

Behavioral Aspects and the Perception of Risk in the Financial Markets: Indian Scenario

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Abstract: In the 21st century, the capital market dominates the financial sector in many countries. Financial systems play a crucial role in the economic development of a country. There are enough economic studies that divulge that a well-functioning financial structure and administration increases profit-making proficiency, financing, and expansion.

The study divulges that the Indian investment/financial sector has experienced wide-ranging changes since the nineties as an outcome of the financial sector makeover. Inevitably, the broadening and strengthening of the financial structure have permitted wider and more fruitful financing to materialize.

System revises as the most common threat influencing commerce transactions, suggestive of rising unpredictability among the international investor circle. Probability and risk mapping reasoned Data Stealing/Phishing/Hackivism as the extremely high rampant menacing. Numerous industries such as Financial Services, Govt/PSU, Infrastructure, and Telecom have collectively ranked Information & Cyber Insecurity as the number one risk.

Transmitting accurate and true information to stakeholders is imperative for market efficiency thereby reducing speculation in asset prices. It is imperative to perform a systematic review in this field as the behavioral biases have implications for market participants, regulators, and academicians.

This study would provide broad guidelines to investors to understand and grasp the nitty-gritty of the market in their pursuit to maximize profit by minimizing risks. A high degree of volatility in the Indian market has led to more development in the future.

Keywords: Financial market, Behavioral aspects, Risks in market offerings.

1. Introduction

Finance is a link between the current and the ensuing and whether it be the organization and deployment of savings or their productive, constructive, and unbiased distribution for investment, it is the triumph with which the financial process discharges its purpose that creates the momentum for the attainment of wide-ranging national plans. The financial structure is

perhaps the most critical institutional and useful role for economic transformation.

The process of industrial development requires, as one of its accompanying structural changes, the development of a capital market. Capital market is a place where people buy and sell financial instruments/securities, be it equity/stock or debt/bond. It is a process to assist the trade of financial wealth. The capital market should be capable of meeting the requirements of the credit and finance of private entrepreneurs in particular. The capital market should also help in sustained national industrial development.

Since the inception of the financial revolution times in the early 1990s, the state Indian markets (both debt and equity) have exhibited significant development. Turning to some specific numbers, net cumulative foreign investment in equities has grown from nothing in 1992 to USD 128.5bn as of end-2016, while the comparable figures for debt stand at USD 42.1bn. The information constitutes apropos 6.4 percent of the entire Indian equity/share market capitalization and roughly 3.0 percent of the consolidated worth of the Indian bond/debt markets (Source: Business Standard).

Mr. HR Khan, Former Deputy Governor, RBI while being positive about the importance of digitization, drew attention to the huge and crucial gap in inclusion in the agricultural sector. Smartphone's, in his opinion, are a better reflection of Financial Institutions in urban areas rather than in villages where widespread digital illiteracy still plagues even the banking staff.

Per A.K. Ahuja & Others (Nov. 2012), the result of this study help in exploring whether the movement of Bombay Stock Exchanges indices is the result of some selected macroeconomic variables or it is one of the geneses of trends in those wavering of the Indian economy. In particular, for the review we apply the ADF test, Correlation and Regression analysis and Granger Casually test to observe the impact of macroeconomic variables on Bombay Stock Exchange Indices and vice versa (by using Granger causality test). The results would be very useful.

Risk is an inherent part of the bank's business. Functional possibility management is important to any bank for attaining financial reliability. Considering this, combining risk control mechanisms to the bank's organizational set-up and business plans has turned into a requisite in the banking business.

Men in general have an innate capacity to be influenced by others while making decisions, including investing activities.

2. Objectives

The motif of the present study is:

- to study, understand and evaluate how financial markets have evolved and performed in India;
- what types of risk perception are associated with Indian financial markets; and how regulators are intervening, directing reforms in the market mechanism;
- how is investor's behavior about participate in the Indian financial market – especially literacy level, awareness, access, product selection, dealing with the whole army of various intermediaries and issuers thus enabling deeper financial inclusion?

3. Literature Review

Mayya (1977), Barua and Raghuna than (1994), and Prabhakaran (1989) analyzed the hedge supported by shares and bullion to counter inflation. Gupta (1981) in a comprehensive review titled 'Return on New Equity Issues' reveals that the financial accomplishment of new issues of equity stocks, particularly those of fresh companies, merit distinct scrutiny. Bhole (1982) compiled an all-inclusive book on the development and reforms in the system of Indian financial/capital markets and investment institutions.

Jawahar Lal (1992) give out a portrait of Indian investors and assess their investment choices. He framed an attempt to review their informality with, and understanding of financial knowledge, and the level to which this is placed to exercise. Basu & Dalal (1993), Barua & Varma (1993a), and Ramachandran (1993) have critically examined various facets of the great securities scam of 1992.

In his new title, L.C. Gupta (1992) reckoned that,

- a) Indian share market is extremely risky;
- b) Indian investors are disappointed with the assistance given to them by the dealers;
- c) Difference collected by the stock exchanges are meager; and
- d) Liquidity in a major number of shares in the Indian markets is particularly little.

According to Banerjee (1992), herd behavior is when people follow the crowd ignoring their personal information that might be suggesting something else. Shah (1999) illustrates the financial sector revolution in India as an endeavor at shaping financial markets as another means influencing the distribution of wealth in the economy. Mohan (2004) describes the principle of financial sector revolution in India, strategy reforms in the financial sector, and the result of the financial sector

revolution system in some aspects. Chakrabarti and Mohanty (2005) analyze how the financial market in India is transformed into the revolution phase.

Anand Pandey (2003) in his paper titled "Effectiveness of Indian Share Market" inquired of some three approved stock indices to analyze the productivity and arbitrary character of the Indian share market. Selvam M (2008) in his research paper "Efficiency of Indian Capital Market to react adequately to the announcement of quarterly earnings: A study in Capital goods Industry" has stated that a well-organized and unified financial market, is quite an essential infrastructure that enables accumulating wealth.

Thomas (2005) describes the financial sector revolution in India with a history of prosperity as well as a fiasco. Prasad and Rajan (2008) state that the stage has arrived to affect a more collaborative force to the succeeding peer-group of the financial revolution. The analysis recommends that a thriving and growingly complicated market-aligned economy and its significant unification with international commerce and finance will necessitate sound, more streamlined, and well- regulated capital and financial markets.

Debjiban Mukherjee (2007) undertook a relative study of the Indian share market with global markets. Both the Bombay Share Market (BSE) and the National Stock Exchange of Indian Limited (NSE) have been exploited in the review as a segment of Indian Share Market. Juhi Ahuja (2012) illustrates a study of the Indian Capital/Financial Market and its composition.

Mangala & Sharma (2014) in their study, review various behavioral biases that impact the investment behavior thereby not only influencing the current but also future decisions. Raut & Das (2015) in their review found that the behavioral changes impact individual investor's decision-making ability leading to irrational choices and thus inefficient markets.

4. Methodology

The study is descriptive and the author has used secondary data from online sources the websites of Government, Industry bodies, Rating agencies, Private organizations, Educational Institutes, other authentic sources, various publications, etc. The data so collected are then organized, classified, and compiled for concluding.

5. Discussion & Analysis

Financial market evolution is a time-consuming and complex process and there are hiccups in its journey. Some important conditions that guide and influence financial markets are:

- Macroeconomic stability
- Efficient and sound market institutions and rock-solid structure
- Prudential regulation and active supervision
- Enabling environment for creditor rights and strict contract enforcement.

(A) 5.1 Indian Capital (Share) Market

The capital market provides an alternative mechanism of reallocating resources; it channelizes household saving to the corporate sector and allocates funds among firms. As a result, the savers and investors are not constrained by their abilities, but by the economy's abilities to invest and save respectively, which invariably enhances savings and investments in the economy. This process allows both corporate and households to share business risk. The capital market enables the valuation of firms on an almost continuous basis and it plays an important role in the governance of the corporate sector.

The sound development of various segments of the capital market is a prerequisite for a properly functioning financial system. The capital market in India has been modernized over some 19-20 years and is now comparable to the international markets. There has been a visible improvement in trading and settlement infrastructure, risk management systems, and levels of transparency. These improvements have brought about a reduction in transaction costs and led to an improvement in liquidity.

Dimension / Purpose of Capital Market

- i. It helps in the capital formation of the country by mobilizing national savings for economic development
- ii. Mobilization and import of foreign capital and foreign investment capital plus the skill to fill up the deficit in the required financial resources to maintain the expected rate of economic growth.
- iii. It maintains active trading.
- iv. It facilitates productive utilization of resources
- v. It increases the liquidity of assets.
- vi. It also helps in the price discovery process.
- vii. It enables directing the flow to funds of high yields and also strives for balanced and diversified industrialization.

5.2. Money Market

A money market is an instrument and vehicle which allows and enables both borrowers and lenders to transpire jointly. Essentially, it refers to a

market for short-term funds. It meets the short-term requirements of the borrowers and provides liquidity of cash to the lenders.

The money market is the place in which momentary money is appropriated and granted. The money market does not deal in cash or money but trade in bills, promissory notes, and government papers, which are drawn for short periods. The short-tenure securities are known as liquid money.

Importance of Money Market

- Dealing in commercial papers and bills of exchange
- Intervening as a channel for the residue short-tenure money of scheduled banks
- Dealing in short-dated government securities and treasury bills
- Guiding central banking policies
- Making central banking policies effective
- Reduction of disparities in interest rates
- Influencing the capital market

Features of a Developed Money Market

- Extant of a proficient and successful central/reserve bank
- The well-organized commercial banking system
- Existence of specialized sectors
- Free movement of money among the numerous sub-markets
- Adequate facilities for transfer of funds
- Uniformity in interest rates
- Availability of ample funds
- Availability of ample short-term credit instruments
- Sensitiveness to internal and external events
- Existence of specialized financial institutions

Characteristics and Deficiency of the Indian Money Market

- Existence of unorganized money market
- Absence of integration
- Diversity in money rates of interests

- Seasonal stringency of money
- Highly volatile call money market
- Absence of the bill market
- Absence of well-organized banking system
- Availability of credit investments.

5.3. Integrating Financial Markets

A segmented financial system complicates the conduct of monetary policy and adversely affects resource allocation and growth. To illustrate, suppose that interest ceilings are set at higher levels for non-bank financial institutions than for banks. A policy of credit restraint would then encourage the outflow of funds from the banking system. The earnings momentum (that is, a ratio of GNP to money) of inclusive & broad money (demand and currency deposits and time and savings deposits) might grow, whereas that of narrow & tapered money (demand and currency deposits), which is utilized to set aside funds of non-bank financial institutions (NBFCs), may plummet.

A redefinition of monetary and credit targets for purposes of financial management cannot sufficiently counteract the possible negative impact on the intermediation capacity of a financial system that is segmented by excessive and inappropriate regulations. A long-term solution is to reform the domestic regulatory framework to eliminate the major causes of segmentation, such as inadequate licensing regulations, burdensome reserve requirements and portfolio restrictions, unrealistic interest rate ceilings, and the operating inefficiencies of the regulated markets.

Dimensions of Financial Market Integration

Broadly, financial market integration occurs in three dimensions, nationally, regionally, and globally. From an alternative perspective, financial market integration could take place horizontally and vertically. The horizontal integration, inter-linkages occur among domestic financial market segments, while vertical integration occurs between domestic markets and regional/international financial markets.

Domestic financial market integration entails horizontal linkages of various segments, reflecting portfolio diversification by savers, investors, and intermediaries. Under horizontal integration, the market interest rate typically revolves around a basic reference rate, which is defined as the price of a short-term low-risk financial instrument in a competitive and liquid market. It typically provides the basic liquidity for the formal financial

system and central banks often use it to gauge the tightness of monetary policy. Domestic markets may be closely integrated because intermediaries operate simultaneously in various market segments; for instance, commercial banks operate in both the saving (deposit) and loan markets.

Global integration refers to the opening up of domestic markets and institutions to the free cross-border flow of capital and financial services by removing barriers such as capital controls and withholding taxes. A deeper dimension of global integration entails removing obstacles to the movement of people, technology, and market participants across the border. Global integration is promoted through harmonization of national standards and laws, either through the adoption of commonly agreed minimum standards or mutual recognition of standards.

Regional financial integration occurs due to ties between a given region and major financial center serving that region. Economic integration might be easier to achieve at a regional level due to network externalities and the tendency of market makers to concentrate in certain geographic centers. Gravity models, which take into account the economic sizes and distance between two countries, explain bilateral trade and investment flows. Additionally, territorial financial amalgamation can be a principal means of augmenting domestic financial/capital markets, for example, along with rival compulsion to bolster institutions and improve provincial practices.

5.4. Financial Stability

From a financial stability perspective, it is necessary to have a balanced financial system whereby both financial markets and financial institutions and other stakeholders play an important and meaningful role. Through a series of reforms have been introduced after 1991 economic reforms and brought about the transformation in the capital market. However, the capital markets in India remained on the periphery of the financial system.

Notwithstanding the future of the capital market holds promise since India is expected to grow at a relatively better growth rate than most parts of the world for the next two decades, thanks to the demographic dividend and growing middle class with high ambitions. Though extraordinary events such as Covid-19, 2008 Global financial crisis can and does pose inevitable constraints.

For the benefit of readers, we narrate hereunder the landscape of financial markets in India and the corresponding regulator for its jurisdiction.

Table 1.1
Landscape of Markets in India & Regulators

<i>Market Segment</i>	<i>Who regulates</i>
Credit market	RBI
Money market	RBI
Govt. Securities market (G-Sec)	RBI
Foreign Exchange market (Forex)	RBI
Debt / Bond market	RBI & SEBI
Capital market (primary & secondary)	SEBI
Commodity market	SEBI
Derivatives market	SEBI
Insurance market	IRDAI
Pension market	PFRDA

(B) Risk and Return (Trade-off)

Investor's dilemma: Two-fold Objective

- Returns to be high – *Maximize returns*
- Returns to be as certain as possible – *Minimize Uncertainty (Risks)*

Risk and *return* are the two most important concepts in investments and finance. Risk and return concepts are basic to an understanding of the valuation of assets or securities. The expected rate of return on a security is the sum of the products of possible rates of return and their probabilities. The expected rate of return is an average rate of return, which may deviate from the possible outcomes (rates of return). Therefore, risk and return, are the foundation of the modern finance theory.

After all, one can earn a higher return by taking a higher risk. Hence it is necessary to be able to compute risk. At times it is possible to spot risk intuitively; more often it will have to be computed specifically.

- What is risk and how it is measured?
- What is return and how it is measured?
- How do investors make their investment decisions?

We shall discuss in the following paragraphs and attempt to answer these questions.

Risk is *uncertainty*. Neither dividend nor capital gains are certain. A variance of actual return from the expected return is risk and is quantified by the *standard deviation*.

Risk is Volatility: Volatility depends on Company fundamentals

- Leverage – Financial as well as Operational

- Uncertainty surrounding expected cash flows
- Uncertainty surrounding discount (interest) rates

Market Psychology

- Random or sociological factors
- Speculative bubbles

Trading Activity

- Derivatives expirations
- Market volumes

The risk/return trade-off could easily be called the “ability-to-sleep-at-night test.” While some people can handle the equivalent of financial skydiving without batting an eye, others are terrified to climb the financial ladder without a secure harness. Determining how much risk you can bear while staying restful with your financials and investments is extremely critical.

The investor will be able to reduce his chance on the range of investible products. Risk avoidance and risk minimization are important objectives of portfolio management.

Risk and return go hand in hand, for, higher the return higher the risk, or vice-versa. So, while investing, return expectations should be based on the level of risk the investor can bear. It is important, if return expectations are not matching with your risk profile, in the long run, it can make a big difference to your total wealth. The general literature on investment looks at the following types of investment risks classified into two: Systematic and Non-Systematic.

1. Un-Systematic Risk (can be controlled)

This is the part of the total risk that is specific to the industry, a firm, or security. It is also called a **unique risk** that arises from the unique uncertainties of individual securities and is independent of the general market movement. Industry-specific factors like product life cycle, technology, etc. and firm-specific factors like management change, capital structure, labour unrest, etc. form a part of unsystematic risk.

Following are some important types of unsystematic risk:

Business Risk: The risk associated with business cycles and uncertainties of business. The risk of doing business in a particular industry or environment with continuous operation is called business risk. The risk associated with changes in a firm’s abilities to measure up to expectations is known as a business risk.

Financial Risk: This arises due to the way asset financing is done, the protection of debt in the capital structure of a firm. The presence of debt will cause a firm to pay regular interest to the debt providers; this affects shareholders who are recipients of residual earnings. The debt-free firm has no financial risk.

2. **Systematic Risk** (cannot be controlled)

Probability can be systematized in ensuing and subject to its genesis. This is part of the total risk that is market-specific, external, and broad in its effect arises on account of the economy-wide uncertainties and tendency of individual securities which move together with changes in the market. It is also known as **market risk or beta**. Following are some important types of systematic risk:

Inflation Risk: The risk arising from a decline in purchasing power on account of inflation is referred to as the inflation risk. It is a risk that arises from the decline in the value of security's cash flows due to inflation, which is measured in terms of purchasing power.

Interest Rate Risk: The variability in a security's return resulting from changes in the level of interest rates is referred to as interest rate risk. Interest rates may change owing to changes in the economic situation. These interchanges usually impact bills and securities inversely; for example, security prices move inversely to interest rates, other things being equal.

Market Risk: A market is a place where goods and services are traded. Events occur within a market that affects all the goods traded therein. In price fluctuations of equity shares (maybe due to several reasons); one of the causes is the changing psychology of investors.

Reinvestment Risk: It is the risk that proceeds received in the form of interest and principal from fixed income securities may or may not be able to earn the same interest as the original interest rate.

Default Risk: It is defined as the risk that the issuer will fail to honour the terms of the obligation for periodic payment of coupon and/or principal on maturity. In other words, whether the payment will be received by the investor on schedule is a function of willingness and ability of the borrower – the issuer of the debt instrument.

Liquidity Risk: It is the risk that the investor may not be able to sell his/her investment when desired, or has to be sold below its intrinsic value. Liquidity is converting the value of an asset into cash wherefore any event/condition that affects it is termed as liquidity risk.

Exchange Rate Risk/Forex Risk: It is incurred due to a change in the value of a domestic currency relative to foreign currency. An investor faces this risk when the investment is done in assets of different countries. The exchange rate that may prevail when the investor sells the security in the future cannot be predicted with any amount of certainty which is considered as exchange rate risk.

Regulatory Risk: It is a type of risk which arises due to changes in the regulation of a country which is beyond the control of the investor. Frequently, in personal money matters, such changes occur when there is an interchange in levies & tariffs.

Investment Manager (Alpha) Risk: Alpha is a measure of excess return over a benchmark and is positive when the portfolio outperforms a benchmark and negative when the portfolio underperforms the benchmark. Since the portfolio can underperform the benchmark, the investor is exposed to risk.

Socio-political Risk: The risks of government change, change of social attitudes, e.g. urban land ceilings, ceilings on agricultural holdings, rent control laws, and so on.

Event Risk: A risk that arises from happening of an event that is sudden, dramatic, and unexpected. E.g. Natural disaster and the like.

Therefore, losing money cannot be a general measure of risk. Thus, we can attempt to measure only perceived risks. Risks that exist but that we do not have the imagination to perceive will always escape our attention.

(C) History and Precursors to Behavioral Finance

Throughout the classical times, economics had a contiguous association with psychology. Psychologists in this field such as Edwards, Amos Tversky, and Daniel Kahneman began to benchmark their cognitive models of decision-making under risk and uncertainty against economic models of rational behavior.

Perhaps the most important paper in the development of behavioral finance and economic fields was written by Kahneman and Tversky in 1979. This paper, *Prospect Theory: Decision-making under Risk* used cognitive psychological techniques to explain several numbers of documented anomalies in rational economic decision-making.

Additional milestones in the evolution of the subject cover a well-attended and myriad seminar at the University of Chicago (see Hogarth & Reder, 1987), a unique 1997 volume of the respected Quarterly Journal of Economics ('In Memory of Amos Tvesky') devoted to the topic of behavioral

economics and award of the Noble prize to Daniel Kahneman in 2002 “for having integrated insights from psychological research into economic science, especially concerning the human judgment of decision-making under uncertainty.”

Investor preferences

As long as investor partiality must be handled, investor penchant must be appreciated and mirrored in the investment plan, in so far as it is both achievable and responsible (after debating the numerous problems). There are two particular areas of investor preference that have been highlighted by behavioral finance a) Loss aversion and b) Mental accounting.

Loss Aversion

A prospect theory, which is built upon a wide range of experiments showing that people will take quite a large risk to have some chance of avoiding otherwise certain losses, nevertheless that they are swift to garner any proceeds. This highlights the need for investors to be educated as well as asked the appropriate questions, framed properly.

Mental Accounting

A division of investments between safety-first accounts or portfolios to meet basic needs and more aggressive “inspirational” accounts to meet more speculative, less critical, or simply more distant objectives is one of the predictions of the mental accounting framework of behavioral finance. This mental accounting helps to discipline future behavior by highlighting deviations from decisions that have already been taken. Psychological accounting aid and assist financial wealth to be chosen for a variety of reasons. Every individual shall have a contrasting risk forbearance for attaining varied plans.

An additional general specimen of psychological accounting is echoed by Meir Statman and Vincent Wood in *Investment Complexion* when they explain the sequence of feedback to the ensuing query in the Fidelity Investments Wealth Distribution Planner. If you can grow your odds of enhancing your gains by assuming higher probability will you:

- Be prepared to consider a lot higher chance with all of your wealth
- Be prepared to consider a lot higher chance with some of your wealth
- Be prepared to consider a slightly more chance with all of your wealth

- Be prepared to consider a slightly more chance with some of your wealth

It reveals a penchant to a portion or layer chance-taking.

Consequently, four of the most prevalent seemingly irrational behaviors that individuals are prone to exhibit are:

- First, individuals tend to separate their money into several 'mental accounts' depending on the sources, magnitudes, and purposes of such money.
- Second, individuals exhibit "loss aversion," which causes their decisions to depend on the context in which the problem is framed, rather than on the net effect of their decisions on their wealth.
- Third, individuals are prone to a cognitive bias known as representativeness, whereby information that is easily available or has become known recently is given too much weight.
- Fourth, people are subject to the psychological tendencies of limited self-control and procrastination.

Traditional finance, Behavioral finance, and Evolution

In the past few years, steps have been taken towards synthesizing traditional finance with insights from behavioral finance, but there is much further to go before an integrated approach is agreed which combines both the comprehensiveness of "traditional" finance with the more recent insights from behavioral finance.

Behavioral Principles that come primarily from

- Psychology,
- Sociology, and
- Anthropology

Other Behavioral Principles are:

-
- | | |
|------------------------------------|--|
| • Prospect theory, | • The disjunction effect, |
| • Regret and cognitive dissonance, | • Gambling behavior, |
| • Anchoring, | • Speculation, perceived irrelevance of history, |
| • Mental compartments, | • Magical thinking, |
| • Overconfidence, | • Quasi-magical thinking, |
| • Over- and under-reaction | • Attention anomalies, |
| • Representativeness heuristic, | • The availability heuristic, |
| • Culture and social contagion, | • Global culture. |
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Investor Biases

Economists often presume that people will memorize from their hither to blunders. Psychologists observe that teaching itself is an awkward procedure. Most of the self-deceit prejudice tends to restrict our capacity to understand. For example, we are vulnerable to ascribe good results to our expertise, and unfortunate results to the good luck of the draw. It is self-attribution prejudice. When we encounter such prejudice, we may not understand from our errors, as we don't observe and treat them as our failures.

• Conservative bias	• Limits to learning	• Regret theory
• Cognitive dissonance	• Loss aversion/Prospect theory	• Ambiguity aversion
• Hindsight bias	• Cue competition	• Self-control
• Confirmation bias	• Availability bias	• Hyperbolic discounting
• Self-attribution bias	• Anchoring/Saliency	• Mood
• Overconfidence	• Categorization	• Emotion/Affect
• Over-optimism	• Framing	• Cascades
• Illusion of control	• Representativeness	• Contagion
• Illusion of knowledge	• Heuristic simplification	• Imitation
• Self-deception	• Information processing errors	• Social Biases

By far the two most ordinary prejudices are **over-buoyancy** and **over-conviction**. Two ordinary errors investors commit **Too much trading** and the **propensity to disproportionately carry** on to squander investments while vending prizewinner. It is argued that these systematic biases have their origin in human psychology. The likelihood for individuals to be over-conviction seed the first prejudice in investors, and the personal wish to circumvent repentance give rise to second.

(D) Now let us understand how the Indian stock market has evolved in the last 3-4 decades. Few indicators are worth to glance through to gain insights

**Table 1.2
Growth of Indian Stock Market Operations**

Year	Broker Nos.	Listed companies	Nifty level	Sensex level	Market Cap (Rs. Millions)	M-Cap (%)	Turnover (Rs. Millions)
1995-96	8476	9100	985	3367	-	47.00	2,273,680
2005-06	9335	-	3403	11280	677,469	85.58	23,901,030
2010-11	9235	-	5584	18605	13,541,700		46,824,370
2015-16	6167	5911	7738	25342	20,794,120		49,772,780
2017-18		5619	10030	32397	28,269,149		83,177,940

Source: NSE, Indian Securities Market, 2002; Handbook of Statistics, SEBI.

Moving on it would be good to glance through how the business has been transacted on Negotiated Platform of NSE, narrated hereunder.

Table 1.3
Business Growth in Negotiated Platform

<i>Year</i>	<i>Market Capitalization (Rs. Crores)</i>	<i>Trading days</i>	<i>No. of Trades</i>	<i>Net Traded Value (Rs. Crores)</i>	<i>Avg. Daily Value (Rs. Crores)</i>	<i>Avg. Trade size (Cr.)</i>
1994-95	158,181	223	1021	6,781	30.4	6.64
2001-02	756,794	289	144,851	947,191	3,277.4	6.54
2008-09	2,848,315	238	16,129	335,951	1411.5	20.83
2014-15	5,739,272	237	18,789	772,369	3,258.9	41.11
2019-20	9,570,055	242	7,177	414,827	1,714.1	57.80

Source: NSE website – Trade Statistics/Turnover/Business Growth (Debt)

Let us discuss how various participants have entered and contributed to the growth of the Indian securities market.

Table 1.4
Growth of Market Participants in the Securities Market

<i>Particulars</i>	<i>As on 31-Mar-2005</i>	<i>As on 31-Dec-2018</i>
Securities Appellate Tribunal	1	1
Regulators	4	4
Depositories	2	2
Depository Participants	477	868
Stock Exchange (cash market)	23	5
Stock Exchange (derivatives market)	2	3
Stock Exchange (currency derivatives)	-	3
Mutual Funds (AMCs)	38	47
Foreign Institutional Investors (FIIs)	502	Na
Registered Portfolio Managers	54	307
Custodians	11	20
Share Transfer Agents & Registrar to Issue	143	73
Merchant Bankers	124	203
Listed Securities	9413	5232
Brokers (cash segment)	9519	2734
Sub-brokers	13291	21114
Corporate Brokers (cash segment)	3764	2371
Brokers (equity derivatives)	1003	2566
Brokers (currency derivatives)	-	2187
Bankers to an Issue	67	66
Debenture Trustee	35	32
Venture Capital Funds	43	195
Credit Rating Agencies	4	7
KYC Registration Agencies (KRA)	-	5
Foreign Venture Capital Investors	14	253
Alternate Investment Funds	-	515

Source: RBI, SEBI, DCA & DEA websites

Having gone through and noted about participants and turnover of some segments, it is interesting to know and learn now historical returns (in percentage terms) that have been delivered by financial markets in India.

Table 1.5
Yearly returns of few select Asset Class (in %)

Year	BSE Sensex return	Call Money Market rates	Long-term Govt. bond Yield	91-day T-Bills rates	Inflation rate CII (Income-tax)
1980-81	35.00	7.10	7.00	4.60	11.40
1986-87	-11.00	10.00	10.20	4.60	8.70
1992-93	-47.00	14.40	10.70	4.60	9.60
1997-98	16.00	8.70	11.10	6.80	6.80
2003-04	83.00	4.60	6.60	4.80	3.90
2007-08	20.00	7.60	7.90	7.40	7.80
2016-17	17.00		7.20	6.35	3.95
2018-19	17.00	6.00	7.70	6.50	2.95

Source: RBI, SEBI, NSE, BSE & CDBT websites

Note: LT Govt. bond & 91-D T-Bills yield are yearly Average figures.

Continuing from the previous table, let us also look at the following table to gain more insights into how BSE Sensex, P.O. PPF, Term deposit, Gold, LIC bonus, and Inflation have fared over time.

Table 1.6
Yearly returns of few select Asset Class (in %)

Year	Inflation	Sensex	FDs	Gold	PPF	LIC Bonus rate
1979-80	17.10	29.00	7.00	46.00	8.25	2.40
1989-90	7.45	9.00	9.00	2.00	12.00	6.60
1999-2000	3.25	34.00	8.50	3.00	12.00	7.10
2009-10	3.80	81.00	6.00	22.00	8.50	4.20
2013-14	5.70	19.00	9.00	-2.00	8.70	4.20
2018-19	5.05	17.00	7.50		7.80	

Source: Websites of RBI, Finance Ministry, Post-Office, LIC of India, MCX, NSE & SEBI.

Note: Inflation is CII (twelve-month Average figure).

It is imperative to highlight here a few initiatives of Govt. of India for increased efforts for both financial literacy and financial inclusion post feedback received from the various committee (reports and recommendations) since 2008 and onward.

Table 1.7
List of Investor Awareness Programs (IAPs) Conducted

<i>Organizer</i>	<i>Coverage</i>	<i>No. of Programs</i>	<i>Attendee (lakh)</i>	<i>Data as of</i>
NSDL	Whole India	3,700 +	3.57	Aug-2019
AMFI&AMCs	485 cities		25.56	Nov-2019
SEBI empaneled Resource Person-RP	570 districts	83,426	48.44	Mar-2019
Ministry of Corporate Affairs (MCA)	Urban, Small town & Rural	4,500		

Further, it is highlighted that Prime Minister's Jan-Dhan Yojana (**PMJDY**) made remarkable progress by opening a new bank account (for all those who did not have till 2014) in the last six years.

- Total no. of **new beneficiaries** across 36 States & Union Territories: 39,19,24,533 opened their first bank account;
- **Bank balance** in beneficiary's accounts Rs.135,977.52 crores;
- Number of **RuPay Cards** issued: 29,34,95,072.

Source: [https://www.pmjdy.gov.in/statewise-statistics\(10-Jun-2020\)](https://www.pmjdy.gov.in/statewise-statistics(10-Jun-2020)).

Also, the government has paid attention to financial inclusion in the last 6-years:

- Made transfer worth Rs. 1,132,155 lakh crores by way of Direct Transfer (**DTB**) for its various social target-oriented schemes
- 2.23 crore subscribers enrolled under **Atal Pension Yojana**
- 3.55 crore pensioners benefited under **Jeevan Pramaan**
- 7.08 crore citizens enrolled under **PM Jeevan Jyoti Bima Yojana**
- 18.76 crore people enrolled under **PM Suraksha Bima Yojana**
- Rs.24.09 crores worth loan amount sanctioned under **Mudra Yojana** for MSMEs

Source: [https://transformingindia.mygov.in/performance-dashboard/#primary\(9-Jun-2020\)](https://transformingindia.mygov.in/performance-dashboard/#primary(9-Jun-2020)).

Per Karvy Private Wealth (Financial Savings) 2018, the report reveals the positive impact of Indian investor's preference towards financial assets into various categories. The total financial assets held is worth Rs.236.33 lakh crores. The break-up of the major assets is narrated hereunder:

- a) Savings & Deposits – Rs.116.80 lakh crore (49.42%)
- b) Equity & Mutual funds – Rs. 70.21 lakh crore (29.71%)

- c) Insurance – Rs.33.36 lakh crore (14.12%).

6. Conclusion

While the overall growth figures for financial assets held by Indian investors over the last 25 years have been impressive, these figures are still relatively low compared to the other, more open capital markets globally.

The country has traveled a long way from a financially illiberal administration to a contemporary financial/capital sector where government-controlled financial institutions and PSUs tend to keep pace with the private sector financial institutions. The Indian regulators while revolutionizing the financial sector had to relentlessly stay on course for the business of equity and efficiency in mind.

In the Indian Fin Tech space, digital payments and alternative lending segments have led from the front in turbocharging the industry's growth, followed by the emerging areas of Insure-Tech and Wealth-Tech. However, success in this digital economy would be dictated by an organization's capacity to innovate, along with its ability to manage partnerships and orchestrate ecosystems across both FS and non-FS contenders to render financial resolution at the point of utilization. Despite the tremendous progress made by Indian Fin-Techs, their true democratic potential is yet to be fully exploited, as current solutions primarily cater to the affluent, urban segments and not the masses.

Measures to improve market infrastructure must be implemented at an early stage of the reform cycle alongside the requisite and proper regulatory & legal framework. These aspects impact positively for the orderly growth of financial transactions involving active liquidity management. However, few macroeconomic variables which can inhibit the reform process of financial markets:

- i. Financial repression policies such as higher taxation, relatively high reserve ratios, subsidized or direct credit programs, credit rationing, and artificial ceiling on deposits, and interest rates can hinder the development of the financial market.
- ii. Large government deficits crowd out private sector financing thereby limiting the growth of the corporate bond market.
- iii. High inflation and unrealistic exchange rates can stifle the financial markets by raising uncertainties about the associated risks and returns to financial activities.

With the continually evolving regulatory landscape, it is becoming imperative for firms to strategize an action plan for effective compliance.

In this new era, industry participants need to play an equally important role alongside other stakeholders, such as regulators and governments, to formulate standards and best practices across different verticals.

In conclusion, the capital market lies at the heart of the economic development of any country and it is prudent for the government to come up with deliberate policies that ensure the establishment of a stable and functioning capital market.

Reference

- Anand Pandey (2003). "Efficiency of Indian Stock Market." Indian Economic Journal, Vol.36, No.4 (April – June), 68-121.
- A.K. Ahuja, C. Makan & S. Chauhan, (2012). *A study of the effect of the macroeconomic variables on the stock market: an Indian perspective*. MPRA Paper no. 43313. <http://ssrn.com/abstract=2178481>
- Bhole L M, (1982). *Financial Markets and Institutions: Growth Structure and Innovations*. Tata McGraw Hill, New Delhi, p. 360, I edition.
- Bharti & Ashish Kumar, (2019). *Herd behavior mania in financial markets: A literature review*. IMJ. Vol. 11, Issue 1.
- Chakrabarti, B.B., and M. Mohanty, (2005). "A Status Report on India's Financial System: A View from the Standpoint of Intermediation and Risk Bearing." Paper for Asian Development Bank and Ministry of Finance, Government of India.
- Debjiban Mukherjee, (2007). *Comparative Analysis of Indian Stock Market with International Markets*. Great Lakes Herald – April 2007 Volume 1, Issue 1, pp. 39-71.
- Dr. Seema Joshi, (2016-17). *Financial sector development and economic growth in India: Some reflections*. MPRA Paper No. 81201. <https://mpra.ub.uni-muenchen.de/81201/>
- Eswar S. Prasad and Raghuram G. Rajan. (2008). "A Pragmatic Approach to Capital Account Liberalization." *Journal of Economic Perspectives*, American Economic Association. 22(3):149-72.
- Gupta L C, (1981). *Rates of Return on Equities: The Indian Experience*. Oxford University, press, New Delhi.
- G. Kharmalki, S. Gupta & Others, (2018). *India Risk Survey 2018*. A Report by Pinkerton & FICCI.
- Hogarth, Robin M., and Reader, Melvin W., eds. (1987). *Prudent Alternative: The Divergence between Economics and Psychology*. Chicago: Univ. Chicago Press.
- Indian Financial System, Unit-I. finiii.ifs.*
- Kapadia Sunil B., (2019). *Investments (Art of Science)*. I.K. International Pvt. Ltd., New Delhi. ISBN: 978-93-89583-07-6.
- Lal Jawahar, (1992). "Investors' Perception of Knowledge: Some Affirmation." *Chartered Secretary*, Vol. 22, No. 3 (Mar), p. 211.
- Literature review. shodhganga.inflibnet.ac.in/bitstream/10603/8509/11/11_chapter%202.pdf*
- Mayya MR, (May-1977). "Whether Equities Act as a Guardin case of Inflation?" *Economic & Political Weekly, Review of Management*, Vol. 12, p. M61-71.

- Mohan Rakesh, (2004). *India's financial sector reforms: Fostering growth while containing risk*. <https://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/81616.pdf>
- Ms. Asha Singh, (Jul-2013). *Credit risk management in Indian commercial banks*. International Journal of Marketing, Financial Services & Management Research. Vol. 2, No. 7.
- Ms. Anju Bala, (Jul-2013). *Indian stock market – Review of the literature*. TAJMMR. Vol. 2, Issue 7.
- Mangala, D. & Sharma, M., (2014). *A brief mapping of theory and evidence of investors' behavioral biases*. 8(8), 44-56. Doi: 10.17010/ijf/2014/v8i8/71855.
- Prabhakaran Malathy, (Feb-1989). "Whether Equities Act as a Guardian case of Inflation?" Economic & Political Weekly, Vol. 24, No. 8, p. 24-26.
- PF Ahmad & T. Anshuja, (Apr-2015). *Indian capital market: A review*. IJRESS. Vol. 5, Issue 4.
- Raut, R. K. & Das, N. (2015). *Practices, the anticipation of single investor resolution-making procedure: A study*. 9 (4), 44 - 55. DOI:10.17010/ijf/2015/v9i4/71457.
- S.K. Barua, V. Raghunathan & J.R. Varma, (Feb-1994). *Analysis of the Indian Financial Market: A Study*.
- Shah, A., (1999). 'Institutional change in India's capital market'. Economic and Political Weekly XXXIV(3-4), 183-194.
- Selvam M., (2008). "Efficiency of Indian Capital Market to react adequately to the announcement of quarterly earnings: A study in Capital goods Industry."
- Shem Oganga, (2019). *Evolution of the capital market*. Journal of Research in Humanities & Social Science. Vol. 7, Issue 7, pp. 55-72.
- Thomas, (2005). *Financial sector reforms in India*. Chapter 2. https://shodhganga.inflibnet.ac.in/bitstream/10603/8509/11/11_chapter%202.pdf
- (2017). *India's debt markets. The way forward*. Asia Securities Industry and Financial Markets Association (ASIFMA).
- (Dec-2017). *Inclusive Finance India Summit*. The Summit Bulletin. ACCESS Development Services and ACCESS-ASSIST. Printed by: Elegant Enterprises. New Delhi.
- (May-2019). *Emerging technologies disrupting the financial sector (Background Paper)*. PwC & ASSOCHAM India.