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REVIEW OF LITERATURE

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CHAPTER 2
REVIEW OF LITERATURE

This chapter examines in a nutshell, the previous studies conducted by various scholars both in India and Abroad. For the sake of convenience, this study has been presented in three sections. While the first section highlights the studies relating to individual investors and reforms in securities market, the second section gives an overview of individual investors and liberalisation and economic orientation, and the final section highlights the studies relating to individual investor behavior.

SECTION – I

Section 1 deals with Studies on Individual Investors and Reforms in Securities Market and has two parts—the First part containing Foreign Studies and the Second part highlighting Indian Studies.

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Foreign Studies on Individual Investors and
Reforms in Securities Market

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PETER BLAIR HENRY¹, in the article entitled “Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices” observes that stock market liberalization is a decision by a country’s Government to allow foreigners to purchase shares in that country’s stock

market. On an average, a country’s aggregate equity price index experiences abnormal returns of 3.3 percent per month in real dollar terms during an eight-month window leading up to the implementation of its initial stock market liberalization. This result is consistent with the prediction of standard international asset pricing models that stock market liberalization may reduce the liberalizing country’s cost of equity capital by allowing for risk sharing between domestic and foreign agents.

JAMES P. WESTON\(^2\), ‘Competition on the Nasdaq and the Impact of Recent Market Reforms’. This paper examines the effect of recent market reforms on the competitive structure of the Nasdaq. The results show that changes in inventory and information costs cannot explain the post-reform decrease in bid-ask spreads. This is interpreted, as evidence, that the reforms have reduced Nasdaq dealers’ rents. Additionally, it is found that the difference between NYSE and Nasdaq spreads have been greatly diminished with the new rules. Further, the reforms have resulted in an exit, ceteris paribus, from the industry for market making. Overall, the results provide strong evidence that the reforms have improved competition on the Nasdaq.

WARREN BAILEY\(^3\), in his article entitled, Regulation Fair Disclosure and Earnings Information: Market, Analyst, and Corporate Responses: With the adoption of Regulation Fair Disclosure (Reg FD),


market behavior around earnings releases displays no significant change in return volatility (after controlling for decimalization of stock trading) but significant increases in trading volume due to difference in opinion. Analyst forecast dispersion increases, and increases in other measures of disagreement and difference of opinion suggest greater difficulty in forming forecasts beyond the current quarter. Corporations increase the quantity of voluntary disclosures, but only for current quarter earnings. Thus, Reg FD seems to increase the quantity of information available to the public while imposing greater demands on investment professionals.

CHIRAPHOL N. CHIYACHANTANA⁴, The Impact of Regulation, Fair Disclosure on Information Asymmetry and Trading: An Intraday Analysis. This study examines the impact of Regulation Fair Disclosure (FD) on liquidity, information asymmetry, and institutional and retail investors’ trading behavior. The main findings suggest three conclusions. First, Regulation FD has been effective in improving liquidity and in decreasing the level of information asymmetry. Second, retail trading activity increases dramatically after earnings announcements but there is a significant decline in institutional trading surrounding earnings announcements, particularly in the pre-announcement period. Last, the decline in information asymmetry around earnings announcements is closely associated with a lower participation rate in the pre-announcement period and more active trading of retail investors after earnings releases.

RENE M. STULZ, in his article entitled, *The Limits of Financial Globalization*: Despite the dramatic reduction in explicit barriers to international investment activity over the last 60 years, the impact of financial globalization has been surprisingly limited. It is argued that country attributes are still critical to financial decision-making because of "twin agency problems" that arise because rulers of sovereign states and corporate insiders pursue their own interests at the expense of outside investors. When these twin agency problems are significant, diffuse ownership is inefficient and corporate insiders must co-invest with other investors, retaining substantial equity. The resulting ownership concentration limits economic growth, financial development, and the ability of a country to take advantage of financial globalization.

JOSHUAS S.W. BUHNY, "The Response of Indian Stock Market to Movement of Asia’s Emerging Markets; From Isolation towards integration?" This paper investigates the existence of interdependence between the Indian Stock Market (ISM) and Asia’s emerging markets since 1990. This study analyses whether the MSCI Asian Index has significantly influenced the Bombay Stock Exchange index before, during and after the Asian financial crisis. To address this issue, the author first uses a rolling correlation and conduct unidirectional and bi directional causality tests using a granger causality test. Then, the author examines impulse response functions and variance decompositions of forecast errors based on a VAR model. These tests provide evidence that the influence of the Asian market

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on the Indian market has increased during and after the Asian financial crisis. He interpreted these results as evidence that the Indian market is moving towards integration with other Asian markets. He concludes that the influence of the Asian markets on the movements in the ISM has been raising since the periods during and after the crisis.

RAFAEL PORTA and others in their article entitled, What Works in Securities Laws? examined the effect of securities laws on stock market development in 49 countries and found little evidence that public enforcement benefits stock markets, but strong evidence that laws mandating disclosure and facilitating private enforcement through liability rules benefit stock markets.

Prema Chandra Athukorala and Kunal Sen, examine in “The determinants of private corporate investment in India with emphasis on the implications of the policy reforms initiated in 1991” and found that the results suggest that the net impact of the reforms on corporate investment has been salutary. The adverse impact of the decline in public investment has been outweighed by the positive effects of the decline in the cost of capital and favorable changes in investor perception brought about by the reforms. While it is not possible to generalize from a single country case, the results cast doubt on the existing cross-country evidence of a negative impact of structural adjustment reforms on private investment.

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Indian Studies on Individual Investors and Securities Market Reforms

KANE (1986)\textsuperscript{9} points out the regulatory lags is longer for government regulatory agents than for self regulating agents, shorter lags for self regulatory agents to adjust to new technology or regulatory breach is due to a strong built-in incentive that motivates self regulators more than public regulation. (A pointer to Indian regulatory policy maker)

GOKHRAN (1996)\textsuperscript{10} made an assessment of the reforms in the capital market in India using conceptual framework on the theory of regulation and new political economy. He used Tobin’s (1984) formal definition of financial market efficiency in terms of information arbitrage efficiency, fundamental valuation efficiency, full insurance efficiency and functional efficiency, where a perfect market does not need regulations. To assess the impact of the reforms, relevant market indicators were seen, before and after a particular reform to make an evaluation. The reforms were examined from the following points of view viz., regulatory effectiveness, competitive condition, information, transaction costs and restriction on speculations. In an overall assessment, it was indicated that the logical sequence of the reforms was going in the right direction beginning with consolidation of regulatory authority followed by dealing with the forces


that cause market failures namely weak competition, asymmetric information and high transaction costs. The downside of the reforms was firstly a lack of fixed term of appointment for the head of Securities and Exchange Board of India (SEBI) leaving it vulnerable to interest groups. Secondly, persistence of non competitive market structure causing price distortions and misallocation of resources, and thirdly listing requirement allowing easy entry for public issues, the latter needing a revision of listing criteria in a major stock exchange.

**L.C.Gupta (1996)¹¹** makes a critical evaluation of Securities and Exchange Board of India (SEBI) effectiveness as a regulatory authority. His work addressed broadly four areas:

1. The progress and problems of assuring fairness to investors
2. The regulatory policy regarding speculation
3. Regulatory problems concerning new issues
4. Problems of governance level of SEBI.

Gupta cites a report of the society for capital market research (1994-95) which indicates that 85% of respondents were of the view that the SEBI was unable to provide the required protection to the investor. The main sources of complaint were the manipulation of prices or what is known as price rigging, and secondly the lack of transparency in terms of client-broker relation especially with regard to reporting actually executed price of deals. The prevailing system of sub-brokers, who continue to remain outside the purview of any regulation, is also indicated as a serious setback to transparency in the market transactions and investor protections. Gupta

points out that the entrance of uninitiated, inadequately informed speculators with “Punter Mentality” who being prone to noisy dealings, were bringing down the existing levels of efficiency in the market. He also refers to the disclosure and investor protection guidelines which in his opinion are confusing, requiring repeated classification, which was a costly exercise in terms of regulatory costs and also counter productive as it gives enough scope for non-compliance. With regard to the governance of the SEBI, Gupta fears that there may be evidence of the theories of the predatory regulator prevailing within SEBI due to a lack of coherence in the management of the governing board of SEBI.

**SHAH (1999)**\(^{12}\) presented a comprehensive assessment of the impact of reform measures introduced in the Indian capital market in the nineties and concluded that developments like sharp reduction in transaction costs, enhanced liquidity, reduced leverage and evidence of superior information processing by the market agents contributed to greater efficiency in the market.

**R.H PATIL**\(^{13}\), ‘The Capital Market in 21\(^{st}\) Century’ Noted that stock exchanges, as we understand them today may not be there in about two decades. The first major transformation is growing cross country listings. The other major development relates to mergers and strategic partnerships among stock exchanges of different countries. The sum total of the

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\(^{13}\) R.H Patil, “The Capital Market in 21\(^{st}\) Century”, *Economic and Political Weekly*, November 18, 2000, p 4097
development will be the emergence of large global exchanges beyond the regulatory purview of any national regulator. One should not, thus rule out the emergence of an international organization such as the WTO for maintaining ‘law and order’ in the global capital market.

**R.H Patil**, in his article entitled *Reforming Indian Debt market*, observes, while equity markets in India have got radically transformed since the year 1991-92 securities scam, the government securities markets have not changed very much except that the RBI has significantly improved the settlement process. Recognizing the need for introducing transparency and to reform the secondary markets in the government securities and money market instruments, the RBI will soon operationalise the Negotiated Dealing System (NDS). Simultaneously, the Clearing Corporation of India (CCIL) promoted by major banks, financial institutions and primary dealers, will be a key market infrastructure to significantly improve market efficiency and integrity. Together with NDS, CCIL will introduce major reforms in the way the government securities and money markets function today.

**T. G. Arun & J. D. Turner**, *Financial Sector Reforms in Developing Countries: The Indian Experience*: This study is based on the premise that the success/failure of financial sector reforms depends heavily on country specific factors and makes an attempt to examine these factors in the Indian context. The financial sector reforms analyzed in this paper include the deregulation of interest rates, increasing competition and foreign

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ownership, and the introduction of financial supervision. The authors argue that an economic rationale for a gradualist approach to financial reform is that it is stability enhancing. Furthermore, they suggest that India's complex political economy has resulted in a gradual approach to reform, and this approach has been successful along the dimension of banking stability.

MANI SHANKAR AIYAR\textsuperscript{16}, Stock Market Scam and UTI imbroglio – JPC Report X-Rayed: The issues dealt with, in the report of the Joint Parliamentary Committee pertain to the ‘persistent and pervasive’ failure of the key regulators to perform their duties and the failure of governance pertaining to the failure of the Ministry of Finance to perform its duties. They also include the failings of the departments of government and a regulator, as well as of the investigative agencies (CBI, Enforcement Directorate, etc.) which fall directly under the Prime minister.

The seminar on \textit{"Expanding Access to the Securities Market\textsuperscript{17}"} was focused on the issue of expanding access to the securities market for the rural and un-banked areas. The development of the Indian securities market, the benefits of engaging in securities market and the recent initiatives of the government and apex institutions was traced. Using this background, the presentation outlined a twin-fold approach - regulatory and operational - to address the issue of access and the need to identify/create surrogate organizations (individuals) who can facilitate and enable the development of this new set of investors.


\textsuperscript{17}“Expanding Access to the Securities Market” - G N Bajpai, Former Chairman, SEBI, 5-Aug-05
J.DENNIES RAJAKUMAR (2005) in Corporate Financing and Investment Behaviour in India, noted that financial sector reforms were an integral part of the economic reforms initiated since 1991 with a view to make the various segments within the financial system more efficient and ‘Complement to market based decision making in the real sector’. The financial sector reforms, in effect, should improve the rate of capital formation and thereby foster economic growth. Of the various reform measures, he noticed that a greater emphasis was placed on broadening of the equity market with the removal of control over terms and pricing of capital issues. He also observed that changes in the corporate financing pattern initiates a movement towards greater equity financing. However, contrary to expectations, this has not had the desired impact on investment. On the other hand, this change in financing practice seems to have been more of a drag on investment.

Priya Basu\textsuperscript{19}, India's Financial Sector: Recent Reforms, Future Challenges, assesses progress with financial sector reforms over the past decade in India and analyses the new challenges that confront India's policymakers and financial regulators with regards to sustainability of growth and poverty reduction. highlights an extensive reform agenda pointing for the need for a progressive reduction in fiscal deficits, further developing capital markets and improving access to finance for the underserved.


\textsuperscript{19} Priya Basu, “India’s Financial Sector, Recent Reforms, Future Challenges”, Macmillan, 2005
SECTION - II

Section II contains studies on Individual Investors and Liberalization and Economic Orientation. This Section has two parts—the First part containing Foreign Studies and the Second Part dealing in Indian Studies.

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Foreign Studies on Individual Investors and Liberalization and Economic Orientation

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FRIEND AND HERMAN (1964-71)\(^{20}\) observed that the prices of shares issued after the establishment of Security Exchange Commission (SEC) performed better than those shares which were issued pre SEC era due to the lower level of volatility. The investors in the shares issued after the SEC were better off than those who invested in the shares before SEC came into existence.

ROBINS AND WERNER\(^{21}\) emphasize the need for expanding the Securities Exchange Commission (SEC) activities, especially in collection of essential market data and revitalizing SEC’s staff function.

The social value of public information in pure exchange economy under different types of markets and utility functions was examined by


JEFFERY\textsuperscript{22}. A model with time independent utility functions and complete capital markets is a common one in the financial literature. The dissemination of information may affect consumption decisions and, hence may have social value when either capital markets are incomplete or utility functions are time dependent.

LEASE AND OTHERS (1976)\textsuperscript{23} further confirmed that the market for securities is segmented, that is different group of investors concentrate on different groups of assets. Apparently investors do align themselves with particular investment philosophies and distinct market segments, and apparently that alignment is systematically related to their individual circumstances. The general pattern is one of increasing conservations in investment behaviour and more self reliance in decision making, the older the investor. The short term capital gains diminish in proclaimed importance; more emphasis is placed on dividend income, low reliance on broker advice, more time and money spent on security analysis. The female investor was found to be more conservative, diversified and dividend oriented. The attitudes expressed line up logically with the behaviour observed and both displayed considerable heterogeneity across the sample.

Taking up a study on short selling and financial arbitrage, RENSHAW\textsuperscript{24} observed the following: The return on the market as a whole


\textsuperscript{24} Renshaw F. Edward “Short selling and financial arbitrage” Financial Analysts journal Jan-Feb 1977 pg no.58
is positive about twice as often as it is negative. Why should an Investor sell the market short if he can’t distinguish between bull and bear market in advance?

In almost any market situation, however, he can reduce portfolio variance and increase expected return by selling short individual assets. For example, an investor who is unable to forecast the performance of an industry, but able to anticipate the relative performance of individual companies, can use a hedged position within that industry to improve his portfolio performance.

Short Selling will generally be more effective, the more positive the correlation between the asset sold and asset purchased. An example is classical arbitrage, where two assets are convertible at some future time at a pre determined exchange ratio. Although a detailed understanding of portfolio theory may not be essential for obtaining reasonably good result in classical arbitrage, it can be critical when the correlation is imperfect, and faulty hedging can lead to instant disaster.

“Stock market out-look : No metamorphosis”, an article by ZEIKEL highlights, there are two ways to use the past to forecast the future.
1. extrapolation which simply assumes that trends will continue and
2. reliance on the underlying logic of events.

The second way requires an insight into how things really work that most investors seem to lack; perhaps this is why they usually assume that the future will be like the past. Portfolio strategy is not merely a matter of picking good stocks over bad ones. It is rather, a continuous effort to identify on the basis of the underlying logic of events - unwarranted extrapolation in conventional expectation. The market consensus, hence prices will continue to be dominated by the emotions of the crowd and by the crowd's irrational tendency to extrapolate the future from the past. The dictionary defines "metamorphosis" as a complete change of form, structure or substance; a transformation by magic or witchcraft; complete change in appearance, character or circumstances. No metamorphosis is in prospect for the securities market.

COPLIN\textsuperscript{26} emphasizes investor relations programme must have objectives such as:

1. To create greater awareness in the financial community.
2. To establish increased loyalty among existing share owners and
3. To attract new share owners.

The use of effective communication based on insight and knowledge gained through formal and informal research among current share owners, registered representatives, and other influential groups - can achieve greater awareness in the financial community, increase loyalty among current share owners, attract new stock holders and in the long run broaden the base for successful equity financing in the years ahead.

\textsuperscript{26} Coplin A. Robert "Marketing concept", Financial Executive, Nov 1977, p-32
Close to the work of Coplin reviewed above, KENNEDY AND WILSON in an article entitled “Are investor relations programs giving analysts what they heed”? brought to light the following observations. Despite the importance of investors’ relations to investors, corporate managers and regulators, theoretical and professional literature on the subject is sparse. The author surveyed both corporation investors’ relations specialists and sell - side security analysts with regard to their perceptions of the goals of investors relations programs, the degree to which those goals are accomplished, the programme activity levels and their effects on stock prices. Both groups agreed that corporate investors’ relations programme should furnish timely and reliable information to the capital markets and both gave relatively high marks on the accomplishment of this objective. Unlike investors relations specialists, analysts did not agree that stock price performance should be one of the primary goals of investor relations.

Both groups rated investor relations programme as “moderately active” in their cultivation of analysts. The groups also agreed that investors relations programme have a favorable impact on market prices. Nevertheless, the overwhelming majority of investors relations specialists believed that the capital market undervalued the common stocks of their corporations. Analysts generally felt that the information provided enabled them to understand the nature of the corporation and their operating and financial risks. The investors relations specialists felt, in turn, that analysts were doing a fairly good job of interpreting the information they supplied.

The analysts were less convinced, however, that this information enabled them to estimate future earnings and investment value - the most crucial elements of the stock valuation process.

In a survey conducted by RECKERS and STAGLIANO\(^\text{28}\) the investors were asked to determine the type of data they considered most useful in making investment decision. The three major conclusions of the survey are:

i. While 91% of the investors indicated a somewhat thorough reading of the annual report, conclusions about the use of these reports must be made cautiously. It must be noted that half the respondents apparently disregard financial statement foot-notes, potentially, the reports may actually be misused. As has been learned from prior surveys, reliability of company produced report, still appears to constitute a major obstacle to more wide spread use.

ii. Forecasts generally were thought to possess some positive use of decision-making. But enthusiasm on the part of stock holders for publication of forecasts was quite guarded. Complexity, unreliability and lack of credibility are among the limitations which deterred more than 50% of respondents from agreeing that it would be a good idea to have earning forecast required in annual reports.

iii. Quality of management assessment and operational credits appear to be the most inaccessible or unavailable major item of decision relevant data, even though this information is used by investors.

There are unquestioned benefits to a company that has a vibrant investor relations program, says GOLD MAN in his article entitled “How to develop an investor relations program?” The objectives of the investor relations program are:

i. Increased institutional interest
ii. Increased analyst following
iii. Increased number and geographical dispersion of individual holders
iv. Assurance of maximum appropriate stock price
v. Tangential positive effects

The program should also strive for consistency, credibility, avoiding surprises, analyst assistance and continuity. The article further suggests the following effective techniques for establishing a broad financial relations program. They are monthly meetings, presentations to the industry regional meetings, shareholder meetings and written communication and publicity.

In an interview with the journal of financial executive LAZOVICK is of the opinion that maintaining a low profile in times of trouble, may serve short-term interest, but in the long-term it will result in less favourable reception of any messages - positive and negative. To some extent, management must commiserate with the shareholder, but efforts must also

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30. Lazorick, “Structure your investor relations for the - good times and the bad” Financial Executive April 1984 pg no.20
be made to explain the constraints affecting the company’s performance. Instead of a blind recap of the years, the chief executive officer’s letter (in the annual report) should be substantive, and address issues the company faces in the market place. It should express a company philosophy and direction.

A study of 31095 industrial investors by the **WALL STREET JOURNAL / NBC** (1986)\(^{31}\) revealed that 56% of the participants believed that stock market was controlled by large investors and so small investors do not stand a chance.

In the article entitled “Security analysis and stock selection; Turning financial information into return forecasts” **ESTEP**\(^{32}\) presents the T – model which provides a conceptual frame-work for turning readily available financial results into return forecasts. The T – model states the investment return in three terms – growth, cash-flow yield and valuation change, each of which depends on familiar accounting results like return on equity, growth and change in price book ratio. When these data are known exactly, that is with hindsight, the T – model explains over 90% of the return on individual stocks or portfolio.

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FERGUSON\textsuperscript{33} has made a study of the mean-variance and long term returns characteristics of three investment strategies. In his analysis of which is the best strategy – buy and hold, Portfolio insurance or covered writing, he has attempted to find out which offers the most efficient combinations of expected returns and standard deviation of return and also which offers the highest long-term return. He also tries to find out whether these measures are relevant in choosing one of these strategies over the others. The study concludes that both covered writing and portfolio insurance reduce long-term annual return relative to the stock index. Neither strategy dominates the other when exercise price is a consideration.

Portfolio insurance programme with time horizons of one year and a minimum return of no more than 2\% have implied exercise prices less than 10\% above the current price of the stock index. Their long-term annual returns exceed those of covered write with the same exercise prices. Portfolio insurance programs with time horizons of three years and a minimum annual return of no more than 4.5\% have implied exercise prices less than 32\% above the current prices of the stock index. Their long term annual returns exceed those of covered writes with the same exercise prices. Portfolio insurance programme with time horizon of five years and a minimum annual return of no more than 5\% have implied exercise prices less than 55\% of the current prices of the stock index. Their long-term annual returns exceed those of covered writes with the same exercise prices. However, if only long term annual returns were important, no investor

\textsuperscript{33} Ferguson Robert, "A comparison of the mean-variance and long-term return characteristic of three investment strategies" Financial Analysis journal July – Aug 1987 pg no. 55
would consider either portfolio insurance or covered writing. The existence of portfolio insurance and covered writing implies that investors are concerned with more than long-term annual return.

Consider for example, a portfolio with a long-term annual return of 100% annually. If one were a long-term investor, one would require no other information to conclude that this portfolio is preferred. Suppose this portfolio had a 0.999 probability of losing 10% in a year and a 0.001 probability of making so much that in the one year in a thousand that money is made, the net result is a compound annual return of 100%. One is truly a long-term investor, if one still wants this portfolio. An important implication of this study is that no portfolio should be managed only to maximize long-term return. He also made a few other important observations in this regard. Consider investors who maximize expected utility in markets that are efficient and in equilibrium. Obviously all securities need to be held and there must be a buyer for every seller. Define buying portfolio insurance as increasing the portfolio's risky asset position after a small decline. Define selling portfolio insurance as decreasing the portfolio's risky asset position after it has gone up a bit and increasing its risky assets position after a small decline. Ordinary portfolio insurance fits this definition of buying portfolio insurance and covered writing fits that of selling portfolio insurance. Neither strategy can dominate the other. If it is optimal for one investor to buy portfolio insurance, it must be simultaneously optimal for other investors, perhaps, as a group to sell it to him. The market could not be in equilibrium otherwise.
Note that rebalancing to maximize long-term return (taken in the ordinary sense) corresponds to a strategy of selling insurance. If it is optimal for an investor to maximize long-term return by rebalancing, it must be simultaneously optimal for other investors, perhaps as a group, not to adopt rebalancing. The moral is that no single strategy that requires trading can be optimal for every investor. If it is optimal for one investor to adopt a particular strategy, it must simultaneously be optimal for other investors, perhaps, as a group, to adopt the complementary trading strategy. The study emphasizes that there is no optimal investment strategy.

VALENTINE is of the view that expert systems may be applied to investment. The key to an expert system is its knowledge base, the set of rules; the system applies to the database of facts. The output from an expert system will be only as good as the rules laid down for it. Construction of a viable system requires both, experts in the knowledge required to develop the rules and expertise in molding that knowledge into a reasonable number of properly formulated rules. It is important to work from the outset towards a goal that is neither too broad nor too narrow, allowing enough time for design and testing of the system. A rule based expert system is very easy to understand, as computer applications go. Every one is familiar with what rules mean and how they work. When an investment professional builds an experts system, he defines a set of rules that the system must obey. These rules are collectively called the knowledge base, as opposed to the database

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of facts that is present in the expert system and in virtually every computer application. The expert system applies the knowledge base to the database in order to accomplish the task for which the system was designed. While discussing the future of expert system, Valentine holds the following view points: Whatever the application, the behaviour of the expert system will be controlled by the rules provided by the investment professional. If one professional attacks his problems with an economic orientation, his expert system will ‘think’ in economic terms. If another is a present value theorist, his expert system will be one too. Capital market theorists will, without even consciously considering it, use rules, that automatically result in expert system oriented towards capital market theory. Expert system will be applied to the problems that are relevant to the type of thinker who built the system and the rules used to control the system will result in the system exhibiting a behaviour pattern that stimulates the thinking of the system builder.

Obviously, the list of potential applications could go on and on; cycle theorists can always ask themselves what they would do next, and so can technical types, value theorists and arbitrageurs. And each, after completing one expert system, can always ask once again, what he would do next. The progression of application could define a new relationship between the investment professional and the computer in the 1990s. In the hypothetical world of the not – too – distant future, the computer may run expert systems that contain the professional’s current best thinking about some problem, and the professional may define the rules for the next problem, or define the rules already in place for the old problem. The expert system solves the problem; the professional defines both the problem and the method by which they are to be solved. As an old saying in the computer world has it,
“machines should work, people should think”. In the coming world of artificial intelligence, this may be amended to “machine should think, people should create”.

JAY LIGHT (1989) estimated that individuals have sold 38% of their direct stock holdings over a five year period, accelerating a downward trend and he estimates that the last share of publicly traded common stock owned by individuals will be sold in the year 2003, if the current trend persists.

VITTAS AND LONG (1992) suggested three criteria for evaluating regulation and structural which are; stability, efficiency and fairness. KEY AND SCOTT (1991) developed a banking matrix that lists four policy goals of regulation promoting competitive markets, ensuring safety and soundness, avoiding systematic risk and providing consumer protection. These are rather similar to three criteria suggested by Vittas and Long. They noted that the main rationale for financial regulation is the existence of market failure arising from externalities, market power and information problems, KEY AND VICKERS (1998). But Vittas (1992) emphasized that market failure is a necessity but not a sufficient condition for regulation. The other condition is that regulation can correct market failure in an effective and efficient manner. Much of the debate alternative theories is about the cost effectiveness rather then the rationale. He classified financial

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regulation objectives into six types; macro economic, allocative, structural, prudential, organizational, and protective. In contrast to macro economic and allocative controls, prudential, organizational and protective controls are necessary because problems of imprudence, fraudulence, moral hazard, adverse selection and free rider problems are endemic to financial system. The main policy issue is how to devise effective measures without undermining competition.

The issue of voluntary disclosure of information by firms with heterogeneous shareholders was examined by KIM\textsuperscript{39}. It shows that in a rational expectation setting, better informed shareholders prefer less disclosure than well informed shareholders. This is due to difference in the adverse risk – showing effect and the beneficial cost saving effect of disclosure among share holders with different risk tolerance and information acquisition cost functions.

In the paper on “the speed of adjustment of prices to private information” Lin and ROZEFF\textsuperscript{40} explore how quickly stock prices adjust to private information. The results of the study indicate that on an average 85% to 88% of the private information, the informed trader has at the beginning of each trading day is incorporated into price by the end of the day. The stock of private information decays quickly; i.e. prices adjust to private information rapidly. Adjustment rates of prices to private information are

\begin{itemize}
\item\textsuperscript{39} Oliver Kim. “Disagreement among share holders over a firm’s Disclosure policy” the Journal of Finance vol. XLVIII No.2. June 1993
\item\textsuperscript{40} Lin Ji - chai and Rozeff s. Michael, “The speed of adjustment of prices to private information empirical tests”, The journal of Financial Research sum 1995 pg no 143.
\end{itemize}
slightly lower for over-the-counter stocks relative to exchange listed stocks and slightly faster for stocks with higher average daily trading volume.

**RONALD BALVERS AND OTHERS**\(^1\), in their study on U.S. stock prices, find evidence of mean reversion over long horizons is mixed, possibly due to lack of a reliable long time series. Using additional cross-sectional power gained from national stock index data of 18 countries during the period 1969 to 1996, they find strong evidence of mean reversion in relative stock index prices. The findings imply a significantly positive speed of reversion with a half-life of three to three and one-half years. This result is robust to alternative specifications and data. Parametric contrarian investment strategies that fully exploit mean reversion across national indexes outperform buy-and-hold and standard contrarian strategies.

**ROBERT M. CONROY**\(^2\), and others in the article entitled, ‘A Test of the Relative Pricing Effects of Dividends and Earnings: Evidence from Simultaneous Announcements in Japan’ studied the pricing effects of dividend and earning announcements by taking advantage of the unique setting in Japan where managers simultaneously announce the current year’s dividends and earnings as well as forecast next year’s dividends and earnings. Defining surprises as deviations from analysts’ forecasts, he finds that share price reactions are significantly affected by earnings surprises,


especially management forecasts of next year’s earnings. The information content of dividends is marginal and is restricted to announcements of next year’s dividends. Consistent with Modigliani and Miller’s dividend irrelevance proposition, current dividend surprises have no material impact on stock prices in Japan.

RUSS WERMERS\textsuperscript{43}, in the article entitled ‘Mutual Fund Performance: An Empirical Decomposition into Stock-Picking Talent, Style, Transactions Costs, and Expenses’ used a new database to perform a comprehensive analysis of the mutual fund industry. He found that funds hold stocks that outperform the market by 1.3 percent per year, but their net returns under perform by one percent. Of the 2.3 percent difference between these results, 0.7 percent is due to the underperformance of non stock holdings, whereas 1.6 percent is due to expenses and transaction costs. Thus, funds pick stocks well enough to cover their costs. Also, high-turnover funds beat the Vanguard Index 500 fund on a net return basis. Our evidence supports the value of active mutual fund management.

MALCOLM BAKER AND JEFFREY WURGLER\textsuperscript{44}, in the article entitled, ‘The Equity Share in New Issues and Aggregate Stock Returns’, says, that the share of equity issues in total new equity and debt issues is a strong predictor of U.S. stock market returns between 1928 and 1997. In particular, firms issue relatively more equity than debt just before


periods of low market returns. The equity share in new issues has stable predictive power in both halves of the sample period and after controlling for other known predictors. The authors do not find support for efficient market explanations of the results. Instead, the fact that the equity share sometimes predicts significantly negative market returns suggests inefficiency and that firms time the market component of their returns when issuing securities.

CHEOL S. EUN and SANJIV SABHERWAL, in his article entitled Cross-Border Listings and Price Discovery: Evidence from U.S.-Listed Canadian Stocks, examined the contribution of cross-listings to price discovery for a sample of Canadian stocks listed on both the Toronto Stock Exchange (TSE) and a U.S. exchange. They find that prices on the TSE and U.S. exchange are co-integrated and mutually adjusting. The U.S. share of price discovery ranges from 0.2 percent to 98.2 percent, with an average of 38.1 percent. The U.S. share is directly related to the U.S. share of trading and to the ratio of proportions of informative trades on the U.S. exchange and the TSE, and inversely related to the ratio of bid-ask spreads.

JOS VAN BOMMEL, in his study entitled ‘Rumors’, A Kyle (1985) model with private information diffusion is used to examine the motivation to spread stock tips. An informed investor with limited investment capacity spreads imprecise rumors to an audience of followers. Followers trade on the advice and move the price. Due to the imprecision of the rumor, the price overshoots with positive probability. This gives the

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rumormonger the opportunity to trade twice: First when he receives information, then when he knows the price to be overshot. In equilibrium, rumors are informative and both rumormongers and followers increase their profits at the expense of uninformed liquidity traders.

Harjeet S. Bhabra & Richard H. Pettway⁴⁷, in their article entitled, “IPO Prospectus Information and Subsequent Performance” found that Initial public offerings underperform in the long run; however, there is very little evidence on their cross-sectional variation. Using a random sample of IPOs from 1987 through 1991 and gathering their prospectus data, they show that financial and operating characteristics as well as offering characteristics have a limited relation with the one-year stock returns. They also find that firms that subsequently reissue equity or merge, outperform their matched-firm benchmarks over three years. Underperformance is most severe for the smaller and younger firms. They find that prospectus information is more useful to predict survival/failure compared to subsequent equity offerings or acquisitions.

BENJAMIN C. AYERS⁴⁸ in his article entitled ‘Shareholder Taxes in Acquisition Premiums: The Effect of Capital Gains Taxation’ exploit cross-temporal differences in capital gains tax rates to test whether shareholder-level capital gains taxes are associated with higher acquisition premium for taxable acquisitions. They model acquisition premium as a function of proxies for the capital gains taxes of target shareholders,


taxability of the acquisition, and tax status of the price-setting shareholder as represented by the level of target institutional ownership. Consistent with a lock-in effect for acquisition premiums, results suggest a unique positive association between shareholder capital gains taxes for individual investors and acquisition premiums for taxable acquisitions, which is mitigated by target institutional ownership.

AIGBE AKHIGBE⁴⁹; Does an Industry Effect Exist for Initial Public Offerings? This study examines, the impact of initial public offerings (IPOs) on rival firms and find that the valuation effects are insignificant. This insignificant reaction can be explained by offsetting information and competitive effects. Significant positive information effects are associated with IPOs in regulated industries and the first IPO in an industry following a period of dormancy. Significant negative competitive effects are associated with larger IPOs in competitive industries, those in relatively risky industries, those in high-performing industries, and those in the technology sector. IPO firms that use the proceeds for debt repayment appear to represent a more significant competitive threat to rival firms relative to IPO firms that use their proceeds for other purposes.

DENNIS J. WHALEN & CHARLES D. COLLVER⁵⁰, ‘Informed Trading Around Earnings Announcements: Another Look’. This study is an empirical test of the Easley, O'Hara, and Srinivas (1998) multi market sequential trade model of stock and option markets. They employ two


approaches to determine the information content of signed stock and option trades executed around quarterly earnings announcements. The first approach expands the vector auto regression (VAR) technique of Hasbrouck (1991a) to include signed option trade volumes and inter-trade durations. Estimates from the VAR models provide insight into whether both equity and option trades are viewed as informative by the equity specialist. The second approach focuses on the information content of the earnings releases to determine whether signed equity and option trades executed prior to the announcements are informed. Results indicate that although informed traders prefer to transact in both markets around earnings announcements, option market transactions contain no incremental information.

SHANE A. CORWIN and OTHERS\textsuperscript{51} in the article entitled The Development of Secondary Market Liquidity for NYSE-Listed IPOs, studied the NYSE-listed IPOs, and found that limit order submissions and depth relative to volume are unusually low on the first trading day. Initial buy-side liquidity is higher for IPOs with high-quality underwriters, large syndicates, low insider sales, and high pre market demand, while sell-side liquidity is higher for IPOs that represent a large fraction of outstanding shares and have low pre market demand. Their results suggest that uncertainty and offer design affect initial liquidity, though order flow stabilizes quickly. They also find that submission strategies are influenced by expected underwriter stabilization and pre opening order flow contains information about both initial prices and subsequent returns.

RICHARD S. DALE, Financial markets can go mad: evidence of irrational behaviour during the South Sea Bubble. This paper explores investor behaviour during the South Sea Bubble—the first major speculative boom and bust on the stock markets. Previous literature debates whether investors during this episode acted rationally. Newly acquired data involving parallel markets for the South Sea Company's stock and subscription receipts are analyzed, and widening valuation gaps are observed between these substitutable financial instruments. Rational explanations do not prove adequate, and the anomalies are explained by the biased decision-making of investors, and their tendency to view financial markets as wagering markets. The implications of these findings for the current debate on rationality in financial markets are identified.

FRANCESCO FRANZONI and JOSE M. MARÍN in the article entitled, Pension Plan Funding and Stock Market Efficiency, argue that the market significantly overvalues firms with severely under funded pension plans. These companies earn lower stock returns than firms with healthier pension plans for at least 5 years after the first emergence of the under funding. The low returns are not explained by risk, price momentum, earnings momentum, or accruals. Further, the evidence suggests that investors do not anticipate the impact of the pension liability on future earnings, and they are surprised when the negative implications of under

52 RICHARD S. DALE, JOHNNIE E. V. JOHNSON, and LEILEI TANG, “Financial markets can go mad: evidence of irrational behaviour during the South Sea Bubble”, The Economic History Review, Volume 58, Page 233 - May 2005

funding ultimately materialize. Finally, under funded firms have poor operating performance, and they earn low returns, although they are value companies.

**Indian Studies on Individual Investors and Liberalization and Economic Orientation**

In a study on what determines the prices of Indian stocks BARMAN analyzed the data on stock prices to find out if the changes in stock prices are determined by fundamentals or bubbles. It has been found that fundamentals are more important in the determination of stock pricing in the long run. This augurs well for the discerning investor who can expect to gain by holding good quality portfolio, though the study did not go into the short term fluctuation of stock prices. However, visual analysis of data and the known fact of inadequate transparency in the operations of stock market continue to loom large on likely inefficiency of stock market in the short run. This state gives a scope for the smart operator to earn abnormally high returns with excessive volatility. This is a cause for concern for policy makers, in the recent period. The Security Exchange Board of India has initiated certain measures to bring about higher transparency in the operation of stock market. This effort should be continued with more vigor to inject efficiency into the stock market even in the short-run and ensure better climate for mobilization of fund for investment, so crucial for economic growth.

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54 R.B.Barman “What determines the prices of Indian stocks? Fundamentals or Bubbles”. The ICFAI journal of Applied Finance, Jan 1969, p-1
A survey of ownership of shares in joint stock companies and of government securities made towards the close of 1954 by RBI (1955)\(^5\) found that 91.5% of the share holding was accounted for by salaried persons.

RBI conducted another survey in 1962\(^6\) and it was found that, of the total number of assessees deriving income from dividend, 87% of them are individual investors.

The RBI conducted its survey of ownership of shares at the end of 1959, 1965, and 1978\(^7\). The 1959 study found that the number of individual shareholders accounted for 98.9% of the total number of shareholders and in value they held 52.05%. The holding of 52% in India compared well with 55% reported in UK and 51% in USA. The 1965 survey found the value of individual share holder’s ownership to decline to 45.6%. The study also found that share holding up to Rs 50,000 of paid up value of ordinary share capital was held mostly by individuals (around 92%) and share holding exceeding Rs.50,000 were comparatively small and insignificant. The pattern of ownership in favor of large financial institutions was comparable to the secular trends observed in the studies in U.K. and U.S.A.

The study conducted in 1978 for the first time collected data on occupation-wise classification of individual shareholders. The largest

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\(^6\) RBI “Survey of ownership of shares in the joint stock companies as at the end of Dec 1954” RBI bulletin May 1962 pp 677 – 685.

\(^7\) RBI “Survey of ownership of shares in joint stock companies as at the end of Dec 1978” RBI bulletin Feb 1983 pp 69 – 128.
number of shareholders constituting 99.3% of the total shareholders and 37.6% of the paid up value of the share holding by individuals. Further, a high degree of concentration in the hands of few shareholders was the striking feature of the ownership pattern. Occupation wise, one third of the individual share holding was contributed by professionals and self employed; salaried and those engaged in household work, each accounted a little less than one fifth of the total individual holding.

AMAL SANYAL in the article “Portfolio choice with indivisibility” proposed an alternative or perhaps an additional rationalization of the diversified portfolio both at the micro and at the macro levels, by referring to the fact of substantial indivisibility involved in the typical portfolio choice problems. He sets up the arguments in the context of a choice between financial assets (interest bearing deposits) and physical assets, which are available only in multiples of an indivisible minimum unit, rather than in the context of the liquidity preference theory. He postulated the hypothesis, that the compounded rate of return on time deposit “r” is less than compounded rate of return on price of physical asset, and that there exists perfect certainty regarding both of these rates as well as regarding the marketability of the real assets at any future date. As a result, in terms of the usual calculus of the rate of return, the real asset is preferred to time deposits. However, to highlight the fact of indivisibility, if suppose the amount of saving of an agent in a single period “s” is typically less than the current price ‘p’ of the minimum unit of the real assets then the latter though preferred, can’t be immediately purchased. The agent has to accumulate his

saving for a number of periods until he can effect the asset purchase. He formalized a context like this into a simple model and examined some of its properties. It should already be clear that after an agent has managed to buy a unit of the real asset of all subsequent dates, he will be generally holding a mixed portfolio, of some real assets, already bought and some financial assets waiting to be converted into real assets when feasible in future. From the context, it should be clear that the analysis would be more suited to the description of the portfolio behaviour of households, rather than of corporate bodies who may not in general be constrained by the said indivisibility because of their large size of savings per period. In the context of the model developed by Amal Sanyal, it is found that not only will there be asset diversification but also two rather curious results could be proved—first is that if 'r' is lower than the aggregate level, it will induce more rather than less deposit formation as a proportion of total saving. The second is that if the inflation rate of the real asset price is higher, and provided that saving is growing fast enough, then there will be more and not less deposit formation as a proportion of aggregate savings.

SHREEYA PATTANNAIK59, ‘The State of Indian Stock Market Under Liberalization’ Discusses the working of Indian Stock Market (ISM) from both quantitative and qualitative perspectives so as to find out how far the goal of liberalization policy has been achieved. In particular, it studies whether and how far the ISM is characterized by volatility. Among other things, it finds that A) the ISM is still speculative, volatile, and riddled with certain drawbacks, B) the share price behaviour in India, particularly short-

term one cannot be explained in terms of economic fundamentals, C) the state ISM can hardly be said to be a barometer of the state of the Indian economy, D) hyper liquidity on the secondary market does not necessarily ensure a vibrant new issue market and E) a significant negative relationship between the rate of interest and stock market variable is absent.

S.BALJI IYER and R KUMAR SHASKAR\(^{60}\), Investors’ Psychology – A study of Investor Behaviour in the Indian Capital Market. In the chaos of the Indian stock markets lies the key to its biggest mystery. Stock markets world over display tremendous uncertainty, volatility and unpredictability. Rooted as the valuation of stocks may be in their own fundamental strength, their value in the ultimate analysis is determined by market participants. This study intends to provide an insight into the workings of an investor’s mind. It examines various aspects of individual and mass psychology. It identifies factors behind valuation fundamental mismatch.

In a market like India, where the quest for transparency and efficiency is still on, various intriguing, valuation discordance form the highlights of the study. It also seeks the views of various market participants and incorporates them into the study; the study identifies the whole gamut of investor’s psychology and the resultant behaviour in stock markets in general, with particular reference to India.

\(^{60}\) S.Balaji Iyer and R Kumar Shaskar\(^{60}\), “Investors’ Psychology – A study of Investor Behaviour in the Indian Capital Market”. Vol XVI no 4, December 2002, p 1357.
SANJAY K HANSDA, and PARTHA RAY, Stock Market Integration and Dually Listed Stocks – Indian ADR and Domestic Stock Prices. In search of the micro foundation of the commonly held view of a dominant Nasdaq and satellite Bombay Stock Exchange (BSE), the study looks into the price interdependence, of 10 Indian companies, which have floated American Depository Receipts (ADR). The strong correlation between the prices of the dually listed stock is corroborated by the finding of a bi-directional causality in a vector auto regression model. The competing domestic stock exchange, viz., National Stock Exchange (NSE) too is found to share the same bi-directional relation scrip wise, with the Nasdaq New York Stock Exchange. Furthermore, the impulse response pattern indicates that a positive shock in the domestic (international) price of a scrip gets transmitted in terms of a strong positive movement in the international (domestic) price the very next day. Thus, the quotes of both the market share not only a stock wise bidirectional causality, but markets also are efficient in processing and incorporating the pricing information.

JAN DU, Financial Integration for Indian Stock Market, A Fractional Co-integration Approach, noted that the Indian stock market is one of the earliest in Asia being in operation since 1875, but remained largely outside the global integration process until the late 1980s. This paper empirically investigates the long run equilibrium relationship and short run dynamic linkage between the Indian stock market and the short run dynamic

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linkage between the Indian stock market and the stock markets in major
developed countries after 1990 by examining the Granger Causality
relationship and the pairwise, multiple and fractional co-integrations
between the Indian stock market and the stock markets from these three
developed markets. Indian stock market is integrated with mature markets
and sensitivity to the dynamics in these markets in the long run, in the short
run, both US and Japan, Granger causes the Indian stock market but not
vice versa. Further it is found, that Indian stock index and the mature stock
indices form fractionally co-integrated relationship in the long run with a
common fractional, non stationary component and find the Johansen method
is the best to reveal their co-integration relationship.

Minir Rakshit (2006)\textsuperscript{63} ‘On Liberalizing Foreign Institutional
Investment’ criticizes the approach and recommendation of the 2004
Government of India expert group on foreign Institutional Investment flows.
The group’s approaches raise several important analytical and policy issues.
The most crucial of these relate to effects of FII flows on 1. Aggregate and
sectoral investment 2. Behaviour of financial, including foreign currency
markets with special references to their volatility, and 3. Efficacy of fixed
and monetary instruments in attaining the objectives of macro stabilization
and growth. The article examines the macroeconomic impact of FII flows in
the light of the Indian experience, and draws some policy conclusions
regarding the role of such flows. It also addresses the issue of volatility in
the Indian context. It finds that there is no coherent macroeconomic model
behind the expert groups analysis and recommendations; no appraisal either

of the optimal scale of capital inflows or the relative merit of FII vis-à-vis other categories of capital receipts at the current juncture of the economy and no examination of monetary/fiscal problems associated with FII or of the quantitative impact of such flows on investment and other macro variables.

C.P CHANDRASEKHAR, and PRATHPRATIM PAL, (2006)⁶⁴ in ‘Financial Liberalization in India’ noted that, the Indian experience with reforms in the financial sector indicates that, inter alia, these are the important outcomes of such liberalization. First, there is increased financial fragility, which the irrational boom, in India’s stock market, epitomizes. Second, there is a deflationary macroeconomic stance, which adversely affects public capital formation and the objectives of promoting employment and reducing the poverty. Finally, there is a credit squeeze for the commodity producing sector and decline in credit delivery to rural India and small scale industry. The belief that the financial deepening that results from liberalization would in myriad ways neutralize these effects has not been realized.

R.H PATIL⁶⁵ ‘Current State of the Indian Capital Market’, stated that, in the early 1990s, India figured low in the global ranking of the state of capital market. The adoption of sophisticated IT tools in trading and settlement mechanisms has now placed India in the lead. The National Stock

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Exchange has played an important role in this transformation. Shorter settlement periods and dematerialization have been other major developments. But all is not entirely positive. The introduction of individual stock further poses a major risk; so also the large inflow of funds through participatory notes.
SECTION - III

Section III contains studies on Individual Investor's behavior and has two parts—the First part furnishing Foreign Studies and the Second part highlighting Indian Studies.

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Foreign Studies on Individual Investor's Behavior

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GRAHAM in a study on "Trust investors and Public Utility Equities" highlighted that projected growth in population and general economic activity will be a major factor in future investment valuations of utility securities. He is of the opinion that utility companies will be competing for new investment money not only with each other, but with all industries. Utilities will not grow as rapidly as the office equipment industry, or the text book publishers, or many chemicals, drug and electronic companies. The utility industry has great advantages. For steady, reliable and predictable growth, no other industry can approach its record. Real problems must be faced but that is nothing new. The same energy and imagination which has served so well in the past will take care of the future.

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CHOTTINER SHERMAN\textsuperscript{67} in the article entitled "Optimum investor-stock market efficiency standard" has thrown light on evaluation of the investor’s performance in the stock market. According to him, knowledge of perfect performance is valuable as it will provide.

- A universal standard of stock market performance. Actual decision rules can then be compared using the efficiency measures.
- A measure of a decision rule's deviation from optimality. This measure would provide insight into our understanding of market movement. Also, it would assist in determining how much research it is feasible to do in order to develop more rewarding decision rules.

The research into perfect performance resulted in many interesting by products such as the severity of market fluctuations over the years, the effect of increasing commissions on performance and the optimum trading activity.

Mc KELVEY\textsuperscript{68} in his study entitled "Intangible factor in stock evaluation" pointed out that when making an investment decision, one should look for certain factors beyond current earnings and dividends. The factor suggested in his study are growth trend, quality of growth, qualitative factors, management factors, validity of earnings, use of leverages, diversification, shareholder relations and other intangible factors. The intangible factors are stocks with restricted voting rights, full voting right, reputation of the underwriter and the length of time that the shares have been


\textsuperscript{68} Mckelveykent J. “Intangible factors in stock evaluative”, Financial Executive Aug 1966 pg.52
marketed. The study emphasizes that current earnings and yield are important factors in determining the attractiveness of a stock, but they are not the only ones.

The findings of a study on the behaviour of individuals in security investment decisions by KELLER are as follows:

i. Although each decision process was highly individualized, it was possible to synthesize the size of a multi step general model.

ii. The expectation of desirable future "reported earnings" to be generated from "adequate company resources" by a good management, is a requisite to any investment.

iii. Financial leverage in a company under consideration for investment has some optimal range relative to "adequate resources" and risk.

iv. Dividend has value only for their possible information content and any "yield floor" was considered to be beyond the range of acceptable down side risk and therefore of no consequences.

v. Investors tend to identify with their investments and any particular stock was rarely regarded dispassionately as a mere portfolio item.

vi. Potential market realization was the hall-mark of success even among investors who held that any sale was unjustified unless the original purchase had been a mistake.

WESTERFIELD in his study "A Behavioral approach to the investment management decision and to the securities markets"

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70 Westerfield Rondolph, "A Behavior" - Dissertation at University of California 1968.
examined the individual investment decision. The major findings may be summarized as follows;

i. There is a significant difference between an amateur investor and non investor with respect to risk performances.

ii. Certain personality and cognitive judgmental factors are associated with choice rationality, perceived risk and risk preferences.

iii. Choice rationality, in the portfolio theory sense is exceptional on gleaning the investment scene.

**STERN**\(^7^1\) has concluded that two broad styles of investing are emerging. They are firstly “gunslinger” the aggressive investor who feels he can identify change before the next guy and capitalize on it. You can identify him—he is young, he is arrogant, he deals in concepts, not price earnings ratios. He is opportunity-oriented and he checks out every idea you present to him in a chart book before he acts on it. He wants access to information and he wants freedom to act quickly. Secondly, we have the “serious long term investor”. He is basically interested in earning trend, concentrates on areas of long term growth and fundamental work. He is less concept oriented and more price-earnings ratio oriented. He wants access to information but he wants lots of bits and pieces, which he puts together into a cumulative appreciative mass, which helps him form long-term judgment. To him short-term information is not the be-all and end-all. He can be aggressive on ideas, but on a long term, not on short-term basis.

CHENNEY\textsuperscript{72} felt that the value of investment advisory services has long been questioned. A 12 year study of performances of stocks recommended by 4 top firms revealed that the skepticism has not been justified. The evidence garnered by the study pointed out that the subscription advisory services are able to select stocks, which offer better than average return on investment. That is, they offer advice which, if followed by the subscribed, promises to provide him with a return on his investment which is greater than the increase in the Standard and Poor's (S&P) 500 composite stock index. In the aggregate, the lists of common stocks recommended by the advisory services increased in value by 353.3 percent compared with an increase in value of 25.7\% by the S&P 500. Both the percentage include dividend income. The above average performance of the advisory services is also true for their individuals' lists of growth stocks, income stocks and for their lists which combine the income objective with the capital gains objective. The amount of risk inherent in a portfolio of common stocks is a difficult thing to measure but the information gathered indicates that the lists of recommended stocks also have excellent defensive qualities. The investor is well advised to seek professional help with his investment programme. The subscription advisory services offer improved portfolio performance and reduced risk. The defensive strength of the recommended list reduces the need for protection in the form of diversification and the sound nature of the recommended lists gives the investors the opportunity to enjoy the satisfaction of managing their own investment programme to meet their needs with an exception of better than average rate of returns.

\textsuperscript{72} Chenney, "How good are investment advisory services?", Financial Executive, November, 1969 pg.30
HATFIELD AND RETLLY in a paper on "New stock issues" found that all tests shared superior short-run and long-run results for the investors in new stock issues. This very strong positively skewed characteristic of the distribution accounted for the significantly superior results. Although on the average, the investor experiences as many relative losses as relative gains, his down sides risk is relatively small while his potential relative gains are substantial. These relatively modest losses probably can be explained by the fact that the underwriting syndicate can and will support the market for the stock after the offering, if it experiences price weakness. On the other hand, while stock could be sold if it showed an usual strength, it is unlikely that the underwriting would feel obligated in such a case. These superior results on the average can partially be justified on the basis of the higher risk assumed by the investor is uncertain regarding market acceptance of the stock. The results justify the later point since in all cases, greater dispersion was found in the new issue distribution of present changes.

FRANK R. KELLER (1970) focused on the determinants of security values, share holder satisfaction and the nature of successful investment practice. He found each decision process to be highly individualized.

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SCHIENMAN\(^{75}\) felt that most investors lose because they try to apply rational measures, fundamental and technical to an irrational market of human emotions. He demonstrates convincingly the uselessness of most investment advice or at least its application by the average investors. The published "experts" tend to be consistently wrong since mutual fund performance is inconsistent.

In his book "The battle for stock market profits" LOEB\(^{76}\) states that successful investor requires a special kind of judgment and flair in analyzing market behavior which is associated more with psychology than with pure fact and formula”.

In a study of financial disclosure, investor confidence and corporate credibility, CASEY\(^{77}\) emphasized that the Securities and Exchange Commission, the accounting profession and corporate executives have no more important job than to make financial reporting more useful, to overcome investor skepticism and to maintain the credibility of the issuers who use public saving. There are many reasons why this task must be accomplished. The fact that the investor in the American Securities market is the most informed and the best served investor in the world is attracted to invest in American companies, from all over the world. That makes it possible for U.S. Corporation

1. To command more capital for a dollar of earnings than their competitors abroad.

\(^{75}\) Scheinman William X, “why most investors are mostly wrong most of the time”, Webright tally New York 1970.


\(^{77}\) Casy J.William, “Financial disclosure, investors confidence and corporate credibility”, Financial Executive Dec 1972 pg.18
2. To plough back earning which competitors abroad have to distribute to maintain capital values, and
3. To raise larger amounts of capital more quickly, to apply technology more rapidly and on a larger scale to bring products to markets around the world. All this is vital to the economic welfare of 200 million Americans. He also added that financial executives have further concern that strikes closer to home investors can have confidence in the economy and in the security market and still lose confidence in the whole financial reporting process or that of a particular company. When an industry or a company loses credibility values go down and the cost of financing goes up.

Will financial forecast really help investors? No one can predict the future with certainty, yet the management is being asked to publish financial forecast on which investors will rely in making their investment decisions. Rather than forecast, managements should release more complete information. KAPNICK\textsuperscript{78} says, in recent years, however certain investors may have forgotten the basic fundamentals of investment risk and have cried “foul” when they incurred losses. This has now led some of these who have the responsibility for seeing that the public investors have sound information to suggest others to assume the responsibility for evaluating the future because, supposedly the investors who lost money were unable to make proper evaluations. Public forecasts are not the panacea for the investor, that some believe them to be, however everyone must recognize that the risk in equity securities can result in losses as well as gains and only the naive

\textsuperscript{78} Kapnick E Harvey, “Will financial forecast really help investors?” Financial executive, May, 1972 pg 50
could conclude that forecasts will protect over zealous investor from taking unwarranted risks.

ROGER E. POTLER (1970)\textsuperscript{79} found empirical evidence suggesting the same basic factors motivating professional and non-professional investors. The factors were: desire for income from dividends, rapid growth, and quick profits through trading and purposeful investment as a protective outlet for saving.

FORBER ROBERT and NICORIA FRANCES CO’ (1972)\textsuperscript{80} addressed the role of family decision making in financial matters

LEASE AND OTHERS (1974)\textsuperscript{81} found the individual investor to be primarily a fundamental analyst who perceives himself to hold a balanced and well diversified portfolio of income and capital appreciation securities. “He invests predominantly for the long run, and is prone to use one of the broad based market indices as the benchmark to judge personal investment performance results. He supplements his direct securities purchase activities quite frequently with ownership of mutual fund shares. Of the money he spends, the great bulk goes towards subscriptions to standard financial periodicals, their direct market participation has its origins in consideration of fun as well as profit”.


LEWELLEN AND LEASE\textsuperscript{82} on analyzing the individual investors risk aversion and investment portfolio composition, identified that age and risk taking propensities were inversely related, with major shifts taking places at the age of 55 and beyond.

COOLEY\textsuperscript{83} in his study entitled "A multi dimensional analysis of institution investor perception of risk" brought to light the following implication. Proper definition and measurement of risk are the two basic problems in understanding investment risk. Although risk is related to the uncertainty of future events and more risk implies more uncertainty, risk is a personal concept reflected by the view point of a particular investor. The multi dimensional scaling methodology employed in this study allowed several portfolio mangers to define risk as they personally viewed it in return distribution. Movement of the returns distribution were then related to the subjectively derived notions of risk.

The results of the above study provide some validating evidence for financial models based on investors’ variance - aversion. First, nearly all of the 56 portfolio managers viewed variance as synonymous with risk or at least an important part of risk. This result would suggest variance as a reasonable risk surrogate. However, a substantial number of investors associated an additional dimension with risk namely, asymmetry of return distribution. Increases in risk, for example, were associated with increase in


negative skewness. Kurtosis, although not an independent dimension was viewed as risk reducing. Less risk appeared inherent in leptokurtic (more peaked) distribution than in the platykurtic (flatter) distribution. If all investors are confronted with ex anti-symmetrical return distribution, perception of asymmetry is irrelevant, whether measured by skewness or some modification of skewness. Lacking this exogenous condition, the variance-equal-risk assumption appears suspect for a large group of investors responsible for investing billions of dollars. Their concern for down side risk is indicated by association of risk with higher order moments. Findings of this study suggest that dispersion and asymmetry capture most of what is perceived as risk.

MARSHALL E.BLUME AND IRWIN FRIEND (1978)\textsuperscript{84} found that investors’ perception of their rates of return were not strongly related to any socio – economic demographic characteristics; except for age and income. The amount of diversification was positively related to education levels and age, even after holding income constant. Age was a lesser factor than education.

MILNE\textsuperscript{85} on identifying the decision on determinants of portfolio policies in the case of individual investors, portrayed the association between risk- return preference of investor and his life cycle. He concluded that in the case of an individual investor, his risk- return trade off at various


life cycle stages depends on his individual circumstances and risk-taking attitudes. In short, he suggested that an individual's risk tolerance is unique and subject to changes influenced by the investor's wealth position, health, family situation, age and temperament.

**EDWARD F. MRKVICKA** \(^{86}\) while describing the motives of rational investor, concluded that the motivational variables associated with an investment are liquidity, stability, strength, hedge against inflation, mobility and less time and expenditure needed to manage the investment. He concluded that mutual fund investment gives liquidity, stability, strength, mobility and low management cost, which characterize an ideal investment.

**MALKIEL** \(^{87}\), when analyzing the risk tolerance of individuals, suggested that the investment choice must be keyed to two considerations, namely, a person's capacity to bear risk and a person's attitude towards risk.

**STEPHEN MORRIS** \(^{88}\), in his article entitled *Speculative investor behavior and learning*, says "As traders learn about the true distribution of some assets, dividends, a speculative premium occurs as each trader anticipates the possibility of re-selling the asset to another trader before complete learning has occurred. Small differences in prior beliefs lead to

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large speculative premiums during the learning process. This phenomenon helps explain a paradox concerning the pricing of initial public offerings. The result casts light on the significance of the common prior assumption in economic models”.

DAVID HIRSHLEIFER in his article entitled, ‘Investor Psychology and Asset Pricing’. The basic paradigm of asset pricing is in vibrant flux. The purely rational approach is being subsumed by a broader approach based upon the psychology of investors. In this approach, security and expected returns are determined by both risk and wrong valuation. This survey sketches a framework for understanding decision biases, evaluates the ‘a priori’ arguments and the capital market evidence bearing on the importance of investor psychology for security prices, and reviews recent models.

SHLOMO BENARTZI and RICHARD H. THALER, ‘How Much Is Investor Autonomy Worth?’. It was stated that, there is a worldwide trend towards defined contribution savings plans, where investors are often able to select their own portfolios. How much is this freedom of choice worth? We present retirement investors with information about the distribution of outcomes they could expect to obtain from the portfolios they picked for themselves, and the same information for the median portfolio selected by their peers. A majority of the survey participants actually prefer the median portfolio to the one they picked for themselves. The authors investigate various explanations for these findings and offer some evidence


that the results are partly attributable to the fact that investors do not have well-defined preferences.

**R. GASTON GELOS** and **SHANG-JIN WEI**, in the article entitled, *Transparency and International Investor Behavior*, Does country transparency affect international portfolio investment? The authors examine this and related questions using some new measures of transparency and a unique micro dataset on international portfolio holdings. They distinguish between government and corporate transparency. There is clear evidence that international funds invest systematically less in less transparent countries. On the other hand, herding among funds tends to be more prevalent in less transparent countries. There is also some evidence that during crises, funds flee non-transparent countries by a greater amount.

**PAUL BROCKMAN** and **DENNIS Y. CHUNG**, in their article entitled, ‘Investor Protection and Firm Liquidity’: The purpose of this study is to investigate the relation between investor protection and firm liquidity. It is concluded that less protective environments lead to wider bid-ask spreads and thinner depths because they fail to minimize information asymmetries. The Hong Kong equity market provides a unique opportunity to compare liquidity costs across distinct investor protection environments, but still within a common trading mechanism and currency. The empirical findings verify that firm liquidity is significantly affected by investor protection. Regression and matched-sample results show that Hong Kong-

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based equities exhibit narrower spreads and thicker depths than their China-based counterparts.

RANDI NÆS and JOHANNES ATLE SKJELTORP\(^3\), in their article entitled, 'Strategic Investor Behaviour and the Volume-Volatility Relation in Equity Markets' examined the volume-volatility relation using detailed data from a limit order driven equity market. Estimates of the intraday slope of the demand and supply schedules of the order book are found to capture regularities in spreads, trade size and submission strategies which are believed to be related to asymmetric information. On a daily level, the order book slope should also capture differences in dispersion of beliefs about stock values. The relationship between their daily slope measure and the contemporaneous volatility across companies and time supports models where strategic trading and dispersion of beliefs increase both volume and volatility.

TOMAS DVORAK\(^4\), in his article entitled, 'Do Domestic Investors Have an Information Advantage? Evidence from Indonesia', Using transaction data from Indonesia, shows that domestic investors have higher profits than foreign investors. In addition, clients of global brokerages have higher long-term and smaller medium (intra month) and short (intra day) term profits than clients of local brokerages. This suggests that clients of local brokerages have a short-lived information advantage, but that clients of global brokerages are better at picking long-term winners. Finally, domestic


clients of global brokerages have higher profits than foreign clients of global brokerages, suggesting that the combination of local information and global expertise leads to higher profits.

MARK LOEWENSTEIN and GREGORY A. WILLARD in the article entitled The Limits of Investor Behavior: Many models use noise trader risk and corresponding violations of the Law of One Price to explain pricing anomalies, but include a storage technology in perfectly elastic supply or unlimited asset liability. Storage allows aggregate consumption risk to differ from exogenous fundamental risk, but using aggregate consumption as a factor for asset returns can make noise trader risk superfluous. Using (i) limited asset liability and limited storage withdrawals, or (ii) an endogenous locally riskless interest rate eliminates violations of the Law of One Price. The main results use only budget equations and market clearing, and require virtually no assumptions about behavior.

Indian Studies on Individual Investors Behaviour

The survey of senior executives of financial institutions by HINDUSTAN THOMPSON ASSOCIATES (1978) found both merchant bankers and financial institutions feeling that the occupation of investor had little relevance to equity market and agreed that the single most important influence on an investor’s decision is the stock broker.

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A later survey by the **HINDUSTAN THOMPSON ASSOCIATES (1980)**\(^{97}\) found that portfolio value increases equity acquiring an edge over other forces of investments.

**SHANMUGAM R AND MUTHUSWAMY**\(^{98}\) in an attempt to describe the investment process of Indian investors concluded that the investment public in India drawn form middle income group investors are divided into three groups namely tax savers, traditionalists and risk takers. An attempt has been made to highlight the differences in investors’ preference over various investment parameters. Apart from giving importance to regional industry in personal portfolio, occupation of investors was found to be having an impact on investment decision.

A study conducted by **IDBI (1985)**\(^{99}\) found 43.8% of shares to be held by individuals.

The **1986 study**\(^{100}\) found 36% of total equity to be held by individuals.

The shareholders’ geographical distribution survey conducted by **ICICI**\(^{101}\) in 1987 found metropolitan cities to account for 58.7% of the country’s share holding population, Bombay alone accounting for 35.3%.

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\(^{97}\) H.T. Association, Ibid


\(^{99}\) IDBI – “Ownership pattern of shares and Debentures of IDBI Assisted Companies” as the 1982 – monograph Bombay IDBI 1985

\(^{100}\) Bombay Stock Exchange, 1993 Op - Cit, PP 11 – 12

The study estimated a shareholding population of around 3 million as of 1983-84, the rural share to be regular.

L.C Gupta\textsuperscript{102} again conducted a survey in 1991 enquiring into several aspects of individual investors. Some of the interesting findings of this survey are as follows:

The typical shareowner is from the educated middle class households with median income of about Rs. 62,000 per annum. Share investment has moved up considerably in the preference scale of educated middle class investors in India. The incidence of share ownership among salaried is slightly less than that of self-employed. Within the salaried corporate sector employees, employees of banks and financial institutions had the highest incidence. Among self-employed, those in professional practice such as Chartered Accountants, Cost Accountants and the like had the highest incidence. The incidence of share ownership increased with the level of education. Rural areas did not contribute to any significant number of shareowners.

The insurance policies followed by National Savings Certificates, Bank fixed deposits and provident funds had ownership incidence of above 50\% and public sector bonds, fixed deposit with government companies had the least incidence.

The investors rated bank fixed deposits and UTI’s schemes to be absolutely safe. The investors perceived corporate debt securities and equity as hardly different in terms of their risk. The survey also revealed that the

service provided by companies and stockbrokers is rated as dismal. The investors lack knowledge and experience in accounting matters, which can be considered as pre-requisites to make sound analysis of financial decisions. The ability to conceal income was the most appealing feature to a small investor while making his investment. Surprisingly ‘returns’ do not seem to be the motivating factor for participating in the share market.

During the late 1980s, almost 85-90% of the participants in a typical public issue are actually small investors (defined as investors who apply for less than 200 shares (i.e.) of value of less than Rupees Twenty Five Thousand)\textsuperscript{103}.

\textbf{L.C GUPTA}\textsuperscript{104} while analyzing the socio-economic profile of Indian investors concluded that the mutual fund investment has been associated with the middle class households of India.

It is needless to emphasize that the country’s capital market has expanded largely due to the small investors. As far as the size of the holding is concerned, a \textbf{Reserve Bank of India (RBI)}\textsuperscript{105} study shows that by March 1995 about 17% of the investors account for share holdings which are less than 500 shares.


\textsuperscript{105} Reserve Bank of India Bulletin, Feb 1998.
PRADAP KAR\textsuperscript{106} and others have estimated that only 9\% of the Indian households invest in shares, around 12\% invest in mutual funds and concluded on certain investment attributes. They concluded that unless the needs of the investors are critically examined and identified, their savings cannot be transformed into productive capital.

A CONSULTING FIRM--PRAXIS OF DELHI\textsuperscript{107} on analyzing the pattern of response to the public issues of different companies concluded that, of the four metros Mumbai ranked first with 66.53\% response to equity and hybrid issues in 1999-2000. Chennai accounted only for 2.07\% and it is an indication that Chennai investors are risk averse.

JASPAL SINGH and SUBBASH CANDER,\textsuperscript{108} ‘An Empirical Analysis of Perception of investor towards Mutual Funds’. This paper attempts to study the perceptions of investors towards mutual funds that have crossed Rs. 1,2,0000 crore mark by November 2002 and analyzing the reasons for withdrawal and/or not investing any more in mutual funds. Investor’s perceptions regarding day to day disclosure of net asset value by the funds and provision for more tax relations on investment in mutual funds by the government have emerged as important requirements for the investors and the reason of ineffectiveness of controlling bodies like SEBI and others that resulted in investors’ disillusionment as regards mutual funds investment has emerged as one of the major reasons of withdrawal from

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mutual funds. The funds have under performed as against expectation and the management has been inefficient, thereby discouraging investors to keep their savings perked in mutual funds.

SEBI IN ASSOCIATION WITH NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH (NCAER)\textsuperscript{109} conducted a Survey of Indian Investors in 1998-99 and then followed it up in 2000-01. The survey of 2000-01 was based on a sample of 2,88,081 geographically dispersed rural and urban areas. The findings of this survey were released in September 2003. The survey estimated that a total of 13.1 million or 7.4 percent of all Indian households totaling 21 million individuals directly invested in equity shares or debentures or both during 2000-01. The other findings are as listed below:

1. The number of debenture owning households and individual debenture holders far exceed household and individual equity investors. Of the total 13.1 million investor households, 9.6 million owned bonds or debentures, whereas only 6.5 million investor households owned equity shares.

2. The percentage of households investing in equity or debentures is more in urban areas than in rural areas. This divergence is more in case of equities compared to debentures. Of the 51 million urban households, 7.8 million households representing more than 12 million urban individual investors owned equity shares or debentures or both. Whereas, of the 125 million rural households, only 5.3 million households representing more

than 8 million individual investors show a definite migration of investors from equity market to bond market during the period between the two surveys.

3. The survey results also clearly reveal that numbers of non-investor households have increased from about 156 million in 1998-99 to nearly 164 million in 2001-02 constituting nearly 92.6 percent of all households.

4. It was also observed that the investor population and town size are directly proportional. The largest city with more than 50 lakh population accounted for about 17 percent of investor households and the next higher segment, more than 31 percent investor households were in towns with population between 10 and 50 lakhs.

Conclusion:

In this chapter the various literatures over a period of 30 years have been reviewed and presented. From this review, one is logically led to believe that a lot of research has been pursued in the field of investment and stock market over the years.

To sum up the review of literature, it may be seen that research has been pursued on various aspects of investment, such as investment performance, investment experience, valuation of securities, investor styles, financial forecast, risk, risk aversion, investor relation program, investment decision factors, statistical tools used for investment strategy, Regulation of Financial Market, and so on. Indian literature has shed light on asset diversification, portfolio choice, and change in Indian stock prices and
related aspects. A lot of ground is yet to be covered in the direction of the individual Investor Behaviour in securities market, individual investor's influences and factors motivating their behavior. Also considering their importance and impact on the development of an economy, there is still need and scope for further research in the area. The present study has been taken up specifically with this idea in mind. The various changes in technology, media, communication, man's behaviour, growth in the number of companies and the changing phase of corporate issues have all contributed to changes in the individual investment behaviour and it has provided scope for research in this direction.

The present study has concentrated on investor behaviour in the Indian securities market, impact of Securities Markets Reforms on individual Investor Behaviour, the pattern of Individual Investor's investment in industry and identifies the predominant factors, which influence the individual Investors with a view to aid the management on corporate issues.