

Impact of Digitalization of the Indian Equity Market on the Retail Investor

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ABSTRACT

A well developed and competitive financial market with financial inclusion is a must, if India has to emerge as a strong knowledge based economy. The transformation of Indian equity market, that till 1990s, was plagued with inefficiency with respect to trading, settlement and surveillance, and lacked the technical prowess required to compare itself with any of the global market, to post-1990s world class equity market, ranked 11 and 12 in the world (WFE 2016), is attributed mainly to the initiatives by the government of India, having its base in ICT. The real purpose of these reforms was to benchmark Indian Equity Market with the global markets and improving the retail investor participation in line with inclusive financing objectives. This paper enumerates and discusses briefly key initiatives of digital revolution that took place in the Indian Equity Market and attempts to check the impact of these initiatives on retail investor. We find that Indian equity market has scaled new heights, with positive response to various initiatives, but the retail investors are still missing.

JEL Classification: G11, G14, G15, G18, G32.

Key Words: Indian Equity Market, Stock Exchanges, Retail Investors, IPOs, NSE, Book Building, E-trading, ASBA, Depositories, DEMAT, IPO Grading, investor population, ICT, Digitalization.

INTRODUCTION

The history of world economies brings us to realize how Indian economy once was most advanced and flourishing economy, contributing around one-fourth to the world output during the period 1 to 1500. This period is referred to as golden period of Indian economy and had earned it a jealous name of 'golden sparrow'. This also attracted many invaders who turn by turn robbed it, destroyed it or ruled it, to bring it to a position of being called as under-developed economy of the world. Britain was last to rule India before its independence in August 1947. The

economic statistics for the British period governance indicate the noteworthy slide in the Indian economy.

Indian economy post-Independence, took off from meager Rs. 2.7 lakh crores with 2.3 percent annual growth rate (1950-51) to slide further to negative growth during 1970s (-3.7 percent in 1965-66) and 1980s (-5.2 percent in 1979-80)¹. This was the time when the then Finance minister of India Dr. Manmohan Singh, in Prime Minister Narasimha Rao led Government in 1991 initiated economic reforms in the country known as liberalization, privatization and globalization (also referred to as LPG). The primary purpose of these LPG reforms was to align Indian economy with the advanced practices of the world for external and internal growth and development. The results of these economic reforms and initiatives have started showing. The Indian Economy has emerged as fastest growing and fourth largest economy in the world. However, when it comes to inclusive growth and development, the picture is different in each sector. The pace of development has not remained same across all sectors. We are still struggling in sectors such as health, education, judicial, social security, infrastructure, etc. The task of LPG cannot be said to as complete unless the benefits reach out to the last person in the queue.

The retail investor in the Indian Equity Market is the person who is meant to be benefitted with all the LPG reforms so as to ensure that they invest in market instruments in transparent manner having requisite safety parameters. Though Indian Equity Market has emerged to be amongst the safest market in the world, thanks to SEBI, it still has not gained the requisite trust and confidence of the Indian retail investor. The total number of investors in equity market in India is still less than 3 percent of the population. Households in India still prefer to invest in more secured but less productive instruments such as gold, or fixed deposits. The remaining paper examines the

¹ From 1947 to 2014: How the Indian Economy has changed since independence Retrieved from www.firstpost.com on February 22, 2017.

efforts undertaken by the government to attract retail investors.

The hallmarks of transformation of the equity market particularly, can be attributed to the economic crisis of 1992², that resulted in abolition of CCI (Controller of Capital Issues) and empowerment of SEBI in 1992, creation of National Stock Exchange (NSE) in 1993 (Shah and Thomas, 2000) and the migration to rolling settlement in 2001 (Shah and Thomas, 2001). SEBI, with stricter disclosure norms for issuers, mandated adoption of automation (read ICT) solutions for stock exchanges to improve transparency in their operations. The Screen Based Electronic Trading (in place of floor trading) in 1994 in all exchanges turned out to be another milestone. The focus was shifted from floor of the exchanges, where only few privileged were permitted, to pan-India offices having computer terminals linked to the main server at the exchange via internet through VSAT enabling participation of many brokers (and through them the investors). Another breakthrough came in 1996 when the largest exchange, NSE, set-up NSCCL (National Securities Clearing Corporation Ltd.) and adopted risk management and containment through “novation” at the clearing corporation. This literally forced all other exchanges to adopt similar measures. Yet another milestone was that of setting-up Depositories (NSDL-National Securities Depositories Ltd.) to implement *Dematerialisation* of securities in 1996, has definitely changed the way we transact and settle our account in the equity market. Now, investors can participate/trade into equity market only if one has a ‘Demat’ account in a depository. This electronic record of securities facilitates equity settlement in two days time frame (T+2). Equally important step was introduction of present version of Book-building Process in 1999 for a better price discovery to issuers in case of fresh issue of securities through IPO’s (Initial Public Offerings) and public offers. After observing the remarkable success of NSE, in 2004, SEBI through an amendment in Securities Law, mandated that all exchanges should ‘demutualize’ (so as to bring down the influence of members and brokers and improve overall governance) by 2007-08. In all 20 exchanges (of the total 23 in 2007-08) have only complied.

This paper is based on the secondary data compiled from various reports, papers and websites to capture the essence of growth and transformation that took place in the Indian

equity market to arrive at conclusion as to its impact on the retail investors.

SOME FACTS ON INDIAN EQUITY MARKET

The growth of Indian equity market has been phenomenal. **Table – 1** presents a brief picture of the equity market for the period 1995-2016. In one of the latest compilation on world stock exchanges by Jeff Desjardins (February 2016), both of our country’s stock exchanges BSE with \$ 1.482 trillion and NSE with \$ 1.450 trillion rank at 11 and 12 amongst the world’s largest 16 stock exchanges featured as ‘\$1Trillion Club’ that constitute 87 percent of worlds total equity value. The growth can be interpreted from the average market value that increased by over 15 times with 5911 listings in BSE and 5 times with 1808 listings in NSE. The benchmark BSE Sensex and NSE Nifty increased by over 7.5 times during 1995 to 2016.

THE MODERN PHASE OF THE INDIAN EQUITY MARKET (POST 1995)

Post 1995, the equity market saw unprecedented changes. An equity market plagued with inefficiency, malpractices and lost investor confidence was turned around in a securities market which went on to become a truly secured market on global benchmarks. Moving from an era of traditional ‘ticker’ trading to Electronic Trading and adopting ICT to enhance reach of the market coupled with swift reforms and initiatives taken by the government and various regulators in the country, the financial market microstructure transformed into one of the world’s most advanced financial market. The speed, at which the Indian Financial market has witnessed the forces of liberalization and globalization, cannot be compared with any other sector. Currently if India is rated higher among the emerging markets, one major reason for this is our financial market. If the reforms and other initiatives have modified the performance of Indian financial market, it should not be forgotten that Information Technology has also played a commendable role in the transforming the financial market particularly the equity market. The total impact/outcome has definitely benefitted millions of people across the country as well as around the world. Thus this paper intends to highlight that common man has benefited from these changes that took place in the financial markets. Most prominent studies on Stock market in India have been done Shah and Thomas (during 1999, 2000, 2001). These do highlight the role of ICT in stock market development in India.

² The fixed income and equity market crisis of 1992 involving Harshad Mehta (Shah and Thomas, 2001).

Table 1: Modern Phase of Indian Equity Market (1995 -2016)

Sr. No.		BSE					NSE				
		1995-96	1999-00	2004-05	2009-10	2015-16	1995-96	1999-00	2004-05	2008-09	2015-16
1	No. of Listed Cos.	5603	5815	4731	4975	5911	422	720	970	1470	1808
2	Turnover (Rs. Cr)	50064	686428	518715	1378809	740089	67287	839052	1140072	4138023	4236983
3	Average Daily Turnover (Rs. Cr.)	215.79	2050	2734.77	5651	2996	276	3303	4471	16959	17174
4	Market Capitalization (Rs. Cr.)	563748	912842	1698428	6165619	9475328	401459	1020426	1585585	6009173	9310471
5	Average Trade Size (Rs.)	2922	9270	21849	22768	17977	101505	86980	25283	24608	22881
6	Market Value of Capital per Listed Cos. (Rs. Cr.) (4/1)	101	157	359	1239	1603	951	1417	1635	4088	5150
7	Index - BSE=Sensex/NSE=CNX Nifty	3366.61	5001.28	6492.82	17528	25342	985.3	1528.45	2035.65	5249	7738

Source: SEBI Handbook of Statistics & Bulletin. Various issues

There have been significant changes in the financial market in India as well as in the international arena beginning 1980's. The advent of information and communication technology (ICT) during this period started to pave the way for modern financial market. The effects of ICT during the period of 1980-1990 in the 60 countries including USA, Germany, Korea, Japan, etc. and India are well documented by Singh et al (2001). In India, it was during 1990's, that a series of changes took place in the financial market (Shah and Thomas, 2001). Most of them had their basis in ICT. The noteworthy of them are discussed below:

Setting up of the National Stock Exchange (NSE) in 1993: The dominance of the oldest exchange in Asia, the BSE (Bombay Stock Exchange) was challenged in 1993 when NSE was set-up by government, taking its operating base in the ICT. Contrary to every ones expectations, NSE surpassed the performance benchmarks of the BSE in the very first year of its operation. Shah and Thomas (2000, 2001) very neatly discuss the reasons for NSE's remarkable success. NSE can be credited for actually bringing in the investors to the closest of the issuers through the use of ICT. This forced all other exchanges to follow the procedures/initiatives undertaken by NSE. It established its VSAT network of online trading centers

throughout the country, whereby taking the accessibility to the exchange to the door step of the individual investors. Earlier most of the population remained out of process since it was not feasible for all to reach Dalal Street (BSE).

Book Building Process: Indian Security Market is a unique market in the world where pieces of economic action, in the form of a Equity/Share is made available to general public. In a country with population in crores, this could prove to be a huge task. But it is actually being accomplished in simple and minimum possible time through 'Book building' process. Book Building basically is a capital issuance process used in Initial Public Offer (IPO) or the Public Issues (PI) which aids price and demand discovery. It is a process used for marketing a public offer of equity shares of a company. It is a mechanism where, the book for the IPO is open for a period (minimum 5 days) and bids are collected from investors at various prices within a price band. The process aims at tapping both wholesale and retail investors. The final offer/issue price is then determined after the bid closing date based on certain evaluation criteria. This helps the bidder/investor to get a security at a better price and also the issuer to realize better price recovery.

Electronic Trading (1994): NSE was first exchange to initiate Screen Based Electronic Trading in India in 1993. Its success forced BSE and all other exchanges to switch from floor trading to Screen Based electronic trading. Traditionally, investors have been doing their stock transactions with their broker either by placing orders on the phone or by visiting the broker's office. All this had its own share of problems. Foremost being that there was no transparency in the trade. Sometimes the investors found it difficult to get hold of the broker through telephone or fax. Then there was a time gap between placing an order and its execution. Further, the traditional trading system involved the paper-based settlement of trades which caused substantial problems like bad delivery and delayed transfer of title. All these issues led to cumbersome time consuming and cost intensive process of trading in equity. But with the advent of internet based trading or Electronic Trading in the country, it changed the total scenario of the Indian capital markets. The speed of transactions improved, transparency also improved since the trade started to take place visibly in front of them. This coupled with reduced transaction costs increased the volume of transactions, the nature and settlement of trade and the profile of market participants.

Real-Time Gross Settlement System (RTGS)/National Electronic Fund Transfer (NEFT): RBI has initiated reforms in the payment system by introducing Real-time Gross Settlement System (RTGS). RTGS is a sub-product under the Cash Management System and on all India basis through various branches of banks. The detailed information on RTGS can be obtained from RBI (Reserve Bank of India). This has also been studied and featured by Devrajan (2006).

Trade Settlement through Risk containment at the National Securities Clearing Corporation Ltd. (1996): NSE, adopted risk management in trades through "novation" (substituting contracts) by specifically establishing NSCCL in 1996. This forced other exchanges also eventually to improve their risk containment mechanisms. NSCCL carries out clearing and settlement functions as per the settlement cycles of different sub-segments in the Equities segment. This ensures timely settlement of trades. Trades in rolling segment are cleared and settled on a netted basis. Trading and settlement periods are specified by the Exchange / Clearing Corporation from time to time such as T+1, T+2 or T+3 (trading day plus __ days). Deals executed during a particular trading period are netted at the end of that trading period and settlement obligations for that settlement period are computed. A multilateral netting

procedure is adopted to determine the net settlement obligations. In a rolling settlement, each trading day is considered as a trading period and trades executed during the day are netted to obtain the net obligations for the day. Automation detects deviations for timely action.

Dematerialisation (1996): Dematerialisation, in simple means creating electronic record and is the process by which physical certificates of an investor are converted to an equivalent number of securities in electronic form and credited in the investor's account with his DP (Depository Participant). In order to dematerialise physical certificates; an investor will have to first open an account with a DP commonly called as DEMAT Account and then request for the dematerialisation of certificates by filling up a Dematerialisation Request Form [DRF], which is available with DP and submitting the same along with the physical certificates. SEBI has mandated DEMAT account for all equity trading participation. All equity settlement today takes place at the depository. A depository holds securities in materialized form and maintains ownership records of securities in a book entry form and also effects transfer of ownership through book entry. Two depositories have been set up in India. NSDL (National Securities Depository Ltd.), set up by NSE and CDSL (Central Depository Services Ltd.) set-up by BSE. Using innovative and flexible technology systems, these depositories aim to work towards supporting the investors and brokers in the capital market of the country. The depository ensures the safety and soundness of Indian marketplaces by developing settlement solutions so as to increase efficiency, minimize risk and reduce costs. In the depository system, securities are held in depository accounts, which is more or less similar to holding funds in bank accounts. Transfer of ownership of securities is done through simple account transfers. This method does away with all the risks and hassles normally associated with paperwork. Consequently, the cost of transacting in a depository environment is considerably lower as compared to transacting in certificates. New technology reduces the costs of building new trading systems, lowering the entry barriers for new competitors.

ASBA (Application Supported by Blocked Amount): SEBI introduced this scheme in 2008, and now is mandatory for all types of investors, to ensure that, a) investors money do not remain locked up with the IPO issuer for the period from application to allotment, b) issuer is not able to take any undue advantage of the situation, and c) easy settlement. In ASBA the amount is paid to the IPO issuer only after and to the extent of actual allotment of equity. Therefore, there is no refund involved in case there is no

allotment. ASBA, with online banking, is modern version of old scheme called ‘StockInvest’ that existed during 1992 to 2002. The scheme prevents IPO Issuers to delay the process of allotment and refund. The gravity of this can be understood in our country from the fact that it very common for IPOs to oversubscribe many times over and rarely being cancelled/withdrawn, giving an opportunity to issuers to use money collated arbitrarily till the actual allotment and refund. Earlier this process used to take almost 3 – 4 months. With electronic banking and book building process this process is completed in minimum possible time as the issuer will get access to money only after the allotment process.

IPO Grading: SEBI introduced and mandated grading of all Initial Public Offers (IPOs) starting May 1, 2007, primarily to ensure that only genuine issuers enter the market and retail investors in particular are provided with quality indication of an IPO. This probably was unique and unparallel case in the world that an equity security was being graded. Five independent credit rating agencies, registered with SEBI, (ICRA, CARE, Crisil, Fitch and Brickwork) were empowered to grade the IPOs of the companies with the objective to give the investors some indication on the quality of the issue and issuers. Huge resistance was observed for this from issuers and eventually, SEBI made it optional. Strictly speaking, these ratings were more of an unbiased assessment on a five point scale of the ‘fundamental strength’ of the IPO as of date and have nothing to do with the issue price of the IPO or its subsequent performance. Higher grade was a reflection of stronger fundamentals of the particular IPO issuing company and vice-versa. Option of obtaining

grading / ratings from more than one credit rating agencies was allowed, but these ratings were required mandatorily to be published in the offer document. Given the short comings in the grading concept and its implementation, it was made voluntary. This would put pressure on rating agencies to innovate to justify their existence so that their ratings are demanded by the investors.

RGESS (Rajiv Gandhi Equity Saving Scheme): This is comparatively new scheme, introduced in September 2012, specifically to channelize savings of first time retail investors into capital market and thus widen and promote equity culture in India. The scheme entails tax benefits on investment of Rs. 50000 for investors with annual income of up to Rs. 12 lakhs.

IMPACT OF INITIATIVES ON THE RETAIL INVESTORS

Indian economy is amongst the world’s fastest growing economy clocking over 7 percent GDP growth. Indian equity market, over the years grew to the global standards. Currently BSE and NSE are ranked at 11 and 12 amongst world stock exchanges with USD 1.5 trillion market capitalization each (CIA, 2016). Gross savings are nearly 40 percent of GDP. Household Financial Savings are forming nearly 13 percent of the GDP (2016). Total mutual fund assets under management (AUM) are one-fourth of GDP (2016). **Table 2** enumerates few facts about the growth with regards to Indian equity market.

Table 2: Growth of Indian Equity Market - Some Facts

Year	2015-16	2009-10	2004-05	1999-2000	1994-95	CAGR
Per Capita Income (Rs.) (GDP/Population)	885.23	409.47	297.72	246.26	194.69	0.063
Savings/Person (Rs) (GDS/Population)	343.34	186.52	96.48	51.63	27.11	0.094
GDS as % of GDP (GDS/GDP)	38.79	45.55	32.41	20.97	13.92	0.030
Stock Market Ratio (Mcap/GDP)	1.65	2.54	1.01	0.78	0.47	0.036
Mcap per Person (Rs.) (Mcap/Population)	1464.21	1040.58	301.56	193.13	91.94	0.101
Mcap per Investor (Rs. Bn) (Mcap/Investor)	646071.50	748796.22	1623503.43	33863513.75		-0.219
MF Market Ration (AUM/GDP)	0.24	0.34				-0.027
Share of Retail Investors in AUM(%)	22.27	26.60				-0.029
Retail Participation (Nos.)	45395059	46926405				-0.006
Share of Retail Participation in Total MF (%)	95.24	97.84				-0.004

Source: calculated based on data available from RBI, SEBI, AMFI and open internet platforms.

Population of Retail Investors in Indian Equity Market:

Retail investment in equity market is possible in two ways, a) direct or active participation, through primary (public offers) or secondary (trading) market, and b) indirect or passive participation through mutual funds, managed by fund managers. Calculating total population of retail investors participating in equity market is going to be difficult. No definitive data is available to accurately measure the figure. In order to participate directly in equity market, it is mandatory to have a demat account. The combined Demat Investor Accounts with NSDL and CDSL, the two depositories, stands at 2.7 crore as on January 2017. This essentially means that only about 2 percent of the total population. Of this total, about 96 percent are retail investors. Balance 4 percent comprises corporate (less than half percent) and others. On the other hand, mutual funds, the indirect or passive route to investing in equity market, there are 4.6 crore retail investors (those having investment of less than Rs. 5 lakh). This accounts for more than 96 percent of total folios having nearly one-fifth share of total AUM (2016) with an average of about Rs.13606. It is all possible that all retail investors of equity market are also the retail investors of mutual funds, leading to overlapping. It further needs to be studied that how many of demat account holders are repeated in 4.6 crore retail investors of mutual funds (2016). Again, about 7 percent of retail mutual fund investors are exclusive non-equity investors. Therefore, on a broader scale we may conclude that not more than 4 percent of total population invests in equity market in India. If 96 percent of population is out of gambit of any such activity, the objective of financial inclusion seems defeated and lost.

When compared to markets like USA, where nearly half (48.8 percent) of the population is direct or indirect owner of stock in 2013, according to a study by Bricker et al (2014). According to another study by GALLUP, nearly 55 percent (2013) of adults have investment in stock market. In another study by Sun (2015), Singapore has about 20 percent retail individuals and 1.6 million accounts on its stock exchange equal to one third of its working population. In Malaysia this figure is 16 percent. China, according to Shen and Goh (2015), has about 250 million retail investors (nearly 18 percent of total) of which nearly 81 percent (and rapidly growing) trade every month.

CONCLUSION

The liberalization and globalization process along with digitization has undoubtedly benefitted the Indian

economy as whole with most of its sectors improved performance and taking the benefits to the maximum population. However, in case of Indian equity market, we feel much is yet to be achieved. Sustained and credible efforts are needed to bring in more and more retail investors into the equity market. The existing figure of about 4 percent of total population is dismally low when compared to markets such as USA (48 percent), Singapore (20 percent), China (18 percent) and Malaysia (16 percent). No doubt that the existing efforts by the government are noteworthy, be it dematerialization, demutualization, electronic trading, book building process, IPO grading, ASBA, in light of transparency, speed of transaction and safety of investment. However, Indian retail investor is still not able to trust the market and prefers to invest in low yield products such as gold, deposits and real estate. Efforts to include financial literacy from the school curriculum would further need to be expanded to include upper levels of education. Better schemes on the lines of RGESS and motivating mutual fund managers to extend benefits to beyond 15 cities (B15) to include more of rural population ensuring speed, safety and transparency would help the market to grow.

REFERENCES

- [1] Bloomberg (2015), *India needs to get retail investors into the game*, Retrieved from <http://www.livemint.com/Opinion/JRbadm1Y3lliAE6c8Q150N/Indianeedsstogetretailinvestorsintotheame.html?facet=print>
- [2] Bricker, Jesse, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Kevin B. Moore, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle (2014), "Changes in U.S. Family Finances from 2010 to 2013: Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin*, Vol 100 No 4, September, available at <http://www.federalreserve.gov/pubs/bulletin/2014/pdf/scf14.pdf>.
- [3] Chandrasekhar, C. S., Malik, S. and Akriti (2016), *The elusive retail investor: How deep can (and should) India's stock market be?*, SEBI DRG Study. Retrieved from www.seci.gov.in/cms/sebi_data/DRG_Study/elusiveretailinvestor.pdf.
- [4] Dahlman, Carl J., (2005), *India and the Knowledge Economy: Leveraging Strengths and Opportunities*, WBI Development Studies, World Bank.
- [5] Desjardins, Jeff (2016), *All of the World's Stock Exchanges by Size*, retrieved from

- <http://money.visualcapitalist.com/all-of-the-worlds-stock-exchanges-by-size/>
- [6] Devraj S (2006), *Real Time Gross Settlement System (RTGS) – An Overview*, The Chartered Accountant, August 2006, pp 237-242.
- [7] Greenwood J, and Jovanovic B (1999), *The Information-Technology Revolution and the Stock Market*, American Economic Review, 1999 – (Retrieved from finance.wharton.upenn.edu)
- [8] Hobijn B, and Jovanovic B, (2000) *The Information-Technology Revolution and the Stock Market: Evidence*, NBER Working Paper, 2000 – (Retrieved from papers.ssrn.com)
- [9] McCarthy, J (2015), *Little Change in Percentage of Americans Who Own Stocks*, Retrieved from <http://www.gallup.com/poll/182816/little-change-percentage-americans-invested-market.aspx?version=print>
- [10] Mittal, S., Gupta, N. K. and Sharma, S. K. (2009), *Changing face of the Indian Financial Market*, Proceedings of the 3rd National Conference “INDIACom-2009: Computing For Nation Development”, February 26-27, 2009. ISSN 0973-7529.
- [11] Mittal, S., Gupta, N. K. and Sharma, S. K. (2011), *ASBA-The Rebirth of Stock Invest*, NIBM's Vinimaya (ISSN 0970-8456), Volume XXXII, No.3, pp. 37-44, October-December, 2011.
- [12] National Council of Applied Economic Research (NCAER) (2011), *How Households Save and Invest: Evidence from NCAER Household Survey*, New Delhi: NCAER.
- [13] Ritter, Jay R. “*The Long-run Performance of Initial Public Offerings.*” *Journal of Finance*, March 1991, 46(1), pp. 3–27.
- [14] Shah A, Thomas S, (2003) *Policy issues in the Indian securities market -Reforming India's External, Financial, and Fiscal Policies*, 2003 (Retrieved from stanford.edu)
- [15] Shah, A. & Thomas, S. (2000), ‘David and Goliath: Displacing a primary market’, *Journal of Global*
- [16] Shah, A. (1999), ‘Institutional change on India’s capital markets’, *Economic and Political Weekly* XXXIV(3–4), 183–194.
- [17] Shah, Palak (2012), “Retail participation growing in market, say NSE& BSE”, *Business Standard*, Mumbai, December 12. Available at: http://www.business-standard.com/article/markets/retail-participation-growing-in-market-say-nse-bse-112121200149_1.html.
- [18] Shen, Samuel and Brenda Goh (2015), “China stock market freezing up as sell-off gathers pace”, July 8, available at <http://www.reuters.com/article/2015/07/09/us-china-stocks-idUSKCN0PI04Q20150709#sTs26smqWib1pfWc.97>.
- [19] Singh, A. and R. Dhumale (2001). *Globalisation, Technology, and Income Inequality: A Critical Analysis*. Mimeo, Cambridge.
- [20] Sivalingam, G. (2012) “Wooing retail investors in Malaysia”, *Business Times*, 18 April, available at <http://cgmalaysia.blogspot.in/2012/04/woeing-retail-investors-in-malaysia.html>.
- [21] Sun, Jeff (2015), “More Retail Investors Flocking to Singapore Stock Exchange”, July 16, available at <http://singaporestocktrading.com/2014/07/16/retail-investors-flocking-singapore-stock-exchange/>.
- [22] Securities and Exchanges Board of India (www.sebi.gov.in)
- [23] Reserve Bank of India (www.rbi.org.in)
- [24] National Stock Exchange of India (www.nseindia.com)
- [25] Bombay Stock Exchange (www.bseindia.com)
- [26] National Security Depository Ltd (www.nsdl.co.in)
- [27] Central Depository Services (India) Ltd. (www.cdslindia.com)
- [28] Association of Mutual funds of India (www.amfiindia.com)