3 depicts that the growth rate of the rights issue offerings has been rising over the period of time during the period from 2001 – 2019. It can be further observed that this rising trend (in value) is a good sign as growth in this segment will lead to growth in the capital market.

(2) Rights Issue Offerings (No. of Issues) : The results of graphical analysis (Figure 4) support the results given by the growth rate analysis. The first graph indicates that in the overall scenario, rights issue offering is increasing over a period of 19 years. However, it is observed that there is a lot of deviation in the actual and predicted value of





the rights issue. It clearly shows that the market has a fluctuating attitude towards the subscription of the rights issue. Similarly, the number of rights issue offers is also declining over a period of time. Also, there is a lot of deviation. Especially after the Companies Act, 2013, there is a downward deviation in the number of the rights issue from the predicted one. So, on the basis of this, we can make out that the rights issue is not that effective an instrument in raising capital from the market. So, on the basis of the above analysis, the hypothesis H_{02} is rejected and H_{a2} is accepted.

Preferential Equity

Equity shares are preferred by investors who are willing to take a bigger risk for higher returns. An equity issue helps in raising funds for owners, and these shareholders have democratic control over the company's management. However, preferential equity is allotted to selected investors who want to take strategic stake in a company. In this process, they do not possess the voting right and the equity shareholders are entitled to get the dividend only if the company gets profit. Preferential equity has a prior claim on the company's assets if it liquidates ; although, they remain subordinate to bond holders.

The results of the growth rate analysis are well presented in Table 3. Interestingly, the value of preferential equity has been increasing at a remarkable pace in the span of 19 years. However, the number of preferential equity offerings is also growing at a positive rate, but the growth is half to the value. It stands at 7.26% p.a.

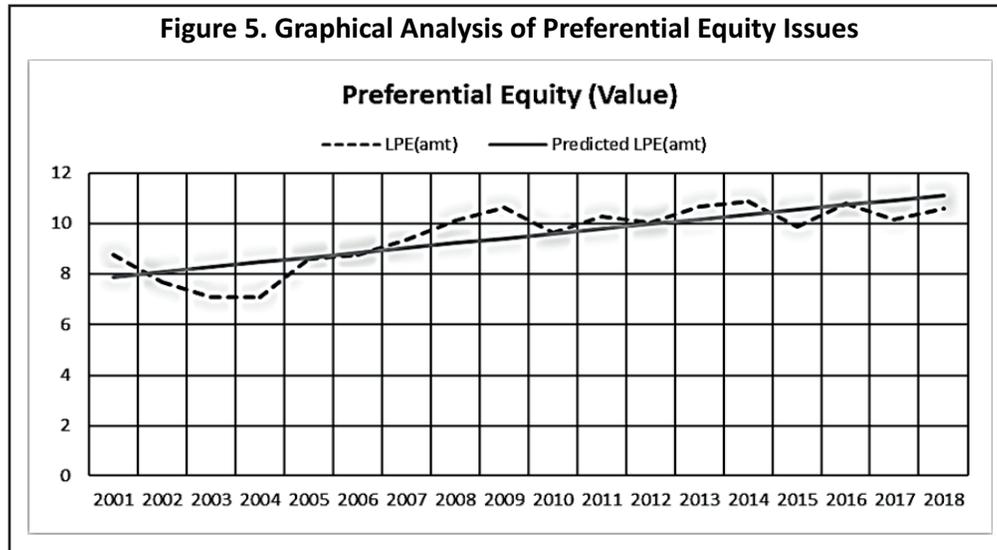
In statistical terms, both are significant even at 1%. It also reflects the perception of investors. Overall, with the growth rate of 18%, investors perceive preferential equity as an effective tool to invest. Also, this high growth rate comes from the fact that preferential equity is a hybrid of debt and equity, which stimulates investors to invest in the same.

Table 3. Growth Rate Analysis of Preferential Equity

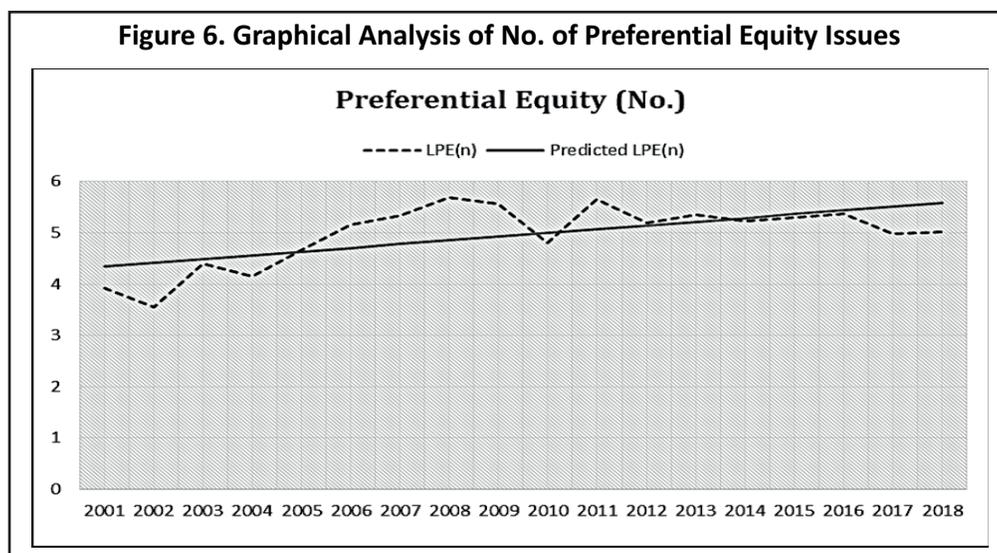
Variable	Growth Rate	P-value
PE (value)	18.90%	0.00%
PE (n)	7.26%	0.00%

Graphical Analysis

(1) Preferential Equity Offerings (Value) : Figure 5 depicts that the growth rate of preferential equity offerings has been rising over the period of time during the period from 2001 – 2019. It can be further observed that this rising trend in this (in value) is a good sign as growth in this segment will lead to growth in the capital market.



(2) Preferential Equity Offerings (No. of Issues) : The results of graphical analysis (as per Figure 6) indicates that overall, there is steady, slow, and upward growth in the flow of preferential equity. In both the forms, that is, in value and in number, the preferential equity issues are increasing in the period of analysis. Also, it is visible that in both, there is a lot of fluctuation in the actual value of preferential equity. In the initial year, there is an increase, however, after the crisis and implementation of new Companies Act, we can see that there is a fall in the flow of preferential equity. So, on the basis of the above analysis, the hypothesis H_{03} is rejected and H_{a3} is accepted.



Overseas Capital Market Offering

The capital market is a place where all debt and equity are bought and sold. There are two ways in which a company can garner funds from an overseas capital market. The equity route involves issuing American depository receipts (ADRs)/global depository receipts (GDRs). The second is the debt route in which foreign currency convertible bonds are issued by a company.

The results of the growth rate analysis are presented in Table 4. The results indicate that the value of the overseas capital market offering is growing exceptionally at a good rate. However, the same cannot be said about the overseas capital market offering in terms of number of issues. In the case of number of issues, the growth rate of overseas offerings is not significant. Therefore, in such a case, we are accepting the null hypothesis that there is no growth in overseas offerings in terms of number of issues.

Table 4. Growth Rate Analysis of Overseas Capital Market Offerings

Variable	Growth Rate	P-value
OCM (Value)	20.23%	0.00%
OCM (n)	5.77%	20%

Graphical Analysis

(1) Overseas Capital Market Offerings (Value) : Figure 7 depicts that the growth rate of overseas capital market offerings has been rising over the period of time during the period from 2001 – 2019. It can be further observed that this rising trend (in value) is a good sign as growth in this segment will lead to growth in the capital market.

(2) Overseas Capital Market Offerings (No. of Issues) : The results of graphical analysis (Figure 8) very clearly point out that in recent times, there has been the demise of the overseas capital market offerings by Indian companies. There are two ways in which a company can garner funds from an overseas capital market. The equity route involves issuing American depository receipts (ADRs)/ global depository receipts (GDRs). The second is the debt route, in which foreign currency convertible bonds are issued by the company.

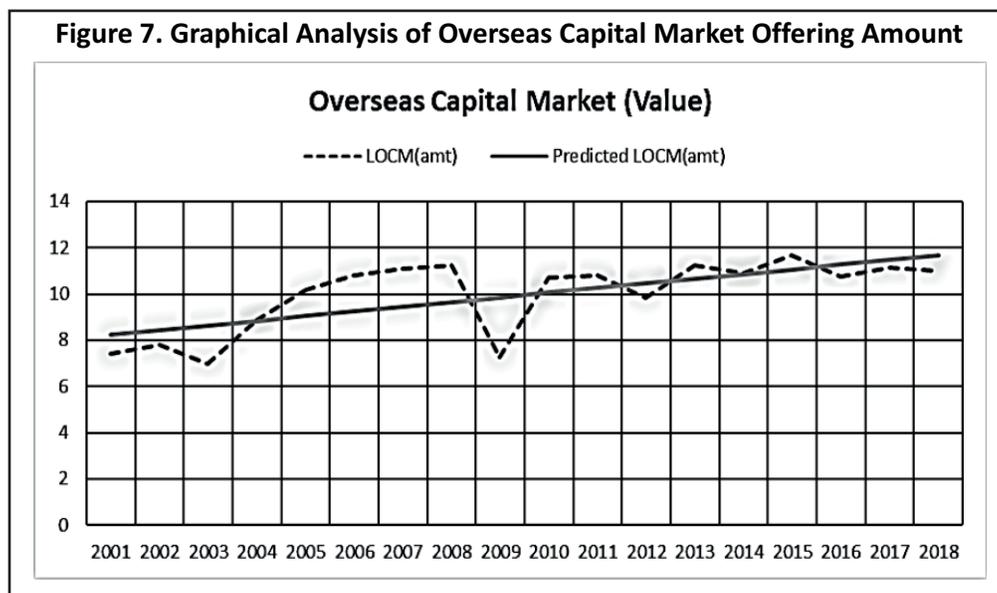
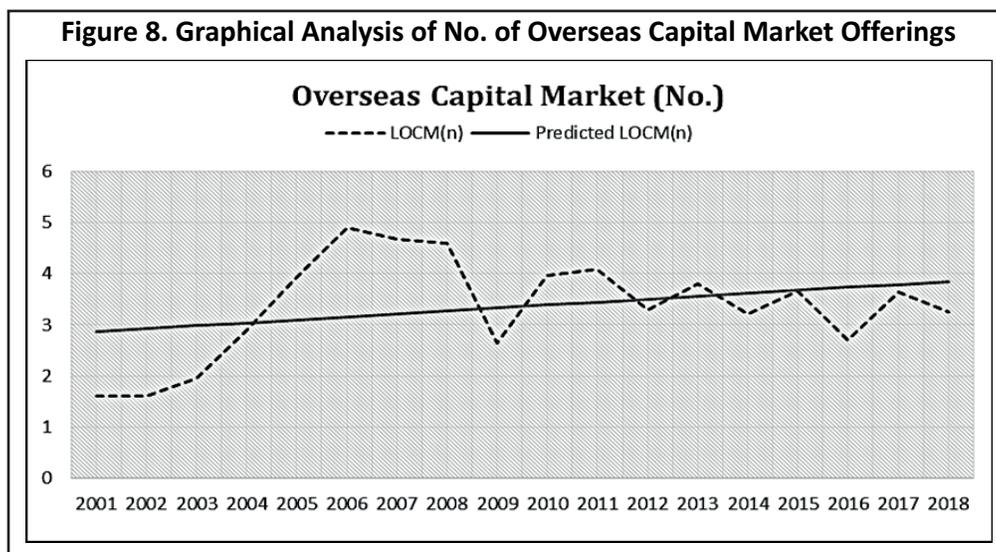


Figure 8. Graphical Analysis of No. of Overseas Capital Market Offerings



In the early 2000s, many Indian companies, especially those belonging to new sectors such as information technology, opted for the ADR/GDR route with an objective to get a better valuation for the shares of companies and access to global investors. But in the past few years, there has been a steep decline in the flow. According to experts, a slew of factors have contributed to the change in the scenario. First and foremost is the development of the domestic qualified institutional placement (QIP) market, which is a more convenient and cheaper method for both the issuer and investor ; also, one has been seeing a lot of foreign participation there. The next key factor is the movement in the rupee. ADR/GDR route was popular at the time when the rupee was weaker and investors were more confident of investing in dollar or pound/euro-denominated instruments. But now, the scenario has changed. The rupee has been stable or has strengthened over the past few years. From the taxation perspective too, it has become an unattractive option. The alleged need for round-tripping by some promoters through ADR/GDR issues is also on decline with the crackdown on black money globally. So, on the basis of the above analysis, the hypothesis H_{04} is rejected and H_{a4} is accepted.

Buyback Offering

Buyback of shares is a method of financial engineering, which can be described as a procedure that enables a company to go back to the holders of its shares and offer to purchase the shares held by them. Cash-rich companies may like to buyback their own shares from the market when the market value is less than the true value. This mode of purchase is also called 'Shares Repurchase.' The process strengthens the company value and equity base for the shareholders. This enables the promoters to strengthen their control over the shares bought back without any investment of their own. In the case of treasure operations, there is a diversion of the company's funds to buy shares and a reduction in the value of equity for the shareholders.

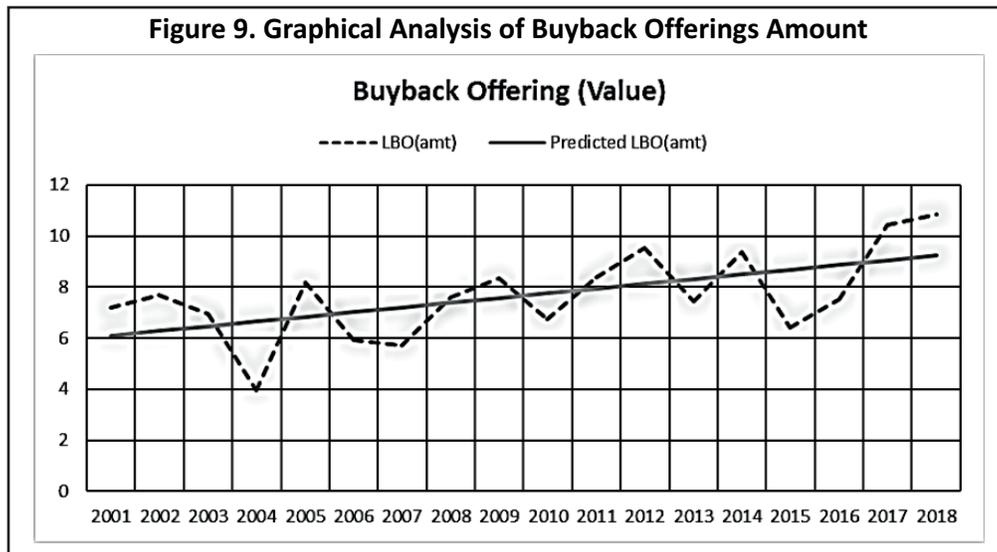
Table 5 depicts the results of growth rate analysis. Overall, both the variables are found to be significant at 10%. BO (value) represents growth of buyback offerings in terms of value ; whereas, $BO(n)$ depicts a growth of buyback offerings in terms of number of issues. It is good to note that the total value of buyback offerings is moving at a remarkable pace, that is, 18.54%. Similarly, in terms of number also, decent growth can be traced in case of buyback of shares. In crux, it indicates the efficiency of the market to push up the stock prices. Also, it points out towards strengthening the position of Indian companies.

Table 5. Growth Rate Analysis of Buyback Offerings

Variable	Growth Rate	P-value
BO (Value)	18.54%	1.16%
BO(n)	4.91%	8.89%

Graphical Analysis

(1) Buyback Offerings (Value) : Figure 9 depicts that the growth rate of buyback offerings has been rising over the period of time during the period from 2001 – 2019. It can be further observed that this rising trend (in value) is a good sign as growth in this segment will lead to growth in the capital market.

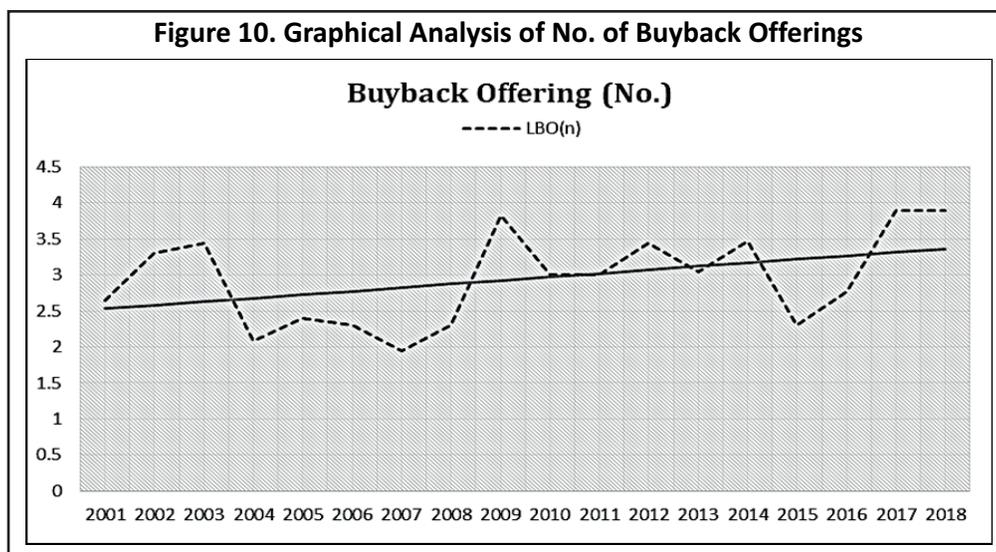


(2) Buyback Offerings (No. of Issues) : Figure 10 shows the results of graphical analysis. The former graph is indicating the movement in the value of buyback offerings ; whereas, the latter graph is showing the movement in the actual and predicted value of buyback shares in terms of number of issues. However, it can be understood clearly from the graphs that there is a lot variation in actual value from the predicted value. Although, overall, there is an upward movement in the quantum of buyback offers.

The results also point out towards high volatility in the buyback offerings. The main reasons for such volatility are as follows :

- ↳ Many a times, companies decide to buy back their shares when they have cash-rich balance sheets and signal investors' friendliness to the market. Therefore, the quantum of buyback is fluctuating every year.
- ↳ Similarly, when a company believes its current share price does not reflect its true value, it buys back its shares, and sends signals to investors about the company's confidence in its business and future value.

So, on the basis of the above analysis, the hypothesis H_{05} is rejected and H_{a5} is accepted.



Further Public Issue (FPO)

In the process of initial public offerings (IPO), an unlisted company raises funds by offering fresh shares in the public and subsequently gets listed in the stock market. When a listed company comes out with a fresh issue of shares or makes an offer for sale to the public to raise funds, it is known as FPO (Follow on Public Offer). FPO is an instrument of diversifying a company's equity-base and the main purpose of going for FPO is to raise capital to expand its business operations or to pay off the debt.

The results (Table 6) of the analysis indicate that there is a significant growth in the case of overall growth of follow on public offer, however, some can't conclude about number of follow on offers. The results indicate that there is no growth in the number of FPO issues and it is not significant even at the 10% significance level. Interestingly, the value of FPO is growing at a reasonably fair rate, that is, 17.18% and indicates that the market is using FPO as one of the effective tools to raise the capital from prospective investors.

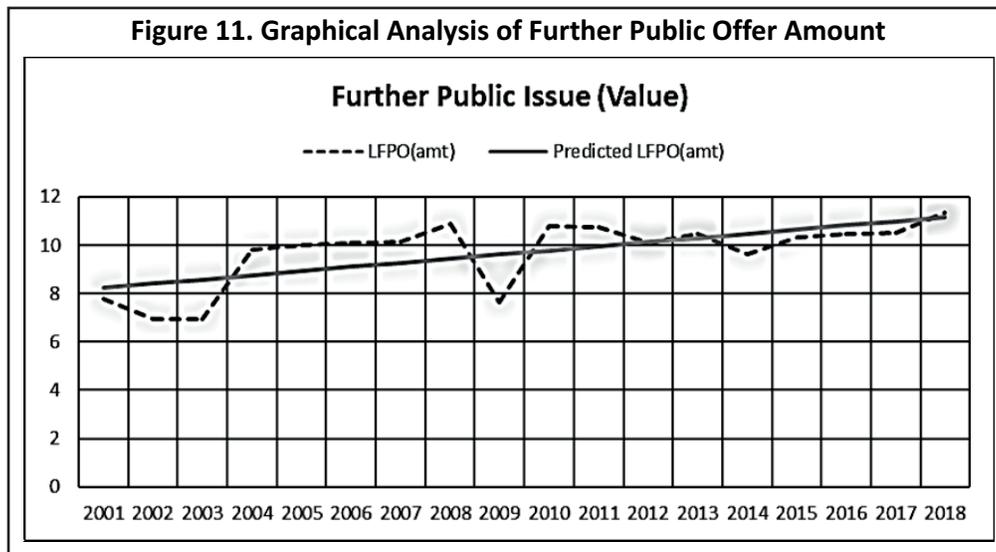
Table 6. Growth Rate Analysis of Further Public Issue

Variable	Growth Rate	P-value
FPO (Value)	17.18%	0.00%
FPO (n)	5.47%	16.18%

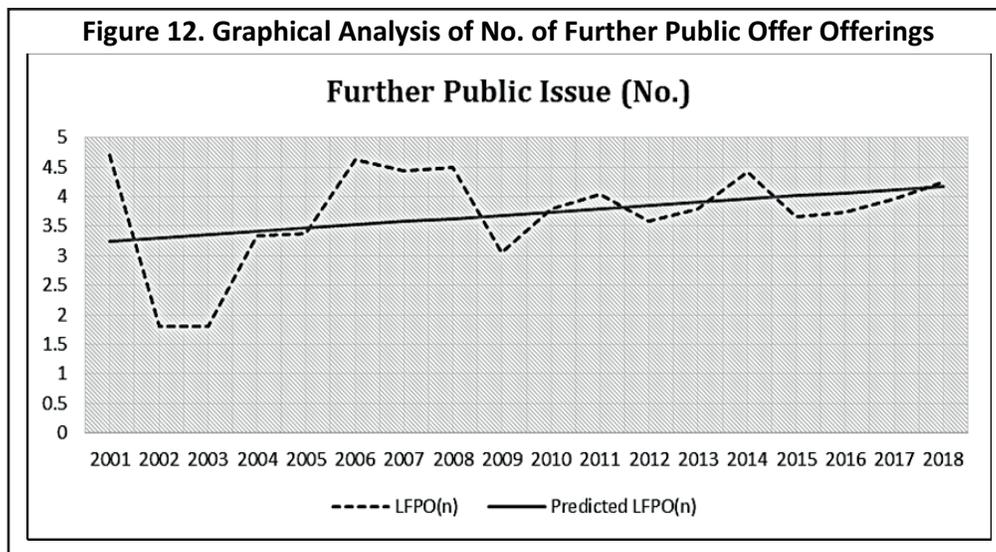
Graphical Analysis

(1) Further Public Offer (Value) : Figure 11 depicts that the growth rate of overseas capital market offerings has been rising over the period of time during the period from 2001 – 2019. It can be further observed that this rising trend (in value) is a good sign as growth in this segment will lead to growth in the capital market.

(2) Further Public Offer (No. of Issues) : Figure 12 represents the results of graphical analysis, where the former graph presents the movement of FPO in a span of 19 years, and the latter graph also shows movement in FPO, but in terms of number of issues over a period of 19 years. Again, both the graphs show upward movement in overall bases. There is no doubt that there is some deviation in actual and predicted value, however, it can be observed that the magnitude of deviation in former years is larger, but in the later years, especially after the



implementation of the New Companies Act, the magnitude of deviation reduced drastically. It clearly points out towards efficiency of a market that is able to channelize the funds from surplus spender unit to deficit spender unit. So, on the basis of the above analysis, the hypothesis H_{06} is rejected and H_{a6} is accepted.



Conclusion

From the analysis and interpretations, it is observed that the market segments : Debt private placement offering, rights issue offering, preferential equity, overseas capital market offering, buyback offering, and further public issue (FPO) of the capital market have driven the market, and as a result, the Indian capital market has shown a positive growth rate during the period from 2001 – 2019. Further, these segments have reported a growing trend in the market, which actually helps the capital market to grow over time. The analysis shows that the cumulative growth of all these sub-segments of the capital market has provided a much-needed growth to the capital market of India.

Research Implications

The outcome of the present study can be used by the policymakers to frame different policies for bringing developmental changes in the capital market of India. Academicians, fellow researchers, and more prominently, the investors (both current and potential) can use the findings to know about the financial structure of the Indian capital market and further for having insights regarding the past performance of the Indian capital market for forecasting the future changes.

Limitations of the Study and Scope for Future Research

The study suffers from some limitations, although these limitations are in the context of scope and coverage. Firstly, the study has analyzed only data pertaining to the period from January 2001 – December 2019. Secondly, the study has focused only on the trend analysis part and does not incorporate any further testing based on the variables. And lastly, the study has used only six segments of the capital market.

Future studies may be conducted on the present subject matter by taking into consideration a longer time period. Further, rather than taking into account only trend estimation, some more dimensions related to the capital market can also be studied. Lastly, in order to conduct more thorough research, more number of variables can also be undertaken by the researchers.

Authors' Contribution

Dr. R. P. Tulsian conceived the idea and developed qualitative and quantitative design to undertake the empirical study. Mr. Rohit Kumar Shrivastav extracted research papers of high repute, filtered these based on keywords, and generated concepts and codes relevant to the study design. Dr. R. P. Tulsian verified the analytical methods and supervised the study. The secondary data were collected by Mr. Rohit Kumar Shrivastav. Dr. R. P. Tulsian helped in filtering the relevant data for study and crystalized the research problem. The numerical computations were done by Mr. Rohit Kumar Shrivastav using EViews-9. Dr. R. P. Tulsian wrote the manuscript in consultation with Mr. Rohit Kumar Shrivastav, and Mr. Rohit Kumar Shrivastav analyzed the data, interpreted the results, and wrote the paper with emphasis on implications as well as provided qualitative inputs for discussion.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

Funding Acknowledgement

The authors received no financial support for the research, authorship, and/or for the publication of this article.

References

- Chen, A. (2000). *Momentum does not matter consistently : The evidence from Taiwan Stock Returns*.
<http://dx.doi.org/10.2139/ssrn.222108>

- Das, B., Mohanty, S., & Shil, N. C. (2008). Mutual fund vs. life insurance: Behavioral analysis of retail investors. *International Journal of Business and Management*, 3(10), 89–103.
- George, S., & Suresh, P. S. (2018). Long memory in Indian equity market : De-trended fluctuation analysis. *Indian Journal of Research in Capital Markets*, 5(3), 7–18. <https://doi.org/10.17010/ijrcm/2018/v5/i3/138173>
- Jain, N., & Bothra, N. (2016). Financial performance of the luxury market : A study of pre and post financial crisis 2007–08. *Indian Journal of Finance*, 10(1), 28–40. <https://doi.org/10.17010/ijf/2016/v10i1/85841>
- Jindal, M. (2017). Risk and return performance of IPOs : An analysis. *Indian Journal of Research in Capital Markets*, 4(2), 61–70. <https://doi.org/10.17010/ijrcm/2017/v4/i2/116089>
- Malhotra, M. S., & Nair, M. (2015). Initial public offerings' underpricing : A study on the short run price performance of book-built IPOs in India. *Paripex- Indian Journal of Research*, 4(2), 197–204.
- Paul, S. (2017). IPO Underpricing in India. *IMI Konnect*, 6(2), 7–10.
- Sehgal, S., & Singh, B. (2008). Determinants of initial and long-run performance of IPOs in Indian stock market. *Asia Pacific Business Review*, 4(4), 24–37. <https://doi.org/10.1177/097324700800400403>
- Shanmugham, R. (2000). Factors influencing investment decisions. In, *Indian capital markets – Trends and dimensions*. New Delhi : Tata McGraw-Hill Publishing Company Limited.
- Singh, A. K., & Bhanumurthy, K. V. (2012). *IPO market: Underpricing or overpricing*. Indira Gandhi Institute of Development Research. Retrieved from http://www.igidr.ac.in/conf/money/mfc12/Amit_bhanu_IPO%20Market.pdf
- Singh, A. K., & Kumar, M. (2019). IPO's underpricing: Trends, determinants and role of underwriters. *Asia-Pacific Journal of Management Research and Innovation*, 14(3–4), 81–93. <https://doi.org/10.1177/2F2319510X18817450>
- Singh, A. K., & Shrivastav, R. K. (2018). Evaluating the impact of the global financial crisis on the stock markets of B R I C S countries. *Indian Journal of Finance*, 12(7), 7–26. <https://doi.org/10.17010/ijf/2018/v12i7/129967>
- Singh, A. K., Kalra, S., & Jham, J. (2018). Factors predicting IPO performance : An analysis. *Indian Journal of Research in Capital Markets*, 5(3), 19–30. <https://doi.org/10.17010/ijrcm/2018/v5/i3/138176>
- Singh, A.K., Maurya, S., & Mohapatra, A.K. (2019). IPO underpricing and predictive power of board related corporate governance mechanisms : A study of Indian IPO market. *Theoretical Economics Letters*, 9(6), 2002–2018. doi: 10.4236/tel.2019.96127
- Wadhwa, B. (2014). Insights into the IPO underpricing for listing on the National Stock Exchange. *Journal of Business Thought*, 5, 38–58.

About the Authors

Dr. R. P. Tulsian, an alumnus of Shri Ram College of Commerce, University of Delhi, has done L.L.B. from Faculty of Law, University of Delhi and obtained his Ph.D in Finance. He has been Fellow Member of the Institute of Company Secretaries of India (ICSI), Life Member of Indian Law Institute, Ministry of Law & Justice, and has been elected two times as a Member of Academic Council, University of Delhi and nominated as Member of Sub-Committee on 'Non-Frill Demat Account' of Securities and Exchange Board of India (SEBI). He has authored/co-authored two books and delivered key note addresses as a Resource Person in several seminars and conferences. He has more than 42 years of experience of teaching in University of Delhi.

Mr. Rohit Kumar Shrivastav, an alumnus of Zakir Husain Delhi College, University of Delhi, is a recipient of various awards of academic excellence. He is pursuing Ph.D (Finance) from Department of Commerce, Delhi School of Economics, University of Delhi. He has more than 7 years of teaching experience and his areas of specialization are finance and investment management (stock market in particular). He has co-authored five chapters in different books and has more than 15 research papers and articles published to his credit. He has also presented papers in various national and international conferences.