

# Fintech Revolution and Factors Affecting Trading Preferences among Retail Investors in the Post Digitization Era of the Stock Market

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## Abstract:

The advent of financial Technological advancement and digitization has caused immense change to the way Stock market and financial service business function. All information for a retail investor is just a click away be it financial details of the companies, past records, companies' financial performance reports, graphs etc. However amidst all this information explosion there is a dearth of knowledge in the form of financial literacy about the stock market or companies before investing. Most of the retail investors invest based on suggestions from friends, relatives or sometimes based on some expert advice without having any appropriate knowledge of stock market and later sell their stock at loss at time of volatile market situation or deposition the gaining stock and hold on loss making stocks which would rarely raise in price when compared to the gaining stock. These type of situations can be avoided by the retail investors by gaining financial literacy before making an investment. Hence this study is undertaken to identify the factors that influence the investment decision of the retail investors in stock market of India, to identify factors for not preferring trading online and to find other factors like demographic, educational, risk factors affecting the trade pattern of retail investors.

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## 1. Introduction

### Financial Literacy

In pursuance of taking effective financial decision i.e. relating to investing in financial resources an investor should possess cognizance of those financial resources before investing known as **Financial Literacy**. NSE has taken tremendous efforts to educate people on financial literacy through several courses. NSE also provides software called NSE learn to trade (NLT), a market simulation software to create awareness and enhance knowledge related to investment, trading activities and portfolio management skills among students. The simulation

software helps everyone to gain knowledge of trading in stock markets, as the simulation software is much alike current market professional software used by the stock market professional to trade in the stock.

### Financial Technology(Fintech)

Financial technology is substantial use of technology in financial services via Smartphone applications, also in various other forms like Trading apps, Investing services apps, Mobile banking apps. Financial technology has created a huge impact on financial service sector by developing various applications which enhances

the financial service business. Financial technology also known as FINTECH is an innovative way of using technology to improve the activities related to financial service sector. Financial technology companies make best use of technology to provide an enhanced financial service online to their clients. Today Fintech is becoming an emerging financial industry. Financial technology has also led to development of modernized and risk-free trade of stocks, mutual funds, commodities through online or mobile trading applications or via trading software's thus saving time and energy of the investor when compared to the traditional method of stock trading in Indian stockmarket.

### **Digitalization of Indian StockMarket**

Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) are major pre-eminent stock exchanges in India. Bombay Stock Exchange is the oldest stock exchange founded in 1875, National Stock Exchange was founded in 1992 is the largest stock exchange of the country in terms of the turnover. NSE was first to start Automated Electronic Exchange Trading System in 1992, later which BSE in 1995 commenced BOLT (BSE On-Line Trading) automated exchange trading system. Almost two decades ago Pre-Digitalization shares were traded in physical form in the stock exchange, shareholder used to get share certificate with company detail (name, address of the company), Quantity and price of shares purchased etc. which gave leeway for brokers to deceive investors. It took several days to complete the transactions in stock market, in contrary now i.e. Post digitalization transactions not only gets completed promptly but also increased magnitude of orders per day up to 8 Million, 1,60,000 orders per second at present when compared to 2 orders per second in 1994, 60000 orders per second in 2001 through

technological advancement in electronic trading system.

During Post Digitalization of Stock Market there is massive change not only in the method of trading in stock market but also in the Investment and trading pattern of Retail investor. Investor has various investment avenues in stock market post digitalization like investor can do Intraday, Short term, Medium term, Long Term trading as per the nature of investor whether Cautious, Follower or Risk-taker. In India the online trading or web trading, trading through software's or trading apps all the trade takes place through registered Stock brokers under "Order Routing System" [ORS] on behalf of the investor (clients) for the trade executed by them. Under this trade system each and every trade executed by the clients are automatically matched in the main server of the NSE online trading system where all the trade details about the trade done such as stock name, stock traded quantity, stock price, and also the other details about securities an stock brokers are communicated with the websites of the NSE or BSE stock exchange from where so ever the trade has been executed in order to buy or sell thesecurities.

### **Objectives of theStudy**

1. To identify factors influencing the investment decision of the retail investors in stock market of India.
2. To identify factors for not preferring online trading.

### **Review of Literature**

**Walia N. and Kumar R. (2012)** in their study have analyzed which type of trading (traditional or online trading) is highly preferred by the investors. The study also shows perception of investors on online

trading, compares the traditional offline trading with current online trading. The findings of the study shows only 28% of the investors prefer online trading which shows that still investors are very hesitant to prefer online trading due to lack of knowledge of how technological improvement in stock trading had made stock trading transparent and easy to use, the researcher also finds in their study that traditional investors are very conservative, hesitant to accept change instantly whereas online traders are making best use of technology in stocktrading.

**PV Durga Rao (2013)** Studied how independent variables have an impact on retail investor's decision making in the equity market, analyzed that the choice of investment varies based on the objective of investor to invest in stock market such as dividend, tax benefit, capital appreciation, quick gain or safety of investment which resulted in showing significant impact of these variables on retail investors with different demographic variables like age, gender, occupation etc. The study also does analysis of positive and negatives of various investment options available for retail investors while making an investment decision.

**Gagandeep Kaur (2014)** how stock market is evolved and how stock exchange has played vital roles in economy such as raising capital by companies through issues of shares to the public where they can mobilize their saving by investing in shares traded in stock exchanges. The stock market also facilitates merger and acquisitions of companies, start-ups gets venture capital in simplest way. The government issues bonds to public through stock exchange for infrastructure development projects promoting economic stability and growth.

**Dr. SunianaKanojia et al (2018)** this study attempts to identify the factors influencing the buying behavior of investors in Stock market of India. The study found seven behavioral issues has considerable effect on investment such as overconfidence, Disposition effect, representative bias, cognitive dissonance, Herd behavior, culture and mood among which the most influencing factors where Disposition effect, Over confidence leading to misjudgment of performance of stocks, cognitive dissonance, whereas Herd Behavior of investors has no effect on investment decision.

**Juhi Ahuja (2012)** studies the Indian capital Market and its structure. In past few decades the stock market has undergone a major prototype shift which has led to various developments and application of new reforms in the Indian capital market. Today Indian capital market has become a strong economy with huge investment in capital market competing with various other international stock markets of the world. Indian stock market has undergone diverse change in modernization of the stock market leading to various new regulatory mechanisms having a check on market liquidity, Capitalization of the stocks to protect the investors' interest in stock market. However Indian capital market has also been affected immensely by the global financial crisis of 2008 of US mortgage market delivering a sluggish capital market performance in India.

## **Research Methodology**

### **ResearchPopulation**

The population of the research opted for the study is the Retail investors who trade or invest in one or more of the following options such as Equity, Mutual fund, IPOs, Stock option and futures or commodities.

## Sampling Method

The sampling method used for the study is the Systematic random sampling where the respondents selected are particularly retail investor investing in stock market particularly in Equity shares , Mutual Fund, Initial Public Offerings (IPOs), stock futures or Options , Commodities.

## Sample Size and Sampling Area

The sample size selected for the research study is around 110 respondents residing in Chennai city. The sample area selected for the study is the retail investors investing in stock market in Chennai city.

**Correlation Table -1 Reasons For Not Preferring Trading Online Correlations**

		Approximate Investment	Not Aware of Trading apps software	Not Aware How To Trade Online	No Proper Internet or Slow internet	Busy No time or Rarely Trade	Fear of Making Mistakes while placing orders	Slow Trading apps or software	Trading apps or software complicated to use
Approximate Investment	Pearson Correlation	1							
	N	110							
	Pearson Correlation	.151	1						
Not Aware of Trading apps software	Sig. (2-tailed)	.116							
	N	110	110						
	Pearson Correlation	.293	.699	1					
Not Aware How To Trade Online	Sig. (2-tailed)	.002	.000						
	N	110	110	110					
	Pearson Correlation	.071	.338	.351	1				
No Proper Internet or Slow internet	Sig. (2-tailed)	.461	.000	.000					
	N	110	110	110	110				
Busy No time or Rarely Trade	Pearson Correlation	.247	.574	.547	.263	1			

Inference:

From the above table 1 of Correlation most of the p values are significant, i.e. p values more than significant value 0.05 this means that there is significant relationship between the approximate income and variables such as not aware of trading apps, not aware of how to use it, no proper internet, no time to trade, fear of making mistakes are positively correlated; whereas expect slow internet and trading software complicated to use are negatively correlated with approximate investment.

There are 67 respondents out of 110 who are aware of mobile trading apps but still do not trade online due to fear of making mistakes. Whereas 47 respondents find mobile trading apps and software to be complicated to use, 55 respondents have moderate opinion on mobile trading apps and software being complicated to use, whereas majority of the respondents agree, strongly agree to the fact that they find no time to trade on their own. The respondents being busy or those who rarely trade due to slow internet do not prefer trading apps or software to execute their trade, moreover due to fear of making mistakes and trading apps being slow to execute the trade, the respondents do not prefer online trading.

		Approximate Investment	Not Aware of Trading apps software	Not Aware How To Trade Online	No Proper Internet or Slow internet	Busy No time or Rarely Trade	Fear of Making Mistakes while placing orders	Slow Trading apps or software	Trading apps or software complicated to use
	Sig. (2-tailed)	.009	.000	.000	.005				
	N	110	110	110	110	110			
Fear of Making Mistakes while placing orders	Pearson Correlation	.129	.449	.564	.227	.465	1		
	Sig. (2-tailed)	.181	.000	.000	.017	.000			
	N	110	110	110	110	110	110		
	Pearson Correlation	-.235	.153	.000	.192	.082	.114	1	
Slow Trading apps or software	Sig. (2-tailed)	.013	.110	.997	.044	.394	.234		
	N	110	110	110	110	110	110	110	
Trading apps or software complicated to use	Pearson Correlation	-.107	.211	.193	.090	.123	.379	.305	1
	Sig. (2-tailed)	.266	.027	.043	.350	.200	.000	.001	
	N	110	110	110	110	110	110	110	110

Source: Primary Data

## Factor Analysis

**Table -2**

Table -2 KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.694
Bartlett's Test of Sphericity	Approx. Chi-Square of Df	701.927 276
	Sig.	.000

The KaiserMeyer-Oklin measure of sample adequacy is found to be 0.69 is a

satisfactory count and therefore the sample is adequate enough to carry out factor analysis. Therefore Kaiser and barlett's test indicates all the necessary parameters revealed that given primary data was fit for factor analysis.Total Variance Explained

Table 2a)

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.219	17.580	17.580	3.337	13.905	13.905
2	2.624	10.934	28.514	2.385	9.939	23.844
3	2.249	9.369	37.883	2.251	9.380	33.224
4	1.654	6.890	44.773	2.115	8.811	42.036

Extraction Method: Principal Component Analysis.

Extraction Method: Principal Component Analysis.

### Interpretation:

The above table depicts the percentage variance explained in each derived factor elements towards factors influencing retail investors to invest in equity. The initial eigen values gives the eigen value given for all the possible variables of the factor in decreasing order.

For factors influencing retail investors to invest in equity in this analysis **F1** component labeled as **Risk factor**, **F2** component labeled as **Growth factor** and **F3** component labeled as **Environmental factor**, **F4** component labeled as **Business Management factor** and **F2** component labeled as **Financial factor**. All the five factors together explain 42% of total variability in the data set. Thus five factors are considered to be adequate to proceed further.

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

b. **Rotated Component Matrix – Table 2 b)**

a. Rotated Component Matrix – Table 2 b)

Component	Component				
	Risk	Growth	Environmental	Business management	Financial
Other Risk Factors	.730				
Fed rate	.703				
Debt equity ratio	.687				
Tax save	.665				
Political factor	.570				
PE ratio					
Change in interest rate		.691			
Industrial growth rate		.683			
companies policies		.582			
Inflation		.515			
Environmental factor			.737		
Company with CSR			.673		
Trade wars			.508		
Currency exchange rate					
Crude oil price					
Future growth				.735	
Book value				.686	
Strong Business company				.663	
management					
Financial Background					
Company result					.811
Dividend					.802
High Risk High Return					.503
Government budget					
Capital Appreciation					

c. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Source: Primary Data

### Interpretation

The total variance of the Factor analysis depicts the number of useful factors. The table titled Rotated component matrix consists of the various variables of which 17 variables with reliability score above 0.50. The highlighted variables are such as other risk factors (.730), change in interest rate(.691), environmental factor(.737), future growth(.735), company result(.811) are considered to be most influencing factor making investment decision in equity.

The variables with similar characteristics are clubbed to form factors. In the above analysis five factors are formed which are named by the researcher as Risk factor, Growth factor, Environmental factor, Business Management factor, financial factor

### Table-3 CLUSTER ANALYSIS



### Initial Cluster Centers

Initial Cluster Centers

	Cluster		
	1	2	3
REGR Risk factor 1 for analysis 1	-.11587	-1.12494	.52772
REGR Growth factor for analysis 1	.33783	-1.97440	3.66995
REGR Environmental factor for analysis 1	-.88487	-.49241	1.99551
REGR Management factor for analysis 1	-3.30331	1.65470	-.47628
REGR Financial factor for analysis 1	1.68209	.24346	1.01339

Final Cluster Centers Table 3a

	Cluster		
	1	2	3
REGR Risk factor 1 for analysis 1	.37243	-.17077	-.20579
REGR Growth factor for analysis 1	-.24067	-.22975	.93687
REGR Environmental factor for analysis 1	-.38570	-.29446	1.32714
REGR Management factor for analysis 1	-1.00935	.72362	-.05871
REGR Financial factor for analysis 1	.04372	-.06265	.07653

Number of Cases in each Cluster Table 3b

Cluster	LEAST INFLUENCED	MODERATELY INFLUENCED	HIGHLY INFLUENCED
Valid	36.000	52.000	22.000
Missing	.000	.000	.000

### Source: Primary Data Inference

The cluster analysis has number of cases extracted from the five factors Risk, growth, environmental, business management; financial factor in this research has been split cases into clusters. The above given are the five factors which are clubbed to 3 clusters. The above cluster analysis depicts that only 22 respondents out of 110 (cluster3) are **Highly influenced** and aware of the factors influencing the investment decision while investing in equity, majority of respondents about 52 out of 110 (cluster 2) are **Moderately influenced** by the factors while taking investment decisions whereas 36 out 110 respondents (cluster1) are **Least influenced** by the factors while taking investment decision in equity which also indicates the lack of awareness of the factors that are influential and must be considered before making an investment decision by the retail investors.

### Findings

The study found that fear of making mistakes while trading online as a main factor for not preferring to trade online, lack of awareness towards online trading as well as towards the apps available along with slow internet are some of the reasons quoted for not preferring to trade online. Factors such as risk factors, change in interest rate, environmental factor, future growth, company result are considered to be most influencing factor making investment decision in equity.

### Suggestions

- The Present study is limited to retail investors dealing in stock market of Chennai city only; there is further scope for conducting research, survey in other different cities of the country.
- Securities Exchange Board of India (SEBI) should take quick action at time of crisis or volatile situation in the stock market which would prevent the retail investor from panic selling at such time. The SEBI should also have control over the spread of fake news related to the stocks over social media or television or any other platform.
- The government should make strict law against those who spread such fake news, penalize for unfair trade activities. The government of India should encourage NSE, BSE and SEBI to conduct many more investor's awareness programs in order to protect the interest of the investor.
- The stock brokers should also take steps to protect their clients during volatile situations of the stock market. The stock broker should try to reduce their borrowing limits of the retail investors so as to reduce the overbuying of retail investors on credit and making loss. The stock brokers should timely reports with

clients of the stocks which they hold in their investment portfolio.

- The government of India, Securities Exchange Board of India (SEBI) should encourage retail investors toward financial literacy; they should do many programs like investors literacy week, make retail investors understand the importance of financial education through those programs or workshops or seminars.
- The government should make law against those who use online trading platform fraudulent activities, and creates a volatile situation in the stock market. The government should take initiative to protect interest of retail investors by addressing the grievances of the retail investors in short span of time.

## Conclusion

The retail investor can gain high return only if he is able to understand the stock market, become more technological advanced by using the various types of apps available for gaining financial information with regard to market news, companies financial results, chart for technical analysis etc. The brokering firms should also initiate to educate people and create awareness about the usage of their apps and trading software's so that retail investor would get an opportunity to learn more about financial markets, about their investment and get exposed to use of technological advancement for their benefit. Hence government should take more steps to create technological awareness among retail investors to gain financial literacy and encourage them to invest more in stock market for long term which would result in vast contribution by retail investors towards growth of an economic and industrial development of the country.

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