

GLOBALISATION THROUGH ECONOMIC WINDOWS: A COMPARATIVE STUDY

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ABSTRACT

In the current Globalisation era and subsequent integration of the world financial markets, the role of Stock Exchanges cannot be ignored. Today, Stock Exchanges in different countries are crossing their national boundaries to impart various financial services in order to achieve the goal of cross-border integration. Overseas investors are facilitated by this and gradually global market becomes one in this process. Indian Stock Exchanges in this context, hold a place of prominence at the global stage. The present paper makes an attempt to compare different trends and patterns in the activities and movements of the Indian Stock market with that of international counterparts. The areas that are covered in the present paper are, global market penetration (capitalization), inter relationship of price trends, return, risk and trend of FPI etc. For this comparison, some selected Global stock Exchanges are considered for the study. They are National Stock Exchange (NSE), New York Stock Exchange, Hong Kong Stock Exchange, Tokyo Stock Exchange and London Stock Exchange. By comparing the above stock exchanges, the current paper tries to test the integration of Indian Stock Market with its Global counterparts and study the trend of Global Equity Market as a whole by interpreting its role in Global Economic Scenario. Time period of the study is post Financial Crisis period i.e. from 1st January, 2010 to 1st January, 2017.

Key words: Global Economic Scenario, Comparative Analysis, Stock Market.

Introduction:

The development of an economy is largely influenced by financial markets in form of mobilisation of fund from surplus unit to the deficit units in order to maintain equilibrium. India as a developing country has put its effort to be on this path in recent years and has achieved a significant growth.

Today the Indian Stock Market being the economic window of the country's economy holds a prominence place in Global Financial Market because of the continuous effort of Govt. and RBI. The Indian stock market scenario really maintained a growth after 1992. Introduction of new technology and strategy helped the market to become one of the effective and efficient markets of

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the world. It helped the domestic market to open up and led to increased integration with heightened cross-border flow of capital, with India emerging as an investment “Hot Spot” resulting in our stock exchanges being impacted by global factors like never before.

The present study aims at comparing the Indian Stock Market with respect to various international counterparts. Exchanges are now crossing national boundaries to extend their services and thus leading it to cross border integration. Services like cross border trading facilitates the overseas investment options for investors. This is not only increased the appeal of the exchange for investors but also attracts more volume. Exchanges regularly solicit companies outside their domestic territory and encourage them to list on their exchange and global competition has put pressure on corporate houses to seek capital outside their home country. India is no exception from these factors. So, it has been tried to compare Indian Stock Market with its counterparts in terms of market capitalization, listing companies, risk, return, trend of FPIs and correlation of price trends. To avoid any biasness on stock market performance, post financial crisis period is considered as the study period.

Background of Selected Stock Exchanges:

For the present study, some selected Stock Exchanges around the world are selected. They are New York stock Exchange, Hong Kong Stock Exchange, London Stock Exchange, Japan Stock Exchange and National Stock Exchange of India.

The Indian stock market is the world third largest stock market on the basis of investor base and has a collective pool of about 25 million investors. There are over 9,000 companies listed on the stock exchanges of the country. The Bombay Stock Exchange, established in 1875, is the oldest in Asia. National Stock Exchange, a more recent establishment which came into existence in 1992, is the largest and most advanced stock market in India is also the third biggest stock exchange in Asia in terms of transactions. It is among the 5 biggest stock exchanges in the world in terms of transactions volume. National Stock Exchange, a more recent establishment which came into existence in 1992, is the largest and most advanced stock market in India is also the third biggest stock exchange in Asia in terms of transactions. It

is among the 5 biggest stock exchanges in the world in terms of transactions volume. For the above reasons, NSE is considered for the present study as a sample.

NSE: It started operations in 1994 and is the largest stock exchange in India in terms of total and average daily turnover. In 1994, electronic screen based trading and in 2000, derivatives trading were launched by NSE and today it provides a range of financial services in form of trading, clearing & settlement, financial education etc.

New York Stock Exchange: Having the market capitalization of around 15,000 Billion USD, this is the largest stock exchange in the world. NYSE offers a wide range of financial products and services in different products like cash equities, futures, options, ETPs, bonds etc. Around 8500 securities are listed in this exchange and it includes 90% of the Dow Jones Industrial Average and 82% of the S&P 500 stock market indexes volume.

Japan Stock Exchange: This third largest stock Exchange of the world has a market capitalization of 3500 Billion USD and trade value of 4000 Billion USD. It had 2,292 companies which are separated into the First

Section for large companies, the Second Section for mid-sized companies, and the Mothers section for high growth start-up companies. The London Stock Exchange and the Japan Stock Exchange are developing jointly traded products and share technology.

London Stock Exchange: It is the oldest (founded in the year 1801) and fourth largest stock Exchange of the world having market capitalization of 3300 Billion USD and trade value of 2871 Billion USD. It is the most international of all the world's stock exchanges, with around 3,000 companies from over 70 countries admitted to trading on its markets. The London Stock Exchange runs several markets for listing, giving an opportunity for different sized companies to list.

Hong Kong Stock Exchange: It is the third largest stock exchange in Asia and the sixth largest in the world in terms of market capitalization (2300 Billion USD and trade value of 1447 Billion USD). Hong Kong Stock Exchange (SEHK) has about 1,477 listed companies and it operates securities market and a derivatives market in Hong Kong and the clearing houses for those markets. The three largest stocks by market capitalisation in Hong Kong Stock Exchange

are PetroChina, Industrial & Commercial Bank of China, and China Mobile.

Objectives:

As the present study is a comparative one, thus the objectives are as follows

- To study and compare market capitalization of selected sample stock exchanges.
- To study and compare listed companies of selected sample stock exchanges.
- To identifying the price correlation of selected sample stock exchanges
- To study the FPI trend of India for the study period and interpret the same.
- To analyse the impact of Indian Stock Market on its global counterparts.

Methodology:

Data, Statistical tool & Time period

As the present study is a comparative one, Indian Stock market is compared with that of some selected stock Exchanges from all over world. The following table contains the list of sample stock exchanges that are used for this purpose.

Table 1: List of sample Stock Exchanges

Country	Stock Exchange	Index
India	National Stock Exchange	S & P CNX Nifty 50
US	New York Stock Exchange	NYSE
Hong Kong	Hong Kong Stock Exchange	Hang Seng
UK	The London Stock Exchange	FTSE 100 (The Financial Times Stock Exchange Index 100)
Japan	Tokyo Stock Exchange	TOPIX

All data used in the study are secondary in nature. The official websites of the above Stock Exchanges are used to collect data. Their respective indices and the closing prices for the study period are considered. For computation of return, annual average return is estimated and used. In order to estimate risk of the price trend, statistical tool standard deviation is used as its the measure of volatility and in other terms risk factor. The time period of the study is from 1st January, 2010 to 1st January 2017 i.e. 7 years. Reason behind selecting this time frame is to avoid the impact of Financial Crisis on the performance of Stock Exchanges. Market price of shares is prone to demand and supply factors in the market and these factors are more influenced by different external reasons like Recession or Financial Crisis. So, to avoid these systematic factors the above time period is considered for the study.

Analysis & Interpretation of Result

Market Capitalization of sample Stock Exchanges:

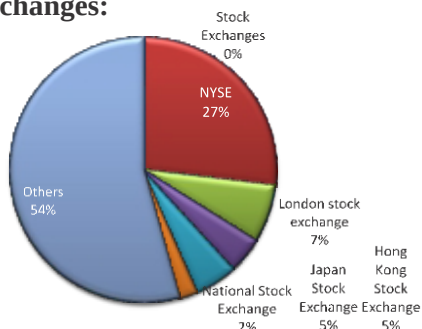


Table 2:

Market Capitalization of sample Stock Exchanges as on 1st January, 2017

Stock Exchanges	Market Capitalization (in trillion \$)
NYSE	18.8
London stock exchange	4.9
Hong Kong Stock Exchange	3.1
Japan Stock Exchange	3.6
National Stock Exchange	1.6
Others	38
Total	70 Trillion \$

The above graph shows the market penetration of the selected sample Stock Exchanges as shown in table -2. It can be clearly seen that New York Stock Exchange is the market leader in terms of Market Capitalization and trade value. NYSE is the premier listing venue for the world's leading large- and medium-sized companies. Operated by NYSE Euronext, the holding company created by the combination of

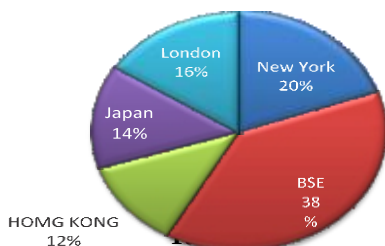
NYSE Group, Inc. and Euronext N.V. Featuring more than 8000 listed issues it includes 90% of the Dow Jones Industrial Average and 82% of the S&P 500 stock market indexes volume. London Stock Exchange is the second largest one having around 3000 listed companies from around 70 countries.

Third largest stock exchange is the Japan Stock exchange in the world by aggregate market capitalization of its listed companies. It had 2,292 companies which are separated into the First Section for large companies, the Second Section for mid-sized companies, and the Mothers section for high growth start-up companies. The main indices tracking Tokyo Stock Exchange are the Nikkei 225 index of companies selected by the Nihon Keizai Shimbun, the TOPIX index based on the share prices of First Section companies, and the J30 index of large industrial companies. 94 domestic and 10 foreign securities companies participate in TSE trading. The London Stock Exchange and the Tokyo Stock Exchange are developing jointly traded products and share technology. It can be seen that NSE has approximately 1.6trillion USD worth of market share that is comparatively lower than the major stock exchanges all over the world.

Comparison of Stock Exchanges in terms of listed companies

Graph 2

Number of listed companies



No of listed companies in sample Stock Exchanges

Stock Exchanges	Number of listed Companies
New York	2800
NSE	1750
Hong Kong	1710
Japan	2006
London	2267

The above graph shows the status of number of listed companies in the sample Stock Exchanges as shown in table -3. In the year 2015, BSE has extended its lead as the world's top exchange in terms of the number of listed companies, outpacing major global peers such as NYSE, Nasdaq and London Stock Exchange. The BSE had a total of 5,174 companies listed on its platform at the end of last month, outpacing its close rival Canadian bourse TMX Group by more than 1,000 firms or over 20 per cent, as per the latest data available with the World

Federation of Exchange (WFE). The number of listed companies on BSE platform is almost double that of major bourses like UK's London Stock Exchange and American bourses like Nasdaq and NYSE. The National Stock Exchange (NSE) is ranked 10th with a total number of 1,660 listed companies. The listed firms on BSE has increased from 5,115 in January to 5,174 in October, the WFE data showed. The number of companies listed on BSE rose by 11 companies in October alone. BSE is followed by TMX Group, BME Spanish Exchanges, London SE Group, Nasdaq, OMX, NYSE Euronext (US), Tokyo SE Group, Australian SE, Korea Exchange and NSE in the top 10. While TMX has 3,964 listed companies, London Stock Exchange has 2,782 companies, Nasdaq OMX has 2,598 and NYSE Euronext(US) has 2,345.

Trend of FPI for the Study Period:

Foreign Investment can be broadly classified into 2 segments. FDI and FPI. Table 4 shows the trend of FPI in Indian Stock Market. The FPI (Foreign Portfolio Investment) in a stock market is the net investment, or the gross purchases minus gross sales. In fiscal 2015 and 2016, the government of India took several measures to boost foreign investments. India's fiscal year begins in

April and ends in March of the following year. The trend is volatile in nature. The reason can be because of the factors like Chinese market crash, BERSIT and rise in federal rate which provoked a global sell-off, was also reflected in this huge FPI exodus from India. The government's endeavours included attempts to bring more clarity to the tax treatment of the gains of the transactions in the securities market, the retrospective tax treatment, and FDI reforms (foreign direct investment) in various sectors. The country's FPI Regulations 2014 initiative is an effort to ease entry norms for foreign investors.

Table 4:
FPI trend in last 7 years (In INR Crores)

Year	Equity	Debt	Total
2010-11	110121	36317	146438
2011-12	43738	49988	93726
2012-13	140033	28334	168367
2013-14	79709	-28060	51649
2014-15	111333	166127	277461
2015-16	-14172	-4004	-18176
2016-17	16140	-37509	-21369

Source: <https://www.fpi.nsdl.co.in/web/Reports/Yearwise.aspx?RptType=5>

Risk & Return

This section tries to compare the various exchanges on the basis of returns and the corresponding risks associated with it, returns being, perhaps, the single most important factor affecting the performance of

any index. While risk can be termed as the major factor underlying all activity, it becomes imperative to compare the exchanges based on this parameter. Table 5 exhibits the historical risk-return figures of the exchanges. From the return perspective, NYSE seems to be most stable among all of these stock exchanges. There are only one year when NYSE has given the negative returns, i.e. in the years 2010. It may be because of the impact of Financial Crisis that ended in the year 2009 and the market was in recovery phase. NSE seems to have followed or moved in tandem with the NYSE more after year 2010. Hong Kong stock market is also very stable from the standard deviation angle. But this market has also not much appreciated over these years and it remains more or less range-bound. Hong Kong has shown the highest volatility as it is a much traded stock exchange. Also, the events like East Asian crisis have also affected the volatility of this exchange. But, nevertheless, the volatility has reduced in the recent years than it has in the period 2010-2015. Yet, it is more volatile than the other stock exchanges that we have compared. NYSE is a mature and most stable market of all these. The volatility has remained more or less constant over the years. The volatility of the NSE is

less fluctuating over these years as the trading and market capitalization of the companies has increased.

exchanges where the particular company is listed. This has not only facilitated the integration process but also increased the sensitivity of the home country's stock

Table 5: Risk & Return of sample Stock Exchanges

Year	NSE Risk Return		NYSE Risk Return		Hong Kong Risk Return		Japan Risk Return		London Risk Return	
2010	89	-12%	457	-5%	365	-12%	176	2%	412	-16%
2011	103	13%	367	8%	564	4%	203	10%	345	-5%
2012	121	8%	472	9%	677	12%	323	12%	328	4%
2013	167	4%	442	15%	678	17%	361	12.50%	402	12%
2014	154	21%	388	18%	876	6%	275	13.40%	478	16%
2015	134	18%	402	23%	776	11%	298	24%	490	18%
2016	121	24%	381	15%	854	13%	299	16%	451	11%

CONCLUSION:

The result of this comparative study clearly shows the robustness and efficiency of Indian Stock Market and it is considered as one of the best in the world. The result further shows, market react to global factors and thus started to integrate with the global market. The financial sector as a whole, with the stock markets as its indicator, has indeed come a long way and are ready for the next level with regards to efficient trading and variety in the instruments traded. The increased trend of has also contributed as a channel for information transfer between the

exchange to the movements of various other exchanges especially where the home company is listed. As for the existence of any signals or patterns among the stock exchanges, it can safely be said that the markets do react to global cues and any happening in the global scenario be it macroeconomic or country specific (foreign trade channel) affect the various markets. Thus this study concludes that the Indian market in particular is more integrated with other global exchanges and the impact is more robust from 2010-11 onwards.

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