

## **FASHION OF TRADE AT STOCK EXCHANGE BY A WAY OF DIGITAL PAYMENTS AND MOBILE APPLICATION: A STUDY OF NSE & BSE STOCK MARKET**

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### **ABSTRACT**

*Stock Trade is a centre point of the essential and auxiliary business sectors assuming an urgent part in the economy. Stock exchange gives a spot to the purchasers and dealers of the offers and protections. For this reason, National Stock Exchange was set up by the main foundations during the 1990s with the fundamental goal to outfit an advanced and online-based exchanging framework with public reach. The current examination investigated and broke down the pattern of exchanging at National Stock Exchange in the capital market fragment. The present research is based on secondary data and is logical in nature. Information has been separated from the authority site of NSE for the length of 12 years for example from 2009-2021. The examination has discovered that NSE has a developing pattern yet in the year 2016-2017; there was an exceptional defeat in the exchanging of NSE. During the year 2016, the Chief of NSE Ms Chitra Ramkrishna additionally leaves her position which prompts an enormous destruction in market. What's more, as indicated by the news in May 2019, NSE was in a trick wherein NSE was utilizing the Tick-by-tick worker to help its individuals by giving information to them. Subsequently, the current investigation has zeroed in on the examination of the exchanging portion of the National Stock Exchange. It was also analysed that due to the happening of worldwide pandemic COVID-19 there is an effect over the stock exchange in both positive and in negative way. But there was a great role of stock trading mobile applications which provided the benefit of digital trade and has boosted the economy through its digital payment system. There are numerous mobile applicants who got launched during this period and have attracted lot of individual retail investors towards the trade in stock market comprising both NSE and BSE.*

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**Keywords:** *Capital Market, National Stock Exchange, Digital Payments.*

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### **Introduction**

The financial exchange is depicted as the gauge of the country's economy. The financial exchange has double capacities that are raising new capital and giving liquidity to existing protections. Indian capital market is extensively isolated into two classes' i.e. essential market and optional market, "the primary market exchanges new offers though the auxiliary market exchanges previously recorded offers".

"Today there is 20 perceived stock trades in India including the Over the Counter Trade of India (OTCEI) for little and new organizations, the Bombay Stock Trade (BSE) the most established stock trade in Asia, and the National Stock Trade (NSE) set up as a model trade to offer public level types of assistance to the financial backers the same".

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The monetary area in India has grown fundamentally and the significant incitement to fortify the monetary framework was given by the quick development of the securities exchange. A wide scope of monetary changes was carried out to fortify the Indian capital market by means of cancelling the "Capital Issues (Control) Act 1947, the foundation of Securities Exchange Board of India (SEBI), presentation of dematerialization, screen-based internet exchanging, the presentation of moving repayment framework, and so on the setting up of NSE as an electronic exchanging stage set a benchmark of working proficiency for other stock trades in the country". The foundation of "Central Depository Services Limited" (CSDL) 1999 and the "National Securities Depository Services Limited" (NSDL) in the year 1996 has empowered paperless exchanging system the trades.

Presentation of dematerialization by SEBI and with the development of online screen-based exchanging; exchanging the Indian securities exchange turned out to be quicker, more straightforward, and more productive banishing from taking out the dangers to the financial backers who come in light from terrible allotment delays in move of offer, phony and fashioned offers. Additionally, the "Electronic Fund Transfer" (EFT) office joined with the dematerialization of offers has planned an accommodating environment to reduce the financial exchange's settlement cycle. Henceforth, "The Indian capital market overall and the financial exchange, specifically, has seen transformative changes throughout the long term. The expanding impact of India's financial exchange at the world level has evoked boundless scholarly and business interests".

The stock trade assumes a vital part in the economy and it additionally helps in the support and improvement of the country. NSE goes about as a specialist and facilitator for enterprising advancement and it likewise has an exceptionally urgent influence in the improvement of the capital market. Offer costs influence the utilization and abundance of families. The securities exchange's conduct is constrained by the Central Bank of India and it likewise goes about as a clearinghouse for every one of the exchanges which occurred on the lookout.

#### **Stock Market and Digital Trade**

The financial exchange crash of 1987 set into movement a pattern of digitization, at that point, stock specialists would take orders from their customers via telephone, scared of enormous misfortunes, many representatives wouldn't get the telephone. This lead the SEC to push for electronic exchanging, on the off chance that an electronic switch was dealing with client orders, people could presently don't disrupt them. That, at any rate, was the thinking.

This, joined with the privatization of stock trade, made the ideal situation for exchange. High-recurrence exchanging firms would pay huge cash to have quicker association with the trade, and afterward exploit value contrasts at various trades acquiring a penny to a great extent on each exchange, they stashed billions. With the passage of time and the growing facilities in the digital technology the trade in stock exchange became easier and there came a launch of numerous mobile applications through which an individual retailer can make their trade happen. The coming of this digital technology was backed by the feature of digital payment system through with the debit credit of money takes place by the added bank account or via use of digital payment applications. The online or mobile trading applications such as Zerodha KITE app, Angel broking mobile app, Edelweiss trading app, 5Paisa, IIFL Market trading app, and many more lies in the row which offers smooth trade through the system of digital payments. A trader for this can make their payment via any digital payment application such as PayTM, Dhani, PhonePe, and Google Pay or even can do directly from their bank account at any time due to the flexibility of these digital payment services across the world.

Trading through smartphones has developed more than 100% in India because of an expanding number of amateurs having begun utilizing the applications prior to getting into genuine exchanging. Taking a gander at the situation and developing interest for exchanging applications, store the board organizations additionally equipped towards dispatching their own lead applications. Therefore, the online market has been overwhelmed with exchanging applications from the main players of the Indian financial exchange. Other than saving time and expenses, application based contributing permits financial backers to get to an ocean of data, which in any case might be troublesome. It likewise helps the financial backer track his portfolio consistently. Applications likewise offer online guidance through instruments, for example, resource designation organizer and portfolio structure analyser. These assist financial backers with building an optimal resource portion and contrast the genuine and an optimal circumstance, individually. Contributing stages are perceiving the inclination for application based contributing and making a huge effort to smooth out the client stream, keeping the user interface or experience (UI/UX) awesome and diminishing grinding in on-boarding.

### Objectives of the Study

- To assess the development example of value exchanging at National Stock Exchange for the time of 12 years for example 2009-10 to 2020-21.
- To determine the contribution of digital payment services or applications in the growth of stock market.
- To identify the participation of stock trading mobile applications in securities market.
- To inspect the example and piece of the pie of exchanging at National Stock Exchange in correlation with Bombay Stock Exchange for the time of 12 years for example 2009-2021

### Literature Review

**Suvanam Gopi Krishna& Trivedi Amit(2011)** encountered "Imbalances Created because of Structured Products in Indian Equity markets. They took a gander at a few parts of the business sectors of construction item which comprises of the supporting conduct the impact of supporting, the danger of the items, and the inspiration to purchase the item. They additionally proposed that the presentation of some new trade items can make the supporting system simple and furthermore can help the retail financial backers to communicate their view in a superior way without having the exchange costs engaged with those items. In their investigation, they established that supporting could become unpredictability past 4,700 clever levels. They saw that the fates can be exchanged at a huge markdown in sell-offs at can be at a higher cost than normal in a meeting. It was additionally seen by them that some utilized longer dedications to support their openness, with the rationale of getting capital insurance".

**Kochhar Khyati (2017)** talked about "A Study on Role of NSE in Capital Market. The portion of the overall industry of the money market, value market, and subordinate market of NSE were inspected by the specialist and investigations the pattern example of various sections of the market. In the exploration, it was tracked down that the pattern of the market capitalization of the money market was expanded by 59.1% from the year 2013-2015 which portrays that there was high development in the capital market during that period. The specialist additionally broke down that during that time financial backers were keener on putting resources into values and in F&O. Yet, the exchanging money worth of F&O was diminished by 42.6%. It was likewise seen by her that during 2013-14 NSE was the market chief as far as volumes in the money market, cash subordinate and value subsidiary and furthermore in 2014-2015".

**Girish G.P. (2019)** the principle motivation behind his examination was to establish that the execution of GST emphatically affected the clever 50 files and fundamentally brought about unusual returns. He likewise thought to be every day shutting upsides of clever 50 List in his investigation and for this the information considered was for 28 days that is 14 days prior and 14 days after the occasion. From the information, he determined Average rate of return (ARR) which was incorporated to get Compounded annual rate of return (CARR). It was established that there was an invalid speculation that was dismissed at 10% importance esteem which further demonstrates that there was no huge contrast between the ARR with regards to previously, then after the fact Execution of GST in the record of clever 50. The invalid speculation in the event of CAAR was viewed as nothing".

**Srivastava. N. (2019)** contemplated the idea that the target of this investigation is to expand administrations of money by means of computerized mode in globalized and changed economy of India, to expect computerized administrations for general individuals in credit only nation and the last goal is to placed light on certain difficulties of advanced administrations in setting to India. The analyst has created theory test for information gathered and established that pattern of computerized administrations will have nonstop and positive development with ordinary advancement may rule Indian instalment situation. It was being seen by him that there is a most vital test in Indian framework that is of less proficiency level comparable to digitalisation, in proper web access, less accessibility of foundation identified with banks and disorderly market for provincial individuals can acquire obstacle development of advanced administrations inside country.

**Jain, Sarupria and Kothari (2020)** contemplated " The Impact of COVID-19 on E-wallet's Payments in Indian Economy " and examined that occurrence of Corona virus has brought an extraordinary lift for the Indian economy particularly for the areas like food and drinks, amusement and others. The administrations of advanced instalments have seen tremendous development that is from 5% to 30 percent after the occurrence of demonetization likewise with consistent endeavours of government towards economy. There is a major commitment by amusement and friendliness industry which is roughly 40% to the economy which is helping for development.

**Singhal Rashi (2021)** cited in her paper "Impact and importance of digital payments in India" that administrations offered by banks in computerized structure gives different freedoms to the banks with regards to the advantage of their clients. The customers have an extraordinary impression alongside an advantageous impact upon the utilization of advanced instalments administrations. As probably the biggest supplier of monetary and money related administrations in our shrewd urban communities and the shrubbery of rustic regions, business banks offer matchless types of assistance to their possible clients. She has established that RBI and Indian government has raised some perceptible acknowledgments with a section of a mode like non-monetary arrangement of conceded instalments. The ordinary improvement in transmission of media just as advancement has given incitement to wilful structure of automated portions. Further she additionally referenced about different legislative exercises, for example, demonetisation or GST which is adding to the financial extension alongside spreading of net for high costs.

**Gupta, A., & Singhal, R. (2021)** quoted in their paper "The impact of covid-19 on digital payment services at towns and villages" that after the happening of covid-19 there is a great boost in the usage of digital payments among the villages & towns people in their businesses as well as while having any kind of monetary transaction. They analysed that there was an increase in the awareness of digital payment applications among the people who were facing hard times due to non-dealing of business because of lockdown or due to the maintenance of social distancing, the people were afraid of touching cash hence to survive in the hard time they analysed the need and increased the usage of mobile payment applications into their daily lives.

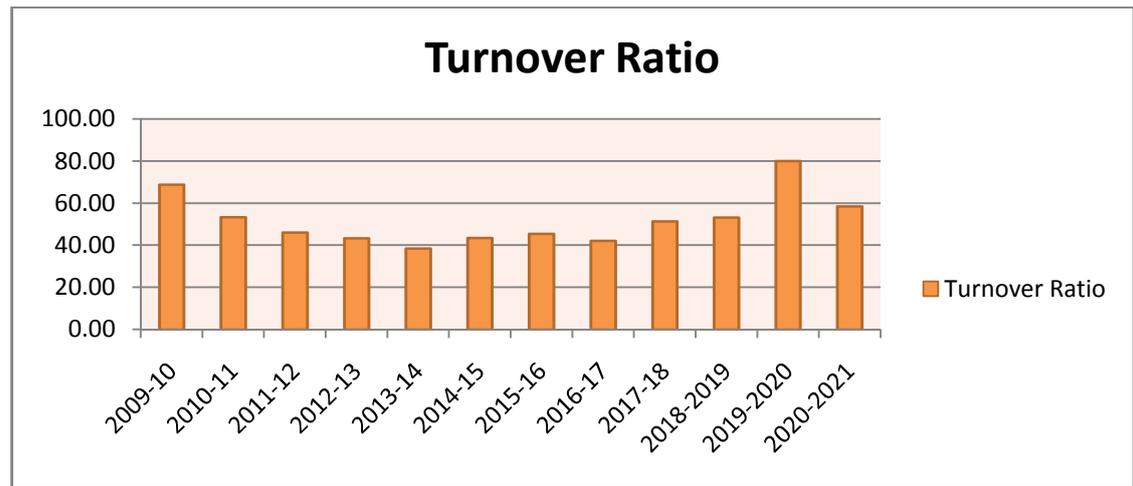
**Research Methodology**

The researcher has utilized applied examination to direct the investigation for example Pattern of Trading at National Stock Exchange in the Capital market fragment. The information utilized in the examination is auxiliary based. Information has been gathered from the sites of NSE, SEBI, and different connections along with previously published journals. The researcher has additionally utilized factual instruments like Standard Deviation and Median for the investigation of information.

**Discussion and Results**

**Equity Trade Growth Pattern at NSE from year 2009-10 to year 2020-21**

Analysis	Turnover (Rs in Crores)	Market Capitalization (Rs in Crores)	Turnover Ratio
Mean	57,70,516	1,08,38,198	52
Median	42,83,319	96,20,297	49
SD	3527535.236	5532815.69	11.59642951



Source: NSE Fact Book, 2021

**Figure 1: Equity trading Turnover ratio trend at NSE during 2009-10 to 2020-21**

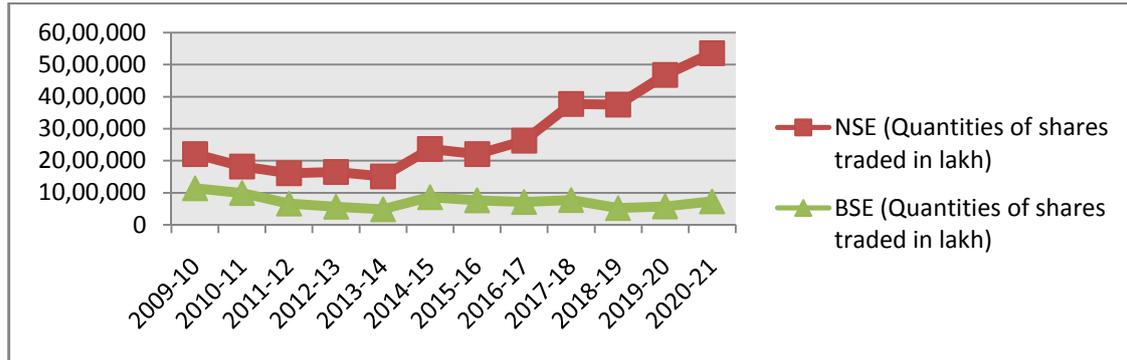
The abovementioned shows the turnover ratio trend at the market of National Stock Exchange. The rise in turnover ratio shows the increase within the trade activities at NSE. The turnover ratio at the year-end 2009-10 was 68.86 that reduces to 53.37 by the end of 2010-11 & continued to 2014-15 that leads

to 43.60. After this the trend started increase again from 45.51 by the year-end of 2015-16. After 2015-16 the market has experienced a slowdown which was later showing the positive signs in year 2019-20 where it reached to its heights that is at 80.04.

**Market Share of trading at NSE and BSE from 2009-10 to 2020-21**

Analysis	NSE	BSE
Mean	27,92,687	7,28,594
Median	22,83,829	7,17,655
SD	1233156.285	186606.597

Source: SEBI Handbook, 2021



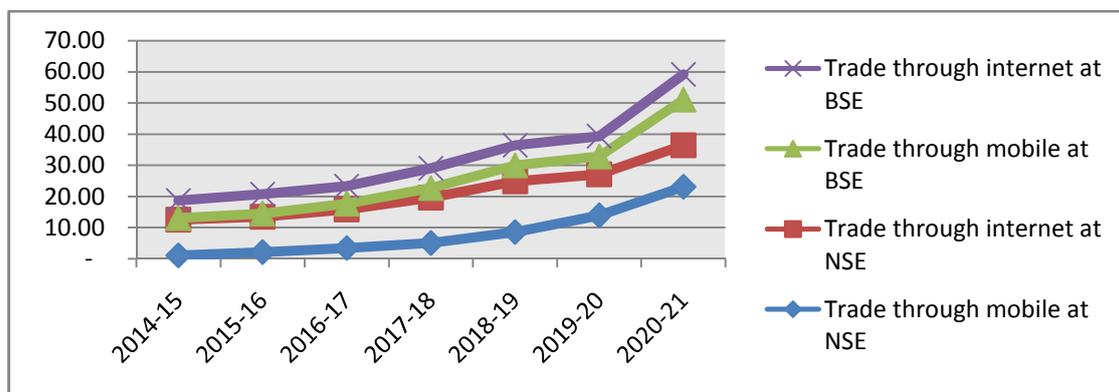
**Figure 2: NSE and BSE trading statistics during 2009- 10 to 2021**

The above figure portrays the portion of exchanging Public Stock Trade just as in Bombay Stock Trade which both is exceptionally noticeable business sectors in the country. As the above table and figure both are showing that NSE is overwhelming BSE as far as amounts of offers exchanged. During the year 2009-10 NSE was at 22, 05,878 though BSE was only 11, 36,513 which shows an extraordinary distinction between them however at that point in the later year for example in the year 2010-11 the hole is low yet after this the distinction began expanding steadily and by the 2018 NSE scopes to 27, 68,553 while BSE was distinctly at 3, 85,982. So from the above figure it is obviously expressed that NSE is overwhelming the securities exchange and is maintaining its position till date in the market.

**Contribution of mobile or digital trading at NSE and BSE from year 2014-15 to 2020-21**

Analysis	NSE		BSE	
	Trade through Mobile	Trade through Internet	Trade through Mobile	Trade through Internet
Mean	6.86	9.34	4.06	4.50
Median	7.32	13.17	4.51	6.34
SD	3.514150581	6.219190987	2.061915287	3.011392646

Source: SEBI Handbook, 2021



**Figure 3: Trend of Stock Market Trade via Digital Platform**

From the above graph it is depicted that in both NSE and BSE market there is a continuous increase in trade via use of mobile and internet applications. The trade through internet at BSE is at peak which shows that the retail investors who prefers to buy and sell their stocks in BSE market are preferring more of Internet based trade which can be done from their computer systems via transacting digitally, whereas in NSE market there are few investors who prefers mobile trade. The mobile trade can be easily done by different stock trading applications through availing digital payment services.

### Conclusion and Recommendations

During the year 2016 the President of NSE Ms.Chitra Ramakrishna leaves her post which prompts enormous destruction in market. Furthermore, as indicated by the news in May 2019, NSE featured a trick in which NSE was utilizing the Tick-by-tick worker to help its individuals by giving information to them which moves information in a similar grouping in which it gets. Regularly, NSE gives the information on Ordinary Convention Premise and by this OPG gain admittance to reinforcement workers of NSE which were kept up with to forestall specialized issues on the fundamental worker in return and are likewise given the primary access of information which helped them in executing quick request and this additionally influenced its position adversely on the lookout. NSE was working more viable and straightforward to support on the lookout and furthermore fabricating a solid trust among its financial backers when contrasted with Bombay Stock Trade and is generally dependable of the financial backers. The pattern of NSE is very high when contrasted with BSE. There is a huge contribution of mobile based stock trading applications which are attracting large number of individual investors to start trading in stock market just by having everything digital. This on the other hand has given rise to the industry of digital payment services or mobile payment applications to make their procedure easier and convenient. At the time of COVID-19 when the whole economy was experiencing the nation-wide lockdown and no physical contact with anyone the digital payment applications as well as mobile based stock trading apps has contributed to the sector and made everything happen with ease.

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**Appendices****Equity Trade Growth Pattern at NSE from year 2009-10 to year 2020-21**

S. No.	Year	Turnover (Rs in Crores)	Market Capitalization (Rs in Crores)	Turnover Ratio
1	2009-10	41,38,024	60,09,173	68.86
2	2010-11	35,77,410	67,02,616	53.37
3	2011-12	28,10,893	60,96,518	46.11
4	2012-13	27,08,279	62,39,035	43.41
5	2013-14	28,08,488	72,77,720	38.59
6	2014-15	43,29,655	99,30,122	43.60
7	2015-16	42,36,983	93,10,471	45.51
8	2016-17	50,55,913	1,19,75,421	42.22
9	2017-18	72,34,826	1,40,44,152	51.51
10	2018-19	7949004	14934227	53.23
11	2019-20	8998811	11243112	80.04
12	2020-21	15397908	26295813	58.56

**Market Share of trading at NSE and BSE from 2009-10 to 2020-21**

Year	NSE (Quantities of shares traded in lakh)	BSE (Quantities of shares traded in lakh)
2009-10	22,05,878	11,36,513
2010-11	18,10,910	9,90,776
2011-12	16,05,205	6,54,137
2012-13	16,44,259	5,63,883
2013-14	15,05,133	4,79,951
2014-15	23,61,779	8,56,755
2015-16	22,01,771	7,62,545
2016-17	26,24,534	7,07,231
2017-18	37,71,836	7,71,603
2018-19	3749976	518103
2019-20	4674057	573548
2020-21	5356910	728079

**Contribution of Mobile or Digital Trading at NSE and BSE from Year 2014-15 to 2020-21**

Year	Trade through Mobile at NSE	Trade through Internet at NSE	Trade through Mobile at BSE	Trade through internet at BSE
2014-15	1.09	11.49	0.5	5.6
2015-16	2.16	11.32	1.1	6.2
2016-17	3.48	12.42	1.9	5.6
2017-18	5.06	14.61	3.1	6.3
2018-19	8.60	16.24	5.1	6.5
2019-20	13.94	13.17	5.8	6.5
2020-21	23.11	13.27	14.7	8.1

