

**AN INVESTIGATION OF THE RECENT NSE (NATIONAL STOCK  
EXCHANGE) SCAM - ITS IMPLICATIONS ON THE PSYCHOLOGY OF  
COMMON INVESTORS**

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**ABSTRACT**

Within the scope of this research, we investigate how the disclosure of fraud affects the behaviour of investors. We pose the question as to whether or not investors who have firsthand experience with fraudulent activities in the stock market are more likely to reduce their involvement in the stock market over the short and long term than investors who have no direct experience with fraudulent activities. When comparing investors who were directly impacted by fraud with investors who were not directly affected by the scam, we utilise daily holding data from the National Stock Depository Limited (NSDL) in conjunction with a matching process. We found that investors who had direct exposure were more active in trading in the seven days after the incident compared to control investors. Furthermore, we discovered that the majority of this activity was driven by individuals cashing out of their portfolios. However, treatment investors started cashing in on their positions within a month after the market crash. The effect on under-diversification will last for a longer period of time.

*Keywords: Stock, Finance, Market, NSE, Investor etc.*

**INTRODUCTION**

The term "financial system" refers to the collection of institutions, both specialised and nonspecialized, as well as organised and unstructured financial markets, financial instruments, and financial services that work together to make it possible to move money around. In addition to standard operating procedures and policies, this system also includes the interrelationships of the various financial institutions. In marketplaces for products or other services, buyers part with their money in return for something they can get right away. In the world of finance, "now" money is often traded for "promises to pay in the future." On the other hand, in marketplaces for products or services, if the thing that is being offered is flawed in some way — whether it be a vehicle or a haircut - the customers often find out very quickly [1]. On the other hand, the quality of the loan is not easily noticeable for a considerable amount of time and may be concealed for significant amounts of time. Additionally, banks and other non-bank financial intermediaries have the ability to rapidly alter the risk composition of their assets, which is an advantage over the majority of non-financial industries. Additionally, banks have the ability to easily hide problems by making loans to customers who are unable to meet their existing debt obligations. The effective allocation of resources may, in principle, be facilitated by the financial market, which necessitates the rapid distribution of information and responses to that information.

As a result of the widespread existence of information asymmetry in financial markets, the financial markets are vulnerable to being manipulated since some players have access to

information that other participants do not. Corporate governance is essential to guarantee that providers of money to firms are confident that they obtain their return on their investment [2]. Overcoming this challenge requires that corporate governance be implemented. Even if there is an existing institutional and legal structure, various financial scams are still carried out, and this occurs in both industrialised and developing nations [3].

The study of investor participation in financial markets has produced certain evidence on investor irrationality, such as excessive trading, overconfidence, trading on attention-grabbing stocks, or a disposition effect [4]. Among these types of irrational behaviours are excessive trading, overconfidence, trading on attention-grabbing stocks, and a disposition effect. Recent research reveals that an investor's personal experiences have an outsized impact in influencing their risk appetite and, as a result, their trading choices [5].

A question that is closely similar to this one is, "How do investors behave when there are large shocks in the market?" Both Dorn and Weber (2013) and Hoffmann, Post, and Pennings (2013) focus on individual trading during times of financial crisis and find that a crisis has a significant impact on risk perceptions and, as a result, trading behaviour. Both sets of researchers came to this conclusion after conducting research on individual trading during times of financial crisis. The shock that is being investigated in this paper is an aggregate shock to the whole market rather than a shock to particular equities. Giannetti and Wang (2016) show evidence that cases of fraud discovery reduces household involvement in stock markets by diminishing confidence. Their findings are based on data from the United States. In this article, we make advantage of a fascinating natural experiment to acquire fresh data about these topics. We pose the question, how do investors react when there is a high likelihood that the exposure of fraud would erode confidence and induce panic in the minds of investors? Recent research seems to indicate that subjectively experienced results carry a disproportionate amount of weight in comparison to logical Bayesian learning [6]. As a result, we question whether or not investors who have firsthand experience with stock market fraud are more likely to reduce the amount of time they spend trading stocks than investors who have not had direct experience with stock market fraud. A more relevant question that we pose is whether or not the response to fraud is an instantaneous response or whether or not it continues to persist over lengthy horizons. We focus on a particular occurrence, which was the largest and most surprising accounting fraud in the Indian stock market. This event is often referred to as the "Enron of India." On January 7, 2009, the head of one of the most successful information technology businesses, Satyam, admitted that he had falsified the company's financial records by the amount of \$1.47 billion US dollars. It is estimated that investors in Satyam lost around Rs.136 billion (almost \$2 billion) over the course of the next month. This news came as a total shock to everyone, and it caused the market to quake [7].

We found that investors who had direct exposure to Satyam engaged in more intensive trading immediately, i.e. over seven days following the Satyam incident, in comparison to control investors, and that this trading was mostly driven by investors selling their holdings. Those whose portfolios have a greater exposure to Satyam are more likely to sell shares than those whose exposure is lesser. We observe a de-investment impact of 36 percent in comparison to the average before treatment. The extent of the disparity, on the other hand, diminishes over the course of a month. It would seem that treated investors are adding to their portfolios via net acquisitions. Our findings consequently go against the findings of earlier research, which demonstrate significant exits from the market. It seems that the impact of fraud on the trading activities of investors is temporary. There are three primary reasons why we are in a position to contribute to the existing body of knowledge. To begin, in contrast to other studies that investigate the global financial crisis, ours is able to zero in on a specific incident of fraud that had a significant impact on only one stock and not the whole market. Second, in contrast to

other papers that base their analysis on household survey data or observe investors at a monthly or yearly frequency, we observe daily data of investors at the individual account level. This enables us to differentiate between the immediate impact of the shock and the more long term impact of the shock [8].

**SECURITY SCAM**

The following characteristics define a security scam: a) an attempt to artificially inflate or deflate share prices b) the exclusive right to trade a very large number of a certain company's shares c) Money laundering, also known as borrowing money in order to trade in securities but then utilising the borrowed money for something else entirely. 5 "It shall be unlawful for any person to engage in any act, practise, or course of action which operates or would operate as a fraud or deceit upon nay person in connection with the purchase or sale of a security," states the Securities Exchange Act (1934), which states that "It shall be unlawful for any person to engage in any act, practise, or course of action which operates or would operate as a fraud or deceit upon nay person." While we are gaining an awareness of the causes or probable processes by which a security scam takes place, we may, on a parallel level, get an understanding of the motivations for financial market regulation, which are also referred to as the economics of financial market regulation. During the process of trading in securities, there is a certain risk to the system that is involved if brokers or banks run into issues with the settlement of their trades. If this is the case, there will be a domino effect, which may lead to difficulties for the other banks and brokers involved in the system. There is also the possibility of a systemic risk occurring when there is insufficient liquidity in the system as a result of a small number of brokers monopolising the trade of a particular securities. The practise of traders who are believed to be insiders to a company engaging in trading while in possession of superior knowledge is known as insider trading and is seen as unjust as well as an extension of the concept of asymmetric information. Also must be avoided is the tendency for traders to concentrate their activities on just one security. There is also consumer protection in place to guarantee that the process of price creation is as effective as is humanly feasible and to make certain that there is enough competition among dealers, brokers, and other market players [9].

**Table 1: Scams in India**

<b>Year</b>	<b>Victim</b>	<b>Perpetrator</b>	<b>Mechanism</b>	<b>Economics Of Financial Market Regulation Misdemeanor</b>
1991	Public buyers of shares of companies dealt with by manipulators, National Housing Bank(NHB) State Bank Of Saurashtra SBI Capital Markets Ltd(SBI Caps) Standard Chartered Bank	Harshad Mehta,Hiten Dalal, Batliwala & Karani ,M/s V.B. Desai , N.K. Aggarwala & Co., Mukesh Babu etc.	Borrow money from banks on a ready forward basis thus violating RBI guidelines and dealing in security transactions with banks where issue of bank receipts and SGL forms were not supported by genuine holding of securities	<sup>6</sup> Clearing and settlements problem(Systemic Risk),Money Laundering
2001	Public,Buyers of shares of companies dealt with by manipulators, UTI,MMCB, Calcutta Stock Exchange	Ketan Parekh	Same as above but in this case much of the transactions had taken place through companies owned by Ketan Parekh,FII's(Foreign Institutional Investors,Banks ,Unit Trust Of India	<sup>7</sup> Clearing and Settlement Problem,Money Laundering

### **Security Scam in India-1991**

In April of 1992, there were reports in the news indicating that the State Bank of India had a deficiency in the quantity of Government Securities that it owned. Investigations led to the discovery of the submerged portion of an iceberg, which was afterwards dubbed the securities scandal and included the fraudulent use of money to the tune of more than Rs. 3500 Crores [10]. The operation of both the money market and the stock market was thrown into turmoil as a result of the swindle, which included senior executives of significant nationalised banks, as well as international banks and financial institutions, brokers, bureaucrats, and politicians. As a result of their inability to be traded, the infected shares had no value. This caused investors and brokers to experience a state of fear, which in turn resulted in a protracted suspension of the stock markets as well as a steep decline in the price of shares. As soon as it was discovered that there had been a fraud, stock prices plunged by more than 40 percent, wiping away an amount equal to Rs. 100,000 crores in market value. As part of the standard procedure for settling transactions involving government securities, the transacting banks would traditionally make payments and transfer the securities directly to one another. The only responsibility of the broker was to facilitate communication between the buyer and the seller. Despite this, over the course of the fraud, the banks, or at least some of the institutions, implemented an alternate settlement mechanism that was analogous to the settlement of transactions on stock markets. Through the intermediary of the broker, the delivery of securities and payments were carried out. That is, the buyer provided the check to the broker, who then made the payment to the seller [11]. Meanwhile, the seller gave the securities that they were selling to the broker, who then gave them to the buyer. The adoption of the brokerintermediated settlement in the markets for government securities [12] may be attributed to two primary motivating factors, namely the following:

- Instead of just bringing buyers and sellers together, the brokers began taking positions in the market themselves. They contributed, in a way, to the increased liquidity that was seen in the markets.
- The bank's use of the broker was particularly helpful if there was a need to hide the fact that the bank was engaged in a Ready Forward transaction. The broker made arrangements for the real settlement to take place with the appropriate counterparty, but for this particular reason, the broker produced contract notes that included phoney counterparties. Because of this, the broker was able to get his hands on the check as it passed through his hands on its way from one bank to another. The problem that needed to be solved at this point was how to credit the check to his account despite the fact that it was drawn in favour of a bank and was made out to a crossed account payee. It is a standard practise in banking that a check sent to an account payee may only be cashed in favour of the individual or entity specifically named on the check. In point of fact, it was commonly permitted for privileged (corporate) clients to credit account payee cheques written in favour of a bank into their own accounts in order to avoid clearing delays and, as a result, reduce the amount of interest that was lost on the amount. Therefore, the brokers devised a method for seizing the checks as they were transferred from one bank to another and applying the corresponding sums to their respective accounts. Because of this, an RF was essentially converted into a loan that was given to a broker rather than a bank. However, this fact alone would not have been sufficient to bring about the fraudulent scheme since, in the end, the RF is a secured loan, and a secured loan to a broker is still secured. What was required at this point was the discovery of a method for doing away with the security measures themselves [13, 14].

### **Security Scam in India-2001**

In spite of the recommendations that were made by the Janakiraman Committee Report in 1992 to avoid fraudulent activities related to securities from occurring in the future, another security market was held in the year 2001. Ketan Parekh, a prominent participant whose acts were implicated in this, was the person in question. It is likely that the fraud remained a mystery for quite some time since he manipulated a huge amount of money in the capital market via a number of his own firms. This is possibly why the RBI, SEBI, and DCA (Department of Company affairs) had gone lax in their regulatory activities. In 1999 and 2000, the SENSEX achieved its all-time high, but the following year, in 2001, the stock market saw a severe decline. El Nirma, Adani Group, Essel Group, DSQ, and Zee Cadila were just a few of the significant businesses in which he had invested. Foreign Institutional Investors, Overseas Commercial Borrowings, Banks, and Mutual Funds were all used by Ketan Parekh in his scheme to control the stock market (Unit Trust Of India). In point of fact, the Unit Trust of India Fraud [15] continues to be a significant offshoot of this scam.

### **The Enron Case**

The formation of partnerships with shell companies was the primary factor that led to Enron's downfall. These partnerships, which were managed by Enron executives who made substantial profits from them, enabled Enron to conceal hundreds of millions of dollars' worth of debt from its financial statements. But after hearing about these agreements from financial journalists and stock analysts, investors started to lose faith in the company's ability to maintain its financial stability [16]. The end effect was a run on the stock, a drop in credit ratings, and bankruptcy for the company. According to claims and counterclaims filed in Delaware court hearings (of the Enron Case), many of the most prominent names in world finance were still involved in the partnership, either directly or indirectly, when Enron filed for bankruptcy. These names include Citigroup, JP Morgan Chase, CIBC, Deutsche Bank, and Dresdner Bank. At first glance, it would seem that Enron was properly using its 15SPEs (Special Purpose Corporations) by segregating its businesses that were unrelated to the energy industry into their own distinct legal entities. They apparently tried to manufacture earnings by manipulating the capital structure of the SPEs; they hid their losses; they did not have independent outside partners, which prevented full disclosure; and they did not disclose the risks in their financial statements. These actions were all unethical and should not have been done. There shouldn't be any management that overlaps with itself: Because doing so would create a potential for conflicts of interest, the management of the off-balance-sheet organisation cannot be the same as those of the parent firm [17]. The ownership share of the off-balance-sheet organisation should be more than three percent, and the parent company should not control or be linked with any of the following outside investors: At Enron, it was very evident that this was not the case. Enron, in order to bypass the outside ownership limits, channelled money via a number of partnerships that seemed to be independent firms but were controlled by Enron management. These partnerships gave the appearance of being completely separate organisations. The extent and significance of the off-balance sheet entities were not generally recognised among investors in Enron shares; but, they were not a secret to the majority of the corporations located on Wall Street. According to estimates provided by the corporation, by the end of 1999, it had shifted \$27 billion of its total \$60 billion in assets off of its balance sheet [18].

### **FINANCIAL MARKET REGULATION**

The structure of securities markets is such that they are intrinsically subject to failures owing to the presence of information asymmetries and existence of high transaction costs Sanyal

(1997). (1997). It is imperative that this point be driven home: when new securities markets come into existence, margin restrictions, obstacles to entrance of membership, and listing agreements are put in place to ensure that the interests of member brokers are protected. However, investors and customers who buy and sell via their brokers are unable to organise an organisation to protect their financial interests because of the high costs associated with establishing such organisations and the free rider issues that arise from their existence. [1921]. When considering the product, its quality, the transactions that take place on the market, and the people that take part in the market, we may see the specific characteristics of the market as follows: (a) the commodity (the security) has a life to perpetuity. (b) despite the fact that the conclusion of the contract states that the redemption of debt is definite, this is not always the case in the case of a private debt instrument; hence, uncertainty is brought into emphasis. (c) the quality of a private debt instrument cannot be seen; hence, the faith reposed on the dealer or the issuer is the deciding element; this brings the issue of information into sharp focus. (d) There must be a minimum of four participants in each transaction or deal that takes place on a securities market. This includes at least two customers and two brokers. As a result of the brokers negotiating arrangements with one another on behalf of their respective customers, the issue of transaction costs is brought into the spotlight. When there is such a large potential for failure and opportunism, there seems to be a major reason for prescribing an institution that monitors the market at various phases to assure its dependability, efficiency, and even its very existence.

### **SEBI GUIDELINES**

In order to spread awareness of the demat system, SEBI has implemented a number of different regulatory changes. Among them is the obligatory distribution of demat shares to institutional investors and OCBs, which is one of the measures. These investors, however, have been granted the ability to purchase shares in physical form, have the shares transferred into their names, and then have the shares dematerialized thereafter. The implementation of the guidelines is contingent upon the firm obtaining a certificate of practise proving that it has followed the method outlined in the scheme. In order to accomplish this condition, the company must fulfil the following requirements:

- Through a circular dated January 28, 2005, SEBI eliminated account opening costs, transaction charges for credit of securities, and custody charges as part of its effort to rationalise the cost structure associated with dematerialization.
- In addition, the Securities and Exchange Board of India (SEBI) issued a circular on November 9, 2005 advising that, beginning January 9, 2006, no charges shall be levied by a depository on DP and, as a consequence, by a DP on a Beneficiary Owner (BO) when a BO transfers all of the securities lying in his account to another branch of the same DP or to another DP of the same depository or to another depository, provided that the BO Account/s at transfer If the BO Account that is located at the transferor DP is a joint account, then the BO Account that is located at the transferee DP must likewise be a joint account in order to maintain the correct sequence of ownership [22, 23].

### **THE ACCOUNTING FRAUD AT SATYAM**

The software revolution was a significant factor in India's incorporation into the global economy after the country broke from its licencing raj and into a post-liberalized age in the early 1990s. This event marked India's entry into the post-liberalized era. At the time, the city of Hyderabad served as the capital of the state of Andhra Pradesh. At the time, Satyam was an information technology business that supplied services like engineering design, software development, system maintenance, and the integration of packaged software. In 1999, Satyam

Infoway, which was a subsidiary of Satyam, became the first Indian information technology business to be listed on the Nasdaq stock exchange. Additionally, Satyam had increased the number of countries in which it operated to 30. In 2007, the individual who was in charge of Satyam was given the Entrepreneur of the Year award by Ernst & Young. By the year 2008, Satyam's annual sales had already surpassed over \$2 billion. The founder of Satyam was a prominent figure in India's information technology (IT) revolution.

On January 7, 2009, the chairman of Satyam officially admitted that he had falsified the company's financial records by 1.47 billion United States dollars (Joseph, Sukumar, and Raghu, 2009). The authorities opened an inquiry into the fraud, and the primary promoter of the company was detained as a result of the probe. It is estimated that investors in Satyam lost around Rs.136 billion (almost \$2 billion) over the course of the next month. However, the announcement came as a complete and utter shock, and despite the fact that Satyam had been in the news the previous month regarding its acquisition of two real estate companies (Maytas Properties and Maytas Infrastructure), the magnitude of the accounting fraud was something that nobody could have predicted at all (Wharton, 2009).

This is seen in Figure 1, which contrasts Satyam with its most formidable rivals in the information technology industry and also presents a comparison of Satyam to the NSE-Nifty market index. Our findings are supported by these findings. The daily closing price, which was received from the NSE, is shown on each graph's left panel. The realised volatility is shown in the panel located on the right. The graphs provide the impression that the trading of Satyam shares did not significantly deviate from its usual behaviour. In fact, the Satyam stock was trading at a higher price than its rivals a few days before to the event in question. The stock was not differently impacted by the worldwide financial crisis either; in fact, the firm was doing pretty well, and its stock price remained constant [24]. Moreover, the global financial crisis did not effect the stock in any other way.

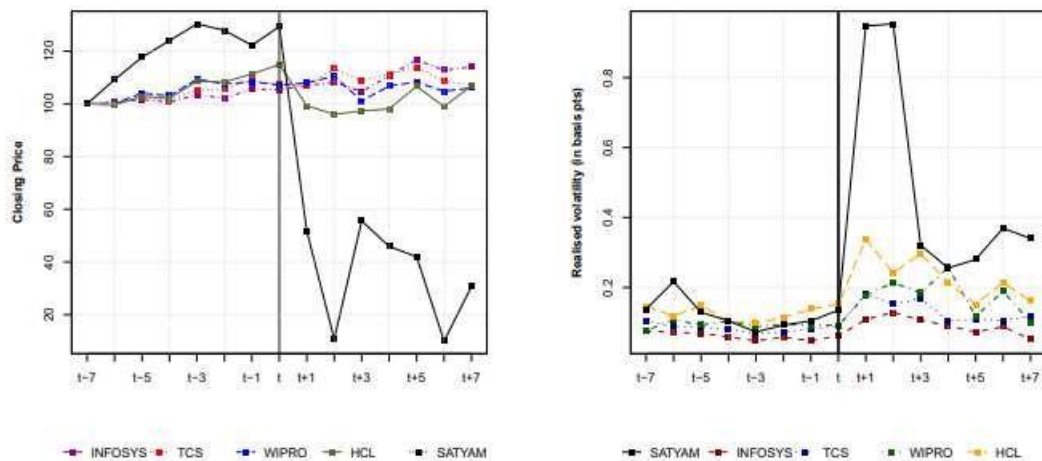


Figure 1: Close price and realised volatility of IT companies

Before the announcement, on the morning of September 7, 2009, there was no indication that such news was anticipated, either on the Nifty index as a whole or on Satyam and its rivals. This was the case regardless of whatever market you looked at. Although Satyam's price dropped significantly after the revelation, no other companies' stocks witnessed declines of a comparable magnitude. Investor trust is claimed to have been severely damaged as a direct consequence of the crisis, which was mostly the result of fraudulent accounting practises. Because of this, we are able to utilise the Satyam incident as a case study to investigate how the exposure of a widespread fraud influences investor engagement.

**UNOBSERVABLE DRIVING THE RESULT**

It's possible that there are unobservable differences between the treatment group and the control group that are the ones driving the behaviour, rather than the Satyam event itself. This is another argument against the study. The matching technique takes into account variations on observables, but it does not take into consideration differences like risk aversion that are not reflected by the variables that are accessible for analysis. One method for determining whether or not unobservable factors are significant is to compare the behaviour of individuals who owned Satyam on the day of the incident with the behaviour of those who did not possess Satyam on the day of the event but had owned it at an earlier time. Investors who had never owned Satyam before were included in the "control" group for the regression; nevertheless, since these investors had previously held Satyam, it is possible that they are more analogous to the treatment group than the investors who had never held Satyam. The findings are shown in Table 2. Even if the coefficient is far less (in terms of rupee value) than those that are provided in we can observe that Satyam investors pulled out of their investments at a higher rate than other investors did. This lends credence to the idea that the outcome is not only determined by factors that are not directly apparent.

**Table 2: Restricting control group to those who once held Satyam**

	<i>Dependent variable:</i>	
	NTV (Rs.) (1)	NTV/Val (%) (2)
Treat	234.814*** (46.598)	0.5*** (0.0003)
Post	-5,525.820*** (55.201)	-3.9*** (0.0004)
Treat*Post	-555.548*** (57.496)	-1.2*** (0.0004)
Constant	2,386.222*** (51.102)	1.5*** (0.0003)
State FE	YES	YES
Observations	568,795	568,795
Residual Std. Error (df = 568772)	4,554.330	0.030
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

**CONCLUSION**

Beginning in the early 1990s and continuing up to the present day, there have been a variety of cons. The Securities and Exchange Board of India (SEBI) was established in order to put a stop to spam, but the issue is that con artists are always adapting their schemes and adopting new approaches in order to investigate the financial markets. Due to the fact that demat accounts are simple to establish, this is something that is feasible to accomplish if it is possible to identify fraudulent applications throughout the application process. Therefore, with the assistance of NDSL and CDSL, there has to be a stringent check maintained on investors in order to assist the financial market of India in functioning in a healthy way. Within the scope of this research, we investigate how the disclosure of fraud affects the behaviour of investors. We pose the question as to whether or not investors who have firsthand experience with fraudulent activities in the stock market are more likely to reduce their involvement in the stock market over the short and long term than investors who have no direct experience with fraudulent activities. When comparing investors who were directly impacted by fraud with



investors who were not directly affected by the scam, we utilise daily holding data from the National Stock Depository Limited (NSDL) in conjunction with a matching process. The findings imply that investors who have direct exposure engage in more active trading in the six days after an incident compared to control investors, and that this trading is mostly driven by investors cashing out of their portfolios during this time period. However, treatment investors started cashing in on their positions within a month after the market crash. The effect on under-diversification will last for a longer period of time. So far, our findings indicate that investors momentarily pull back from the market by selling their shares, but that they eventually come back after a period of one month. It seems that the impact of fraud on the trading activities of investors is temporary.

## REFERENCES

- [1]. "Securities and Exchange Commission: Securities fraud and insider trading", Palgraves' Dictionary Of Money And Finance (1994) [2]. "Boys will be boys: Gender, overconfidence, and common stock investment". In: Quarterly journal of Economics, pp. 261–292. – (2008). "All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors". In: Review of Financial Studies 21.2, pp. 785– 818. doi: 10.1093/rfs/hhm079. eprint: <http://rfs.oxfordjournals.org/content/21/2/785.full.pdf+html>. url: <http://rfs.oxfordjournals.org/content/21/2/785.abstract>.
- [3]. Anagol, Santosh and Hugh Hoikwang Kim (2012). "The impact of shrouded fees: Evidence from a natural experiment in the Indian mutual funds market". In: The American Economic Review 102.1, pp. 576–593.
- [4]. Anagol, Santosh, Vimal Balasubramaniam, and Tarun Ramadorai (2015). "The Effects of Experience on Investor Behavior: Evidence from India's IPO Lotteries". In: Available at SSRN 2568748.
- [5]. Andrei Sheleifer and Robert Vishny (1997) 'A Survey of Corporate Governance'
- [6]. Badarinza, Cristian, Vimal Balasubramaniam, and Tarun Ramadorai (2016). The Indian Household Savings Landscape. Tech. rep. Available on SSRN (<https://goo.gl/GiabXJ>).
- [7]. Barber et. al. (2009). "Just how much do individual investors lose by trading?" In: Review of Financial Studies 22, pp. 609–632.
- [8]. Barber, Brad and Terrance Odean (2000). "Trading is hazardous to your wealth: The common stock investment performance of individual investors". In: Journal of Finance 55, pp. 773–806. – (2001).
- [9]. Barberis, Nicholas and Richard Thaler (2003). "A Survey of Behavioral Finance". In: Handbook of the Economics of Finance. Ed. by M. Harris G.M. Constantinides and R. Stulz. Elsevier Science B.V. Chap. 18.

- [10]. Blundell, Richard and Monica Costa Dias (2000). "Evaluation methods for nonexperimental data". In: Fiscal Studies 21.4, pp. 427–468.
- [11]. Campbell, John Y., Tarun Ramadorai, and Benjamin Ranish (2013). Getting Better: Learning to Invest in an Emerging Stock Market. Tech. rep. Available at SSRN.
- [12]. Caprio, Gerard Jr. and Ross Levine, "Corporate Governance In Finance: Concepts and International Observations"(2002).
- [13]. Dorn, Daniel and Martin Weber (2013). Individual Investors' Trading in Times of Crisis: Going It Alone or Giving Up? Tech. rep. Citeseer.
- [14]. Giannetti, Mariassunta and Tracy Yue Wang (2016). "Corporate scandals and household stock market participation". In: The Journal of Finance.
- [15]. <http://www.demataccount.com/index.php?s=dps&paged=2>
- [16]. <http://www.sebi.gov.in/faq/faqdemat.html>
- [17]. ICICI Bank, HDFC Bank and UTI Bank, do not have one
- [18]. Machiraju H.R. 'Indian Financial System' (1997)
- [19]. Malmendier, Ulrike and Stefan Nagel (2011). "Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?\*" In: The Quarterly Journal of Economics 126.1, pp. 373–416. doi: 10.1093/qje/qjq004. eprint: <http://qje.oxfordjournals.org/content/126/1/373.full.pdf+html>. url: <http://qje.oxfordjournals.org/content/126/1/373.abstract>.
- [20]. Sanyal. Sreejata, Regulation of Securities Markets in India'1997, Ph.D.
- [21]. SEBI (Depositories and Participants) Regulations, 1996: see (1996) 3 Comp LJ
- [22]. Stock market Scam in India of 1991:The Janakiraman Committee Report
- [23]. To get a list, visit the NSDL and CDSL websites and see who are the registered DPs.
- [24]. Wang, Tracy Yue, Andrew Winton, and Xiaoyun Yu (2010). "Business conditions and corporate securities fraud: Evidence from IPOs". In: Journal of Finance 65, pp. 2255– 2292.