

Performance Evaluation of National Stock Exchange of India

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National Stock Exchange (NSE) was incorporated as a Public Ltd Company under the Companies Act 1956 at New Bombay. It was promoted by financial institutions and banks with IDBI as the nodal agency on November 27, 1992. It started its operations in June 1994. Indian securities market architecture has undergone significant transformation over the years. Settlement guarantee fund, Clearing Corporation, and nationwide trading network etc were introduced over the years. National Stock Exchange (NSE) has played the catalytic role in bringing about these transformations. The processes and procedures set by National Stock Exchange marked a paradigm shift in the securities market. The relative importance of various stock exchanges in the market has undergone dramatic change during last decade (1990's). National Stock Exchange in October 1995, within the first year of its operations became the largest exchange in terms of volume transacted.

Moreover, NSE has introduced first time in India, various market practices which were common internationally but were absent from Indian market place for e.g., clearing corporation, settlement through depository, nationwide network and counter-party guarantee etc. Today, these measures have become common features in Indian securities market. Various reforms introduced over the last few years have transformed market practices, reduced fragmentation across market, improved competitive pricing of intermediaries and provided complete anonymity of trading members in the equity market. This stock exchange has also been making an important contribution to the turnover in Indian stock exchanges with more than 40% share in total turnover of stock exchanges.

Despite the ample scope for research work on various aspects of National Stock Exchange, no study has been performed examining data-based performance of National Stock Exchange and its contribution to the Indian securities market. In view of the significance of National Stock Exchange in Indian securities market, this stock exchange has been selected for making a research study which focuses on policy issues and performance.

Objectives of the Study The objective of the study is to conduct an enquiry into organizational arrangements, policies and performance of National Stock Exchange (NSE) with a view to evaluating the role of NSE in the development of capital market. For this purpose the operational objectives of the study are:

1. To study the genesis, objectives, administrative structure and membership of

NSE with a view to examining their suitability for the development of Indian securities market.

2. To evaluate the role of NSE in investor protection in terms of various facilities provided by it to investors (only corporate investors were considered for survey).
3. To assess the extent of volatility in security prices at NSE.
4. To study the role of NSE, relating to trading volume and liquidity.

An examination of the issues inherent to above mentioned objectives is likely to provide an insight which will help in making National Stock Exchange more efficient. The analysis of factors influencing performance of NSE is likely to help the management of NSE in formulating strategies and policies and determining functions accordingly.

Research Methodology The study is based on literature survey and a survey of brokers for getting feedback on various aspects of functioning of NSE. A sample of 40 corporate brokers of NSE was taken on the basis of their availability and willingness to respond. Respondents were given structured questionnaire and questionnaire was filled up by the researcher by interviewing the respondent personally. Data and information have been collected from NSE monthly magazine 'NSE-News', published annual reports of Securities Exchange Board of India, publications of Reserve Bank of India and Union Budgets for different years, periodicals relating to stock market and daily newspapers. Detailed and informal discussions with experts in the field and officials in NSE were held to get knowledge on different aspects of NSE. Only those corporate brokers, who were also investors, were selected for the study, because they were supposed to have detailed knowledge of the market and operations of the exchange. The sample represents 5 percent of total brokers in NSE. This sample represents 6 percent of the corporate brokers in NSE.

Conclusions and Suggestions

Analysis of data / observations in this research study has led to the following conclusions / observations:

1. NSE introduced many new concepts/measures in the securities market. The important ones relate to the Governance of the Exchange. The ownership and management of NSE have been separated from trading rights. The Board of NSE does not include any representative of brokers. Thus, there is clear-cut independence of executive (management) interests from the trading interest of trading members. This concept of an independent Governing Body without any brokers' representation might have helped NSE in formulating policies in the interest of long-term growth. This concept of divorce between ownership and trading rights should be adopted by all the stock exchanges in India.
2. The combined percentage of corporate members in all the stock exchanges increased from 22.6% in 1995-96 to 34.9% in 1999-00. An increasing trend of the percentage of corporate members to total members indicated that securities market has appreciated the services of corporate members. Percentage of

corporate members to total members in NSE increased from 84.3% in 1995–96 to 86.8% in 1999–2000. This shows the conscious effort of NSE to improve the corporate membership. The analysis of operations of corporate members in NSE revealed the positive role of corporate members in maintenance of capital adequacy norms and follow up of margin requirements. The corporate members did not seem to pay attention to provision of expert advice to investors.

3 The analysis of responses of member–investors revealed that the number of NSE– brokers was adequate, and there was no need for increasing it further. It was presumed that an increase in number of brokers would make the market more competitive and healthy. The hypothesis that "*the NSE–brokers should be increased even if their number was adequate*" was not accepted. Non acceptance of this hypothesis indicates that increase in number of brokers may not be a factor for provision of services in a better way.

4 In general there was willingness shown by brokers to execute the orders of small investors. It was presumed that the brokers having large volume of business generally ignore the investors having small holdings. But, there was no strong evidence to accept the hypothesis that "*big–sized brokers often show unwillingness to execute orders of small investors*". It could be concluded that NSE–brokers did not seem to be biased towards big or small investors.

5 The evaluation of the operations of NSE with reference to market surveillance revealed that

Respondents did not clearly agree or disagree with the statement that "*Surveillance Department of NSE monitors the share prices on a real time basis.*"

Respondents tended to agree with the statement that "Surveillance Department of NSE suggests rationally the imposition of special margins on highly speculative scrip".

According to respondents, in the case of violation of trading limits by trading members, the NSE often asked the trading members to reduce dealings within trading limits forthwith. If trading members did not comply with this order, NSE often suspended the trading members.

NSE controlled the spread of false rumor in the market by dissemination of information after verification, but only sometimes.

NSE verified the news that may affect the security prices, for its factual correctness, but only sometimes.

On the basis of above–mentioned observations, it may be concluded that working of surveillance mechanism was not satisfactory as per the feedback from respondents.

6 Analysis of volatility in share price indices of NSE was made on the basis of Nifty

and Nifty Junior indices. The analysis led to following conclusions/ observations:

An increase in volatility in share price indices of NSE was observed over the years. Half the distance of high and low values of index during a month (deviation) computed as percentage of mid value of high–low spread has been taken as a measure of volatility. Increase in volatility indicated that there had been an increase in uncertainty in the market. The indices of Nifty Junior were found to have relatively more volatility than those of the Nifty. The impact of Union Budget was more visible in the case of Nifty Junior indices than in the case of Nifty Indices.

- (b) The Z–test indicated that there was a statistically significant difference between the degrees of volatility of two types of securities indices, viz., Nifty (Index of high capital securities) and Nifty Junior (Index of mid–capital securities). Such a difference justifies the existence of two types of indices on the basis of volatility.
 - (c) The first half of a year was found to be more volatile as compared to the second half of the year. In the first half of the year, the months in order of degree of volatility (from high to low) were March, January, June, May, February and April. NSE authorities should be more vigilant in the first half of the year.
 - (d) The end of trading period i.e., Tuesday was not found to be a factor causing increase in volatility.
- 7 Analysis of turnover of Indian stock exchanges showed a significant increase in turnover over the years. By 1999–2000, the turnover of Indian stock exchanges increased by 9 times the comparable turnover in 1995–96. Turnover in NSE showed relatively larger growth as compared to turnover of other stock exchanges. By 1999–2000, its volume of turnover increased by 12 times the turnover in 1995–96. The share of NSE in total turnover of all the stock exchanges, increased from 30% in 1995–96 to 40.5% in 1999–2000.

Wider reach of NSE facilitated the geographical diversification of its turnover by covering smaller cities. The share of smaller cities in total turnover of NSE improved from 18.5% in 1996–97 to 22.5% in 1999–2000. Over 60 percent of the NSE's trading volume was generated from cities other than Bombay.

NSE reported higher turnover in the regions than that reported by most of regional stock exchanges. It indicates that NSE provided better services than those provided by regional stock exchanges and that its reach had brought geographically scattered investors into the market.

The combined market share of five major Stock Exchanges (i.e. NSE, BSE, Calcutta, Delhi and Ahmedabad) in turnover of all stock exchanges increased from 87.6% in 1995–96 to 97.2% in 1999–2000. In other words, 18 out of 23 stock exchanges (78.2%) were doing business of 2.8% of total turnover. The

combined turnover of major five stock exchanges increased by nine times between the period 1995–96 to 1999–2000 compared to an increase of 1.9 times of turnover of rest of the stock exchanges. The increasing trend of concentration of trading in major stock exchanges indicates that regional stock exchanges are losing their business.. Increasing monopoly of NSE requires restructuring of Indian stock exchanges with a view to providing justification for existence of regional stock exchanges.

- 8 The wider reach of NSE through out the country could be reflected by an increase in number of transactions in NSE. The number of transactions in NSE in a month reached to over 99 Lakh in March 2000 compared to 1.37 Lakh in March 1996. The total monthly turnover of NSE reached to over Rs 96,000 crore in March 2000 compared to Rs 62,000 crore in March 1999 and Rs 35,000 crore in March 1997. On an average, 91% of the total scrips available for trade in NSE were traded in a month. Analysis of number of scrips traded in a day in NSE showed that on an average more than 80% of the scrips were traded in a day. This indicated that NSE was active to a very great extent.

The increase in number of transactions and increase in turnover ratio (Turnover to Market Capitalization Ratio), and high percentage of scrips traded in a month / day indicated that NSE provided a ready market for securities and ensured liquidity in the market. The High-Low ratio also indicated that out of 36 Months, 29 Months observed moderate to high degree of liquidity.

- 9 Liquidity offered by NSE was concentrated to few stocks only and was thin in a large number of stocks. Between 1996 and 1999, the top 100 stocks contributed about 95% (1999) to 98% (1996) of the total trading volume of NSE. The top 10 stocks contributed between 61% (1999) and 92% (1996) of the total turnover of NSE. It could be interpreted that only 8% of traded scrips at NSE (at end of March 1999, 1254 scrips were listed / permitted to trade in NSE) contributed more than 92% of the trading volume and rest 92% of the scrips contributed only about 8% of the trading volume. The ratio of delivered value to traded value in NSE declined from 16.03% in March 1997 to 10% in March 2000. Though, it was claimed that the NSE will be free from speculation but the declining delivery ratio and increase in concentration of trading activities in few scrip's indicated that NSE was not able to restrict the speculative tendencies in the market.