

FinTech Companies and Central Banks' Responses to the Revolution in the Stock Market

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Abstract: *Equity markets of any country have a very fundamental role in the development of business (fundraising) and experiencing capital gain. Financial unawareness and unavailability have made the markets underperforming due to a lack of financial infrastructure and efficiency. The arrival of fintech companies has filled these voids and resulted in the efficient working of these financial institutions. In today's modern era financial technologies provide us with a source of side income in both short and long-term investments. These sources can be accessed from the comfort of your home and just through some taps on your mobile or web applications. If technologies can simplify stock trading, there are so many more opportunities that can be facilitated by financial technologies as the majority of the Indian population is job seekers. These institutions provide a source of side income for them. This discussion emphasised how simplification of stock trading has been beneficial for the Indian stock market because the web and application features of the fintech companies have attracted the millennials (tech enthusiast generation) attracted towards the stock market. The fintech companies have evolved as a bridge to cover up the information gap and inefficiency.*

Keywords: Finance, Fintech, Banks, Stock Market, Demat Accounts, Crypto

1. Background

Terms required to understand the basics of the stock market

- 1) Stock exchanges - Market for purchase and exchange of equity share
- 2) Equity shares - An equity share is a fractional ownership in which each member commences the maximum entrepreneurial liability associated with a trading firm.
- 3) Stock Broker - An officially licensed firm or a person who performs the exchanges on behalf of their customer by taking brokerage charges
- 4) Regulatory bodies (SEBI & RBI) - Official licensing of a broker and a firm is done by SEBI. Moreover, SEBI and RBI are jointly responsible for the supervision of the exchanges. At the same time, both have their designated roles in the supervision as RBI primarily supervises the fund management and transactions
- 5) Rating Agencies - Financial experts and many banking firms share vital information about stock fundamentals, target prices, and predictions related to future gains.
- 6) Investors - They invest their money in the long run in search of capital gains and high returns.
- 7) Traders - They invest their money in the short-run in search of a lot-profits by analysing stock performance and traded volumes.
- 8) Market Indexes - These indexes determine the market status during a particular period in different sectors, for example - Nifty bank, Sensex, Nifty50, Nifty100
- 9) Trade volume - The volume of stocks in quantity or in value traded on a given market session.

Big investors and bankers have historically governed the stock markets, and the fundamental reason for this has been accessing information, which has enabled them to make well-informed decisions. Through some of the most modern technology, certain services provide rich data. These provide real-time data on the latest trends, company information, news feeds, public opinion, and more, but not everyone has access to them.

Investing in the stock market has been equated to gambling for a long time, but it is actually about managing volatility and risk in the capital markets. It isn't completely reliant on luck. Fintech has changed the status quo in the stock market, where information is king, and market insights and rich data are now accessible to all thanks to technological scaling. It has the potential to be democratizing. Previously, ordinary investors had to either subscribe to a stock research company or pay a stockbroker to keep up with the newest trends or obtain the necessary data, which fintechs have effectively eliminated. Retail investors can use fintechs to select algorithm-based services that can generate better market predictions and plan decision-making to maximize their return on investment.

Stock Manipulation, scams, Insecure transactions and insecure settlements have been a problematic issue in the stock markets. SEBI and RBI are continuously changing and regulating the policies to fix the loopholes. With the Fintech era, services like E-KYC, debt accounts have provided better verification of stock holder, brokers thus reducing the risk of stock manipulation and fraud holdings through dedicated verification via SEBI.

2. Methodology

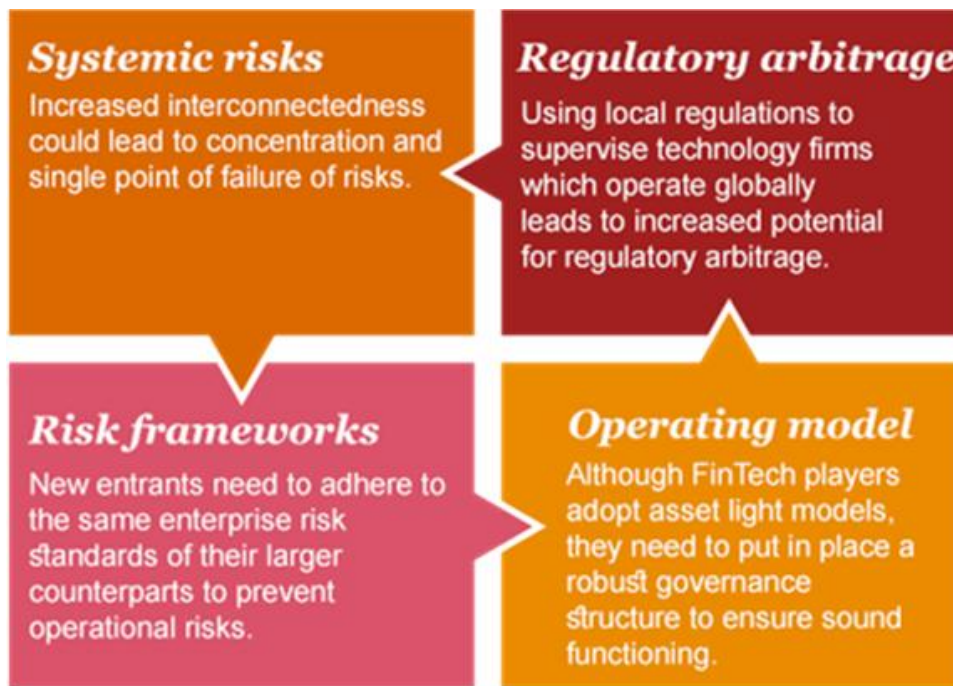
FinTech companies are making financial services more accessible to the mass public. Traditional financial transactions are still every day in these services, such as saving, investing, and loan processing. India Stack is a set of Application Programming Interfaces (APIs) driven by a volunteer organisation, ISPIRIT (Indian Software Product Industry Round Table). India Stack has two major components:

- A unique identifier for each citizen (Aadhar) and
- A digital payments infrastructure built by NPCI (National Payments Corporation of India)

This set of APIs enables businesses, governments, and Fintech to utilize a unique digital infrastructure to solve the complex problems of India to get a cashless, presence-less, and paperless service delivery. With the presence of FinTech, Stock market Investors do not need to transact directly with the stock exchange to sell or buy a stack. With these fintech applications, investors can invest easily with their mobile devices. Start-ups can now get crowd funding from a single platform with this fintech application.

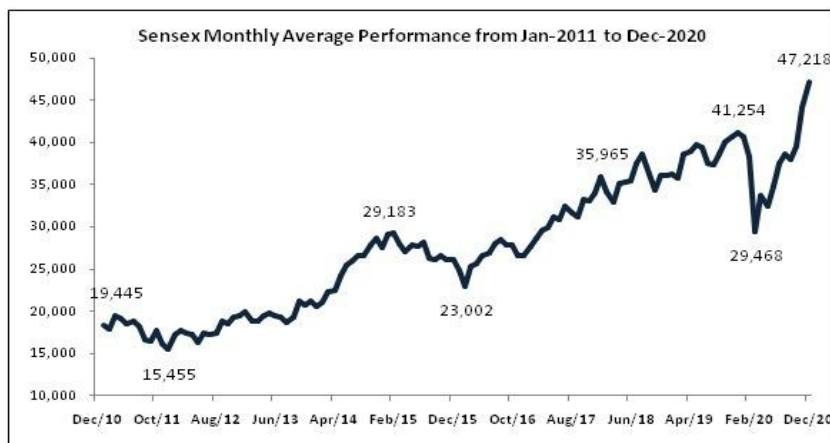
But all these rapid paces of digitization, parallelly coupled with the decentralized nature of Fintech, have brought new challenges for regulators (RBI & NPCI), which were only supervising central activities before digitization. Contemporary Issues for Regulators were:

- 1) Protection of the consumer by ensuring data privacy and security: open data might be handy for cybercriminals to exploit the consumer and hamper their trust. So, without consent, the free flow of data is harmful to consumers.
- 2) Keeping pace with new technological changes and optimizations: Payment technology could lead to a single point of failure risks if industry concentration is high. Algorithmic trading can increase market volatility and cause systematic risks. If poor underwriting standards are followed, Alternate lenders could lead to asset quality risks, leading to online scams.
- 3) Ensuring the stability of the financial system: Increased interconnectedness and entry of disruptive models could raise new systematic risks such as single point of failure risk and concentration



Data

Year	Market Capitalization (In Cr)	Demat Securities Traded (lakh)	Sensex Index	
			High	Low
2021-2022	26181064	552376	62245.43	47204.5
2020-2021	20295813	7429579	52516.76	27500.79
2019-2020	11243112	4674057	42273.87	25638.9
2018-2019	14934227	3749976	38989.65	32972.56
2017-2018	1,40,44,152	37,71,836	36443.98	29241.48
2016-2017	1,19,78,421	26,24,534	29824.62	24523.2
2015-2016	93,10,471	22,01,771	29094.61	22494.61
2014-2015	99,30,122	23,61,779	30024.74	22197.51
2013-2014	72,77,720	15,33,716	22467.21	17448.71
2012-2013	62,39,035	16,59,160	20203.66	15748.98
2011-2012	60,96,518	16,16,978	19811.14	15135.86
2010-2011	67,02,616	18,24,515	21108.64	15960.15
2009-2010	60,09,173	22,15,530	17793.01	9546.29
2008-2009	28,96,194	14,26,354	17735.7	7697.39



Sensex Index

Analysis

The stock market is very volatile as small rumours can change a market session into a bear market from a bull market. The fundamentals of any stock govern the long-run performance and have low risk. But the stock performance is also determined by the demand and supply of the stocks whose manipulation and misinterpretation diverts investments and can even bring bloodbath in the stock market. Before the era of Online trading (2010 onwards), the Indian stock markets were considered very unstable and considered gambling. Still, after the onset of online trading, the Indian market became more stable and reliable, which

can be concluded by comparing the rate of increase of the market indexes and market capitalisation.

After 2008-to 2010, the market cap increased by nearly ten times depicting the onset of online trading. However, the internet wasn't as accessible today; hence the increase is not as prominent as it should have been. A further effect of this online trading wasn't seen for five years. Still, after 2016, the impact of accessibility of the internet was again visible as well as foreign investment in the stock market increased, particularly by the Chinese and American banks.



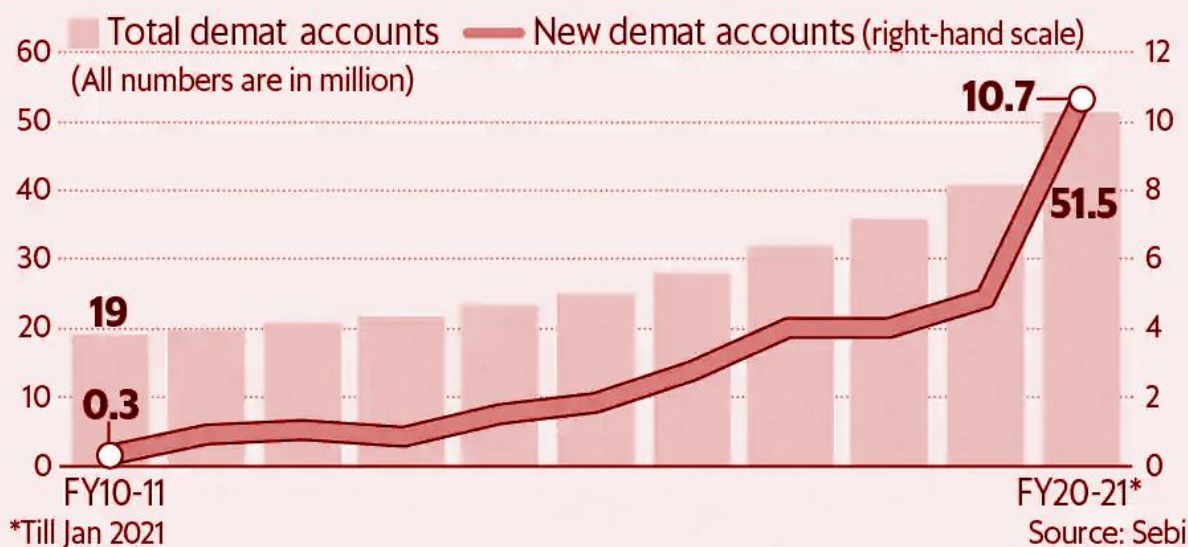
Market Capitalization

With the evolution of API based fintech solutions, the Demat accounts or the number of shareholders increased drastically as the financial knowledge became very accessible, especially during the covid period. Many

financial awareness and related investment personalities were immensely followed on social media, which is evident by the boom in the number of Demat accounts.

Explosive growth

The number of new demat accounts added between April and Jan in FY21 was more than double the accounts opened in FY20.



Number of Demat Accounts

The stock market is dependent upon supply and demand. If we talk about the market as a whole, not every stock is just increasing due to the company's performance. Instead, some stocks are hyped or in more demand, which drastically increases the price. If, on a day, the number of investors suddenly increases, the costs of the demanded stocks would increase proportionally to the number of investors. The example of Reliance Industries Stocks can explain this thought.

Date	Price	Volume Traded
Mar-22	2,688.00	145.02M
Mar-21	2,231.90	194.13M
Mar-20	1,356.15	459.29M
Mar-19	1,374.97	188.46M
Mar-18	950.89	134.07M
Mar-17	662.54	302.50M
Mar-16	523.04	143.48M
Mar-15	450.55	141.61M
Mar-14	465.49	193.84M
Mar-13	430.62	121.98M
Mar-12	411.1	194.08M

Source: Reliance Stock Trend

If we see the Trends of price and volume specifically for the year 2020, the covid time when the number of Demat holders increased the volume drastically traded increased which ultimately lead to a considerable price gain in the stock. Not just reliance, the majority of popular companies got high investments, and the price increase was evident after the covid relaxations. A similar increase in the trading volumes during 2011-12, which was the very first year when online trading became popular among brokers, traders and big investors.

3. Conclusion

Most Indians still do not invest in the Indian stock market, thus equity or share market has a lot more potential. When the stock market and its fundamentals become more evident and the information gap narrows in the future. The stock market will soar, and the risk associated will be significantly reduced.

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