

Comparative Study on Regulatory Framework of Indian, Chinese and American Stock Exchange

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ABSTRACT

This paper examines the regulatory framework governing the Stock exchanges of India, China and the United States highlighting their distinctive features and their day to day functioning. In addition to this paper also emphasize on their listing agreements. The regulatory environment in the market ensures market integrity, economic stability and investor protection. the regulatory authorities of India, Chinese and American Stock exchange has developed according to the needs of investor. Securities and Exchange Board (SEBI) enforced measures in order to maintain transparency. Securities and Exchange Commission (SEC) not only emphasis investor protection but also ensures prevention from fraud and market fairness. China Securities Regulatory Commission reflects the socialistic market. It not only incorporates state control but also emphasis market mechanism .

1. INTRODUCTION

A capital market is a set up that assist an economy by providing a way through which companies can increase the funds for business operation and wealth enhancement. It bridges a gap between small and scattered investors who want to invest their savings in the corporate world and the companies who are in need of fund to make fulfill their short and long term fund requirements. A regulated and systematic capital market contributes in the development of the economy. Capital market is the stock market of the country where securities are bought and sold. An efficient stock market, with a good banking system, thus enables not only to promote economic growth, but also to predict it. Indicators like capitalization, liquidity, asset pricing and turnover relating to stock market operations has been used to understand whether a national economy is proceeding on sound lines or not.(Amanulla, 1997).

There are two types of Capital Market: Primary market and Secondary market. In a Primary market, first time trading takes place, enabling Initial Public Offering (IPO), whereas in a Secondary market old securities or second hand securities are traded. In order to measure the growth of Stock market, indexes are used to estimate the level of growth in the market over the period of time. Stock prices go up and down because of the price fluctuation and price of the script is functioned under demand and supply forces. As long as, influx of investment is at larger extent, the indices of the stock market react positively showing upward trend. (Navleen Kaur, 2016). A stock market index is a statistical tool that shows the changes taking place in a market. Some similar stocks are grouped together among securities listed on the exchange and changing price of these securities will affect the overall index. If there is increase in price of security, indice rises and if there is fall then indice falls. Some of the indices include

BSE SENSEX, S&P 500, FTSE 100 etc. Every country has their separate stock exchanges in which securities are traded. Some of the major stock markets of the world include American Stock Market, Indian Stock Market and Chinese Stock market.

1.1. INDIAN STOCK MARKET

Indian Stock Market holds a prime position in the world market. According to United Nations, as of 2024 Indian Economy is worth \$3.937 trillion in terms of GDP and \$14.59 trillion Purchase Power Parity. As per IMF, India ranked 5th position contributing 7.59% towards world GDP.. It surpasses major economies like United Kingdom, France, Russia, Canada etc. this makes position of Indian Stock Market more prominent in the global market. There are stock exchanges in India but out of them, the largest and commonly used stock exchanges are Bombay Stock exchange and National Stock Exchange. All the stock markets in India are regulated by a single regulatory body known as Security Exchange Board of India (SEBI).

1.2. AMERICAN STOCK MARKET

AMEX or American Stock Exchange is situated in the New York City. It is the New York Stock exchange which rules the global economy. United States of America is the largest economy of the world so any fluctuations in the US stock market impact the global market. As of 2024, America is an economy of \$28.78 trillion in terms of GDP and \$28.78 trillion Purchase Power Parity, according to IMF, US contributes 25.22% of world GDP which is the highest contribution. New York Stock Exchange or 'The Big Board' is the largest stock exchange in the world and is regulated by Security and Exchange Commission (SEC).

1.3. CHINESE STOCK MARKET

Chinese Stock market is one of the major stock markets. China being a developing economy has a great impact on world market. According to United Nations, china is the second largest economy in the world. It is an economy worth \$18.53 trillion in terms of GDP and \$35.29 Trillion Purchase Power Parity. As of 2022 china contributes 18.19% in the world GDP. After United States of America, China is dominating the world market. There are three main stock exchanges in China including Beijing Stock Exchange, Shanghai Stock Exchange and Shenzhen Stock Exchange. Chinese stock market is regulated by China Security Regulatory Commission.

2. LITERATURE REVIEW

Prashant Joshi (2009), studied the stock market volatility in India. The researcher attempts to examine Indian market and international market interactions and along with this volatility spillover effects are also analyzed. Data from BSE, S&P and CNX, Hang Seng was considered. During the study it was concluded that Volatility was highest between S&P 500 and Hang seng. It was also observed that Average Stock Return of Indian Stock Markets are greater than other but they involve higher risk.

Zahid Ahmad (2011), in research paper on the comparative study on stock market development and economic growth investigated the effect of stock market development on Pakistan economy and compared the growth and framework of both the indices. in order to get results, data from KSE, ISE and LSE of Pakistan is taken and Dhaka stock exchange was considered for Bangladesh. It was observed that growth rate of Pakistan was comparatively less than the growth rate of Bangladesh. This is due to positive stock market development of Bangladesh, whereas in Pakistan there is a lot of corruption and political instability.

Nupur Gupta (2011), in her research on comparative study of distribution of Indian Stock Market with

Other Asian Markets analyzed the correlation of Indian stock market and other asian markets like Hong Kong, Malaysia, Japan and South Korea. It was observed that there was high correlation between Indian and Korean markets. In short and long run, Indian stock market experienced highest annual growth in stock return rate.

Najeb (2013), in this research paper explored the link between the stock market performance and economic growth. The researcher used a simple theoretical and empirical literature framework. It was observe that the researchers hold very dynamic opinions relation to importance of stock market in economic development. Some of these include improving liquidity, mobilizing capital, observing managers etc. it was concluded that in short and long run, there is a direct relationship between efficient stock markets and economic growth. According to this study, results are consistent towards the fact that efficient stock markets boost the economic growth.

Tejas(2014) did the comparative study of Indian corporate bond market with the bond market of countries like USA, Korea, Malaysia and china. In his research paper, it was seen that there is urgent need to develop the bond market of India and it also puts light on the suggestions for the development of bond market.

San K. Lee (2017), in research paper compared the Volatility Forecasting models. Stock markets of countries like Malaysia, Indonesia, Hong Kong and Japan are considered. It investigated three volatility models including Exponential Weighted moving average methods, Autoregressive Integrated Moving Average and Generalized Auto regressive Conditional Heteroscedastic model. in this study, Indonesia and Malaysia are emerging economies and Japan and Hong Kong are developed economies. From the study, it was concluded that none of the chosen model robust all stock markets in sample. Like GARCH model was found robust for three stock markets including Malaysia, Indonesia and Japan whereas EWMA model was proved to be better model for Hong Kong Stock exchange.

Ghulam Abbas (2020), analyzed the interaction between macroeconomic uncertainty and volatility between China and USA. GARCH model was used to capture the volatility. It can be observed that there is a weak form of efficiency in Chinese stock market and Chinese government should take steps to minimize the risk arising from stock markets and other macroeconomic variables. USA, on the other hand, showed the strong relationship between stock market and macroeconomic risk factors.

Pinglin He, Yulong Sun (2020), in their study analyzed the impact of COVID-19 on different sectors of Chinese stock market. Shanghai Stock Exchange and Shenzhen Stock Exchange were studied. T-test was used to observe the abnormal return rate. It was found that pandemic negatively impacted stock prices of Shanghai Stock exchange and positively impacted the stock prices of Shenzhen Stock exchange.

Vanita Patil Gaude, Namdev M. Gawas (2024), compared Indian stock exchange with International Stock Exchanges in order to analyze relationship between the prices of National Stock Exchange and Bombay Stock Exchange with each other and other countries as well. Along with this, movement of Indian Stock Exchange and international stock exchange is also analyzed. In this study, National Stock Exchange and Bombay stock exchange represent Indian Market and for International market, stock exchanges like New York Stock exchange, Hong Kong stock exchange and Tokyo Stock Exchange. Ten year data from the 2009 to 2019 is analyzed. In order to get results, R model is used. The results showed that, there is a close integration between Indian and international stock markets and BSE showed a strong association with indices of china, Japan and Taiwan. Furthermore, it was pointed out in this study that Indian Stock Markets will be more integrated with global market in the coming 10-15 years.

3. NEED OF THE STUDY

In the literature review studied above, the study was mainly done on the volatility of the stock markets. India, China and American markets contribute in major proportion in world GDP therefore it is necessary to know the regulatory framework of these economies. Majority of the investors around the globe are investing in international exchanges, this study will be helpful for the international investors because in regulatory framework will be studied. In this globalised world, investors tend to invest more in international exchanges, but due to regulatory barriers it can be difficult for the investors to make the trade happen. It can be very difficult for the investors to be familiar with market capitalization, listed securities and listing agreements of various exchanges. This research is not only helpful for the investors, but also for the companies that are keen to be registered in the top exchanges to represent their company globally. It is essential to make a comparison between major exchanges of the world so that it can be observed that which exchange is doing better than the other in terms of market capitalization, listing securities, listing agreements and trade mechanism.

4. OBJECTIVES

- To compare the Indian Stock Market with Chinese and American Stock Market in Context of Market Capitalization and Number of listed securities.
- To compare the Indian Stock Market with Chinese and American Stock Market in context of listing agreements.
- To analyze the role of regulatory authorities in the stock exchanges.

5. METHODOLOGY

In order to achieve objectives, secondary data will be retrieved from websites, research paper, books, newspapers etc.

6. RESULTS

6.1. MARKET CAPITALISATION

Market Capitalization refers to the total value of the shares of the company. It is calculate by multiplying price of the stock with its total number of outstanding shares. It helps the investor to recognize the size of a company in comparison to other. There are various factors that affect the Market Capitalization including fluctuation value of shares; any exercise of warrants on the stock of the company will lead to increase in number of outstanding shares, diluting the existing value of the shares.

Indian Stock Market is one of the largest stock markets of the world. There are various stock exchanges but most traded stock exchange includes Bombay Stock Exchange and National Stock Exchange. Bombay Stock Exchange comprises of indices like BSE SENSEX, BSE 100, BSE all cap etc. Market Capitalization of Bombay Stock Exchange is \$5 trillion as of May 2024 making it 6th largest stock exchange. It is one of the most traded stock exchanges used by Indian and International Investors. Another major stock exchange of India is National Stock Exchange (NSE). In NSE indices that are traded, consists of NIFTY 50, NIFTY NEXT 50 INDEX, NIFTY 100 etc. As of September 2024, Market Capitalization of NSE is \$5.5 Trillion.

American Stock Market is the largest stock market around the globe. It is the most traded stock market of the world attracting various international Investors. In America, there are two main Stock Exchange that are operating including New York Stock Exchange popularly known as 'The Big Board' and

NASDAQ. Both the stock exchanges contribute majorly not only in the American Economy but around the world. Market Capitalization of New York Stock Exchange is around \$28.33 trillion (2024) which is highest in the world. Indices like DOW JONES, S&P 500, NYSE Composite are traded here. NASDAQ on the other hand, has a market capitalization of \$26.62 Trillion according to World Federation of Exchanges (2024).

Chinese Stock Market consists of two major stock exchanges including Shenzhen Stock exchange and Shanghai Stock Exchange. According to data presented by CEIC, Market Capitalization of Shenzhen Stock exchange as of September 2024 is \$3.48 trillion. Indices that are traded in Shenzhen Stock Exchange includes SZSE component, SZSE 100 Index etc. Shanghai Stock exchange, on the other hand, has a market capitalization of \$6.41 trillion as of September 2024. Indexes that are traded in Shanghai Stock Exchange include SSE Composite.

| COUNTRY | INDIA | AMERICA | CHINA |
|-----------------------|--|--|---|
| MARKET CAPITALIZATION | BSE- \$5 Trillion NSE- \$5.5 Trillion | NYSE-\$28.33 Trillion NASDAQ-\$26.62 Trillion | SHENZHEN STOCK EXCHANGE - \$3.48 Trillion SHANGHAI STOCK EXCHANGE- \$6.41 Trillion |

From the above table, we can observe that American Stock Exchanges have the maximum market capitalization followed by Indian Stock Markets. China on the other hand, has the lowest market Capitalization. Chinese stock exchanges should focus the ways in which they can improve their market capitalization by attracting people to invest in the market.

6.2. NUMBER OF LISTINGS

In Indian stock market there are various national and international listings. According to world federation of exchanges, in Bombay Stock Exchange there are 5246 listings available whereas in National Stock Exchange a total of 2002 securities are listed. New York being the largest stock exchange has only 2800 listings which range from Blue chips to new high growth companies. On the other hand, NASDAQ has around 3554 listing in the market. In case of Chinese Stock exchange, there are 2375 listings in Shenzhen Stock Exchange and 2005 listings in Shanghai Stock Exchange.

It can be observed that Indian Stock Exchanges are more focused on the listing of securities rather than improving the market capitalization. It is evident that market capitalization is not directly linked with the Listing of securities as NYSE being the largest stock exchange with maximum market capitalization, has listings much below BSE. Total listings of Chinese Stock Exchange is also much lower than that of Indian Stock Exchange, but in spite of that market capitalization of Chinese stock exchange is more than that of Indian Stock Exchange.

6.3. LISTING AGREEMENTS

INDIAN STOCK MARKET

Bombay Stock Exchange (BSE)

The prime objective of listing IPO's is to provide liquidity to securities, mobilize savings for economic development and protecting the investors' interest. Listing of securities in BSE takes place according to

the regulations of SEBI. The eligibility criteria for IPO and follow on Public offerings are as follows:

- Minimum issued paid up capital of the company before issuing should be Rs 10 crore for IPOs and Rs 3 crores for FPOs.
- Size of the issue should be Rs 10 crore.
- Minimum market capitalization of the company should be at least Rs 25 crore.

National Stock Exchange (NSE)

In order to be listed under National Stock Exchange there are some conditions that needs to be fulfilled. Some of the conditions include that paid up capital of the company should be Rs 10 crores or market capitalization should be more than Rs 25crores. Minimum net worth of the companies should be more than Rs 20 crores. The company should have obtained a good credit rating by the credit rating agency. All the listings will be done according to the rules and regulations provided by SEBI. All those companies will be eligible for listing who has not been wiping out accumulated losses and never received any winding up petition by the court.

CHINESE STOCK EXCHANGE

Shenzhen Stock Exchange

In order to be listed under Shenzhen Stock exchange, the issuer and its controlling shareholder have not committed any crime of corruption, misappropriating property, and disrupt the order of Socialistic market. The supervisors and directors of the company should not be subject to administrative penalties from CSRC in last three years. Monetary and financial requirement for the registration of a domestic company are as follows:

- Net profit of the company should be positive for last two years and aggregate should be more than RMB 50 million.
- Its market capitalization should be more than RMB 1 billion, and its net profit for the last year should be positive with operating income more than RMB 5 billion.

Company shall meet one of these requirements.

In case of red chip enterprises, the requirements for listing IPOs are as follows:

- Estimated market capitalization should be more than RMB 10 billion and net profit for the last year should be positive.
- Market capitalization should not be less than RMB 5 billion and its last year profit should be positive along with operating income of more than RMB 500million.

Company shall meet one of these requirements.

Shanghai Stock Exchange

Following are the rule for listing securities under Shanghai Stock Exchange:

- Company shall disclose all the legal obligations complying with the law and other regulatory documents should be submitted.
- The total share capital of the company should not be less than RMB 50 million.
- Stocks that are issued should be followed by the approval of CSRC.
- The quantity of stocks offered should be more than 25 % of the total stocks. If total capital of an issuer is more than RMB 400 million, such percentage is 10%.
- Financial reports of the company for three recent years should be audited by CPA firm.
- The company must not be committed any crime or anything illegal for last three years.
- Special preferences are given to the domestic companies.

AMERICAN STOCK EXCHANGE

New York Stock Exchange (NYSE)

Getting listed under NYSE is internationally recognized because it reflects that a publically owned corporation reached the level of maturity and front rank status in their respective industry. In order to be registered, companies have to file an application for registration and then discussions are held in the headquarters. Selected applicants are given opportunity to take advantage of NYSE's free confidential review process in order to learn that whether or not a company is eligible for listing. There is a board in an exchange which decided that whether company is eligible to be listed or not.

In order to be listed a company should meet the following criteria:

- Pre tax earnings before the issue must be at least \$10 million in aggregate for last 3 years, with minimum \$2million in each of the two most recent fiscal years.
- An emerging company is more privileged by the US security laws as these companies need to report only two years of audited financial statements and will be qualified for earnings test if its pretax earnings are \$10million in aggregate of last two years together with minimum of \$2 million each year.
- The number of beneficial holder of the stocks that are held in the name of exchange organizations will be considered as an addition to holders of the record.
- For the Companies that are listed during the time of their IPOs the stock exchange will be relying on the written obligation of the underwriters showing the estimated value of company's offering in order to determine company's compliance towards the listing standards.
- For the number of shares held by the directors of the company, family members or others, exceeding 10 percent, will be excluded in calculating number of publically held shares.

NASDAQ

In order to be listed in NASDAQ, the issuer needs to make a user account on the NASDAQ listing center. After making that the issuer needs to fill out an application form. Applicants must satisfy some liquidity, financial and corporate government requirements.

Following financial criteria must be fulfilled in order to be registered under NASDAQ:

- Pretax earnings should be more than or equal to \$11 million which is aggregate of three fiscal years and earning for each of two fiscal year should be at least \$2.2 million.
- Cash flow for aggregate of three fiscal year should be at least \$27.5 million.
- Total assets including equity of the firm should be \$80 million.
- Shareholders equity should be at least \$55 million.

Criteria for listing is well defined which makes it easier for the companies' to list especially in case of Indian Stock Exchanges. The listing procedure is very well defined in Indian Stock Exchanges and less complex which can be the reason for higher listing in these exchanges.

It can be observed that the procedure for listing in any of American stock exchange, be it NYSE or NASDAQ is more complex than that of Indian Stock Exchange. In comparison to Chinese Stock Exchange also, listing procedure of Indian Stock Exchanges is also uncomplicated making it possible for Indian Exchanges to have higher listings.

6.4. ROLE OF REGULATORY AUTHORITIES

SEBI (SECURITIES AND EXCHANGE BOARD OF INDIA)

SEBI was set up in the year 1988 through resolution by the government of India. It is the regulatory body for Indian Stock Market under which all the stock exchanges operate. Clause 49 has also been introduced stating the policies for improvement of corporate governance in listed companies. The main purpose of SEBI is to ensure that all the transactions that place safely and investors' interest is protected. Other than this SEBI also registers and regulates the working of stock brokers, share transfer agents, merchant bankers, underwriters, portfolio managers etc. Along with the SEBI also regulates working of depositories, Foreign Institutional Investors and credit rating agencies. All the securities that are registered under SEBI are rated first and properly analyzed. It also promotes investors education and training programmes in order to educate not only the investors but also other intermediaries. SEBI also has a right to inspect, conduct enquiries and audits of any other organization. No stock broker or intermediary and working stock market without being registered under SEBI. It plays very important role in the functioning of Indian Stock market making sure that it is safe for the investors from many insider trading and frauds. Security and Exchange Board of India can perform all these functions as per provisions of Securities Contracts (regulation) Act, 1956.

SEC (U.S SECURITIES AND EXCHANGE COMMISSION)

SEC or U.S Securities and Exchange Commission is the regulatory authority of American Stock Exchange. All the exchanges in USA works according to the guidelines of SEC. the main purpose of SEC is to protect the investors, facilitate capital formation, and maintain fair and efficient market. According to Securities Act 1933, there are two main objectives of SEC which includes that the investor should receive financial and other information related to securities which are offered for public sale and prohibit any kind of fraud that may take place in the sale of securities. It ensures that company is transparent and fully discloses all the information. No company or any intermediary like underwriter or broker can be part of American Stock Market without being registered under SEC.

CSRC (CHINA SECURITIES AND REGULATORY COMMISSION)

Chinese stock markets are regulated by China Securities and Regulatory commission. This was formed in the year 1988, making it rather a new regulator. It is a ministry level public institution directed by State Council in order to perform regulatory function under rules and regulations. The main purpose of setting up CSRC is to formulate policies and plans for security market and draft rules and regulations that should be followed. It also supervises the listing, trading, and settlement of stocks. It ensures that rules and regulations are followed in the market and give penalties in case of any violation. CSRC supervises management and managerial officials of the companies that are registered.

7. CONCLUSION

The comparison in study showed that Indian Stock exchanges are more regulated as the system of listing is simpler as compared to USA and Chinese Stock markets; this leads to more listings under BSE and NSE. it can further be analyzed that American Stock exchange consists of NYSE and NASDAQ and NYSE being the largest stock exchange in the world has the maximum market capitalization. According to United nations, India and china are both developing countries yet market capitalization of BSE and NSE is less than that of Shenzhen and Shanghai Stock exchange. India has now enabled IDRs and ADRs in order to attract the foreign companies to be listed in our country. As far as listing agreements is concerned, on analyzing the criteria for listing it was observed that India's criteria for listing in both the

exchanges i.e., BSE and NSE was much simpler than NASDAQ, NYSE, Shenzhen and Shanghai stock exchange which makes it easier for the companies to be listed. This can be the reason that more companies are listed under BSE and NSE. Regulatory authorities like SEBI, SEC and CSRC perform the similar primary function of making sure that all the transactions take place separately and interest of investor is protected. The major difference between the three is the fact that SEBI and SEC are autonomous and independent bodies whereas CSRC is a wholly owned government corporation.

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