

***“Stock Market Reforms – A Comparative study between Indian Stock Exchanges & Select Exchanges Abroad”***

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**Abstract**

The Indian capital market has witnessed major reforms in the 1990s and thereafter. The Government of India and SEBI has taken a number of measures in order to improve the working of the Indian stock exchanges and to make them more progressive and vibrant. The stock market is witnessing heightened activities and is increasingly gaining importance. In the current context of globalization and the subsequent integration of the global markets this paper captures the major reforms pertaining to the Indian Stock Markets in comparison to the international counterparts.

The research paper attempts to compare Indian Stock Markets with the major global stock exchanges like New York Stock Exchange (NYSE), London Stock Exchange (LSE) and Tokyo Stock Exchange (TSE) with respect to stock market reforms.

**Keywords:** Global Stock Exchange, Stock Market Reforms, Globalization, Integration

**1.0 Introduction**

In India, the process of Liberalisation, Privatisation and Globalisation (LPG) was given a thrust in 1991 when the economy suffered severe crunch of foreign exchange reserve, balance of payment crisis, declining industrial production, galloping inflation and a rising fiscal deficit. Major

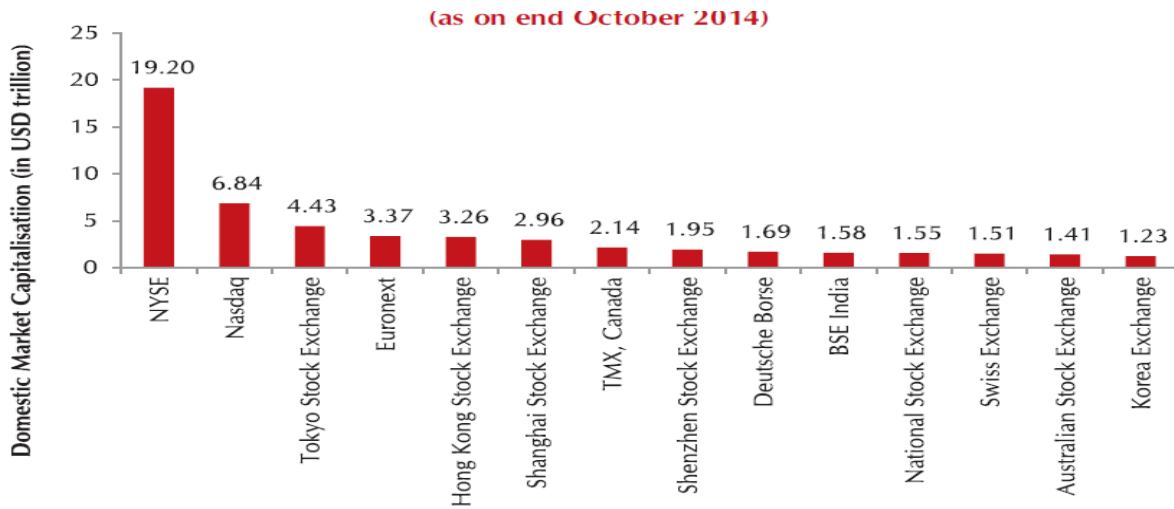
reform was the establishment of the Securities and Exchange Board of India

(SEBI) to regulate and promote development of securities market; SEBI brought in several measures which included free pricing of securities, investor protection measures, use of information technology, dematerialisation of securities, improvement in trading practices, evolution of an efficient and transparent regulatory framework, emergence of several innovative financial products and services and specialised FIs etc. aimed at creating efficient and competitive securities market.

These reforms have led to exponential growth of the Securities market in India measured in terms of amount raised from the market, number of stock exchanges and other intermediaries, the number of listed stocks, market capitalisation, trading volumes and turnover on stock exchanges, investor population and price indices. Along with this, the profiles of the investors, issuers and intermediaries have changed significantly. The market has witnessed fundamental institutional changes resulting in drastic reduction in transaction costs and significant improvements in efficiency, transparency and safety in terms of minimisation of scams and market manipulations. Indian market is now comparable to many developed markets in terms of a number of parameters, In terms of number of companies listed on stock exchanges, India is second to none. Currently BSE and NSE are ranked at no 10 and 11 in terms of Market capitalisation in the World. (**Refer Table 1.1**) Estimated investor population in India is at 2.5crores in 2015 as compared to a population of 1.2 billion. These figures indicate the

tremendous potential for growth of Indian securities market.

**Table 1.1 World's Largest exchanges Source : WFE**



**Table 1.2a: Primary Market Performance of India in 1997-1998 (Rs in crores)**

Sector	1997-98		1998-99		April - Dec 99	
	No.	Amount	No.	Amount	No.	Amount
Private	102	3820.97	55	5483.14	57	5509
Joint	03	31.11	02	33.02	1	14
Public	06	717.87	01	70.30	2	200
<b>Total</b>	<b>111</b>	<b>4569.95</b>	<b>58</b>	<b>5586.46</b>	<b>60</b>	<b>5733</b>

*Source: SEBI*

**Table 1.2b: Primary Market Performance of India in 2013-14**

Sector	2012-13		2013-14		Apr - Sep'14	
	Number	Amount (₹ mn)	Number	Amount (₹ mn)	Number	Amount (₹ mn)
Private	55	176,900	70	116,810	37	43,350
Public	14	147,650	20	439,700	10	39,090
<b>Total</b>	<b>69</b>	<b>324,550</b>	<b>90</b>	<b>556,520</b>	<b>47</b>	<b>82,440</b>

*Note: This table includes public issues and rights issues*  
*Source: SEBI*

**Table 1.3: Indian Secondary Market Performance**

	1999	2014
<b>Market Capitalisation</b>	Rs 5,57,064 crores	Rs 74,15,296 crores
<b>Turnover</b>	Rs 10,23,382 crores	Rs 3,34,14,400 crores

The stock market is witnessing heightened activities and is increasingly gaining importance as seen in **Table 1.2a**, **Table**

**1.2b** and **Table 1.3** In the current context of globalization and the subsequent integration of the global markets this paper

captures the major reforms pertaining to the Indian Stock Markets in comparison to the international counterparts and tries to identify the way forward.

## 2.0 Research Design

**Objective of the Study:** The research paper attempts to compare Indian Stock Markets with the major global stock exchanges like New York Stock Exchange (NYSE), London Stock Exchange (LSE) and Tokyo Stock Exchange (TSE) with respect to stock market reforms and tries to identify a way forward.

**Scope of the Study:** The study restricts itself to Stock market reforms post 1992 in India and reforms in NYSE, LSE and TSE abroad. The study is more focussed on reforms in Equity market.

**Limitations:** The data is secondary in nature. Primary data may bring in more dimensions and improve the quality of the analysis.

## 3.0 Stock Market Reforms in India and Abroad

The Indian capital market has witnessed major reforms in the 1990s and thereafter. The Government of India and SEBI has taken a number of measures in order to improve the working of the Indian stock exchanges and to make them more progressive and vibrant. The stock market is witnessing heightened activities and is increasingly gaining importance.

### 3.1 Indian Stock Market Reforms:

#### Primary Market reforms

- IPO norms were made more stringent and QIB market was introduced with limits

- More requirements of Disclosure by issuers.
- Regulations were framed and code of conduct were laid down for all primary market intermediaries
- IPO grading has been introduced.

#### Secondary market reforms

- Capital adequacy and prudential regulations were introduced and enforced for secondary market intermediaries
- Rigorous enforcement of Margin system
- Improvements were brought about in Stock Exchange governance system.
- In a short time ,most of the stocks were Dematerialized
- Automation of stock exchanges with introduction of On-line trading
- Reduction in Settlement time
- Introduction of Derivatives in stock markets

Apart from the above, the following reforms by NSE and BSE have contributed to development of Indian Stock market

#### National Stock Exchange (NSE)

The National Stock Exchange (NSE) is India's leading stock exchange covering

various cities and towns across the country.

**Table 3.1: Market Statistics NSE (Source NSE India)**

CAPITAL MARKET (EQUITIES) SEGMENT			
1	Record number of trades	16-May-2014	1,18,05,386
2	Record daily turnover (quantity)	26-May-2014	21,059.59 lakhs
3	Record daily turnover (value)	29-May-2015	₹ 43,621.27 crores
4	Record market capitalisation	13-Apr-2015	₹ 1,04,20,430 crores

### Bombay Stock Exchange (BSE)

At par with international standards, BSE Ltd. has been a pioneer in several areas over the decades and has many firsts and key achievements to its credit. BSE is the first exchange in India to

- SME securities trading platform and reporting platform for corporate bonds launched
- Equity Derivatives were introduced
- S&P BSE SENSEX a free float index was used
- Exchange Enabled Internet Trading Platform was introduced
- Financial training facility in the form of BSE Institute Ltd.
- Mobile-based trading introduced
- S&P BSE IPO index and S&P BSE PSU website were launched
- S&P BSE SENSEX futures trading on EUREX and leading exchanges of the BRICS nation bloc was launched.
- Smart Order Routing for members and investors
- SACT (SMS alert & Complaint Tracking system) was introduced
- Co-location facility at BSE premises
- Reduction in membership fees to to promote financial access and inclusion
- Web-based mutual fund trading platform for investors

**Table 3.2 BSE Statistics (as on 17th June 2015)**

Market Capitalization of BSE Listed Co. (Rs.Cr.)	<b>98,46,493</b>	No. of Companies Traded	<b>2,781</b>
No.of Listed Companies	<b>5,689</b>	Total No. of Orders	<b>36,28,72,859</b>
No.of Suspended Companies	<b>1447</b>	Equity Orders	<b>33,25,23,272</b>
No.of Companies Eligible for Trading	<b>4242</b>	Median Response time(µS)	<b>195</b>
Registered Investors	<b>2,80,22,678</b>		

**Source: BSE India**

### 3.2 Global Stock Market Reforms

Over the past decades, many countries have implemented significant reforms (including financial liberalization, privatization, and regulatory and supervisory improvements) to foster domestic capital market development. However ,there has been an increasing

migration of securities market activities to major international financial centres, such as New York and London. Reforms in few leading stock exchanges of the World are detailed below:

1. **New York Stock Exchange (NYSE)** - It is by far the world's largest stock exchange by market capitalization of its

listed companies at US\$16.6 trillion as of February 2015. Operated by NYSE Euronext, the holding company created by the combination of

NYSE Group, Inc. and Euronext N.V. Few Reforms in NYSE are detailed below:

- Facilitation for IPOs through NYSE Euronext
- Connectivity through Secure Financial Transaction Infrastructure (SFTI)
- Access to Real Time market data
- Liquidity through Variety of Trading Models
- Wide Range of Products
- Facilities for High Frequency Trading

**2. London Stock Exchange (LSE)** It has a Market Capitalization of 4.09 Trillion GBP and a volume generating 1.16 Trillion GBP as on December 2014. It has around 3,041 companies from over 70 countries admitted to trading on its markets. Few reforms are detailed below:

- Effective Communication mechanism with investors through Regulatory News Service (RNS)
- Access to Real Time data
- User friendly Market data information/trading application Proquote
- Availability of powerful Pre and Post trade Execution Monitoring and Analysis tools connection,
  - Exchange Hosting
  - Customer Managed Connectivity
  - Extranex
  - Network Service Providers (NSPs)
  - Vendor Access Network (VAN)
- Facilitating trading through multi-order booking system SETS

### 3.0 Tokyo Stock Exchange

The **Tokyo Stock Exchange (TSE)** for short, is a stock exchange located in Tokyo, Japan. It is the third largest stock exchange in the world by aggregate market capitalization of its listed companies. It had 2,292 listed companies with a combined market capitalization of US\$4.09 trillion as of April 2015.

Few Reforms

#### Market Surveillance and Compliance

Financial Instruments and Exchange Act (FIEA) in Japan regulate stock trading and monitors insider trading, market manipulation and other unfair acts. Japan Exchange Regulations, Market Surveillance and Compliance Department, continuously monitors the market for any unfair trading, and the same is reported to the Securities and Exchange Surveillance Commission (SESC). The department is also involved in educational initiatives and clarifies queries on laws and regulations.

#### Maintaining Quality of Trading Participants

To maintain high standards in the market operations and ensure fair price formation and smooth operations, strict compliance is adhered to following processes:

- Admission Process of Trade Participants
- Trading Participants Inspection Process
- Process for initiating Disciplinary Actions
- Examination & Inspection Department activities

- Support in Compliance
- Liasoning with Other Regulators
- **Scalability:** Provision for future expansion
- **Connectivity :** Access to globe

### Strong IT Infrastructure

- **Low latency (reduced network latency)** Achieves a network of low latency (via Access Point: about 260 microseconds one-way , via Co-Location Area: about 15.7 microseconds one-way ).
- **Reliability (secure 99.999% availability):** strong back up and disaster management support

### 4.0 Way Forward

According to the WFE statistics, in terms of the number of trades in equity shares, the NSE ranks numero uno at end September 2014. The trade details of the top-ranked stock exchanges are presented in the below Table.

**Table 4.1: Number of trades in equity shares of top ranked stock exchanges**

Exchange	End December 2012	End December 2013	End September 2014
NYSE Euronext (US)	1,374,539	1,187,800	1,091,855
Shanghai Stock Exchange	925,550	1,153,367	876,613
NSE	1,406,498	1,449,227	1,298,294
Shenzhen SE	935,565	1,289,435	1,135,297
Korea Exchange	1,218,992	1,031,553	812,411

\* Year to date.

Source : WFE Reports

The movement of a few of the selected indices presented in table below brings out the trends witnessed in the Indian and foreign markets during 2012–13 and 2013–14. A global comparison in 2013-14, shows that most of the indices recorded

returns in the range of 2.5-20 percent, barring NASDAQ which witnessed maximum returns of 28.5 percent. NSE and BSE exhibited healthy returns as compared to some of their foreign counterparts.

**Table 4.2: Returns on few selected indices across the globe**

Region	Index - Country	End March 2012	End March 2013	End March 2014	End Sep 2014	Change during 2012-13 (Percent)	Change during 2013-14 (Percent)	Change during Apr-Sep '14 (Percent)
Americas	Dow Jones	13212.04	14578.54	16457.66	17042.90	10.3%	12.9%	3.6%
	Nasdaq	3091.57	3267.52	4198.99	4493.39	5.7%	28.5%	7.0%
Europe	FTSE 100- UK	5768.45	6411.70	6598.40	6622.70	11.2%	2.9%	0.4%
	CAC 40 - France	3423.81	3731.42	4391.50	4416.24	9.0%	17.7%	0.6%
Asia Pacific	Nifty 50 (S&P CNX Nifty)- India	5295.55	5682.55	6704.20	7964.80	7.3%	18.0%	18.8%
	BSE Sensex- India	17404.20	18835.77	22386.27	26630.51	8.2%	18.8%	19.0%
	Hang Seng- Hong Kong (China)	20555.58	22299.63	22151.06	22932.98	8.5%	-0.7%	3.5%
	Nikkei- Japan	10083.56	12397.91	14827.83	16173.52	23.0%	19.6%	9.1%
	Kospi - South Korea	2014.04	2004.89	1985.61	2020.09	-0.5%	-1.0%	1.7%

Source: Yahoo Finance and NSE

### Expansion of Investor base

Even though as per **Table 4.1**, Indian market leads in trading of equity shares in

terms of number of trades, NSE and BSE need to maintain their competitive position as compared to other exchanges and increase their retail investor base. With a

huge population with favourable demographics and decent returns as seen in **Table 4.2**, Indian stock markets need to attract retail investors. The proportion of retail investors in India's equities markets is strikingly low. Less than 1.5 percent of the population invests in securities, compared with almost 10 percent in China and 18 percent in the U.S. Just 2 percent of India's household savings are exposed to equity; in the U.S., the long-term average is 45 percent.

### **Regulated Foreign Portfolio Investment**

With Indian markets opening up to Foreign Portfolio Investors, it will result in competition and greater efficiency. However, foreign participation will bring increased risk and exposure. Stability is thus needed for financial markets for which safeguarding mechanism has been established by formation of regulations related to Foreign Portfolio Investors by SEBI. them access to high quality financial service .

### **Minimising Cost of Transaction**

Another Challenge faced by the investor is the cost involved in trading, which are comparatively higher in India, than in developed markets.

### **Creating Cutting edge IT Infrastructure**

A Strong IT infrastructure facilitates operational efficiency in the markets and builds investor confidence as well as enhances their satisfaction. IT Infrastructure need to facilitate algorithm trading which need low latency of trading. Both BSE and NSE have facilitated this and have world class latency level. BSE is working towards latency level of 10 micro seconds from current levels of 196 microseconds. LSE has one of the best latency in terms of 124 micro seconds. Co-location of servers for faster execution of trades and smart order routing applications (which route the order to the exchange

where the probability of execution would be highest at the best price).

### **Remote Connectivity**

Even though banking sector has shifted to NEFT and RTGS, the expansion of benefits of the same to Tier 3 cities, towns and villages may take time and this may delay popularity of internet trading and attractiveness of stock market investments to investors in these places.

### **Shift to T+1**

Even though the banking sector is in a position to support this transition, however internet connectivity in remote locations is still in nascent state and the banking transactions takes more time thereby increasing the transaction time.

### **Investor Education**

SEBI need to encourage investment in markets by educating the prospective investors. Current, investor education programmes need to be strengthened. Investors need to be enlightened about use of Fundamental and Technical analysis to support their stock market decision making.

### **Innovative products and Services**

Stock markets need to extend the range of products and services to attract new investors and retain existing investors.

### **Popularise the IPO market**

IPO market has several regulations in place to prevent manipulations and facilitate effective price discovery. Learning from scams have facilitated improvements .IPO rating facilitate investor decision making process. Despite these reforms the IPO market performance is far from satisfactory, a lot can happen in this market.

### **Focus on SME sector**

Indian economy comprises of several enterprises in the SME sector. This sector can help in expanding the investor base of the markets.

### 5.0 Conclusion

Innovation and reforms are essential for an emerging capital market like India. They lead to decrease in the reduction in cost of acquisition of capital and make capital market investment less risky. However this may entail huge investment in IT infrastructure. A well-developed capital market supports economic growth and attracts FDI. Emerging Markets like India need to further sustain the reforms that have been initiated, ease the operations, educate investors, provide investor protection, bring in more transparency in operations and refine policies to increase the depth and reach of the capital market and to make it as competitive as the world's best stock markets.

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