CHAPTER 2

REVIEW OF LITERATURE

2.1 Theoretical Concept:

As a part of the study in Monetary Economics, it should be understood that why do people demand money? What do people hold their money in currency, fixed deposits and savings account? The answer is given by some Classical, Neo-Classical and Modern Economists. According to Classical Economists, money does not influence demand for money. It is a medium of exchange. It has no power of accumulation. On the other hand, according to Neo-Classical Economists, Keynes has used the term “Liquidity Preference”. How much money person holds in the form of cash or in other investment avenues, depends upon preference to liquidity or desire to hold cash. He explained that money is liquidity asset which can be easily converted to cash. According to him, the desire for liquidity arises because of three motives such as return value, security and future expenses. An American Modern Economist James Tobin (1958) has explained that the rational behavior of individuals that they should keep a portfolio of assets which consists of both bonds and money. He has written an article on Liquidity Preference as Behavior towards Risk in volume of Review Economic Studies. This approach is called risk aversion theory or Tobin’s portfolio selection model. According to Tobin, the portfolio of individuals may also consist of more risky assets such as shares. Faced with various safe and risky assets, individuals should diversify their portfolio by holding a balanced combination of safe and risky assets. Individual’s behavior shows risk aversion.

2.2 Conceptual Framework:

Investors’ behavioural approach about financial investment studies are summarized below:

Keynes, J. M. (1936) have published his work on “The general theory of employment: Interest and money” London: MacMillan and Company Ltd in 1936. He defined savings of individual households as the excess of income over expenditure on
consumption. Keynes classified savings goals into eight different categories, which would lead individuals to refrain from spending and instead saving the earned income to:

a. build up a reserve against unstable and unforeseen conditions in the future
b. provide for anticipated future needs arising during a person’s life-cycle
c. enjoy interest on savings
d. increase their standard of living
e. become financially independent
f. secure a certain amount of money for future investments
g. keep a certain amount of money for legal heirs
h. satisfy pure miserliness

He also assumed that these savings goals change very slowly and are comparably so stable that they influence the propensity to consume over long periods of time.

**Baumol, W. J. (1952)** has published a theory on “Transactions Demand for Cash, An Inventory Theoretic Approach” in Journal of Economics in 1952. According to him if income increases, the ratio of demand for transaction money decreases. There is an inverse relationship between interest rate and transaction money. Individual income and expenditure does not happen at a time. Keeping ourselves more cash, it is very costly. Instead of that, money should be invested in securities, bonds which are profitable investment avenues. Baumol asserts that individuals also hold inventory of money because this facilitates transactions (purchase) of goods and services. Individual compare the costs and benefits of funds in the form of money with the interest-bearing saving deposits. Transactions demand for money of an individual who receives income.

**Modigliani, F. and Brumberg, R. (1954)** have published a book on “Utility analysis and the consumption function: An interpretation of cross-section data” in K. Kurihara (ed), Post Keynesian economics, New Brunswick: Rutgers University Press in 1954. Lifecycle theory assumed that consumers attempt to maximize their utility by choosing an optimal consumption level over their lifetime at a specified interval, every month and spends it gradually at a steady rate.
Friedman, M. (1956) has published a book on Studies in Quantity Theory of Money in 1956 at University of Chicago. He wrote a Treatise on “The Quantity Theory of Money-A restatement” in his book. He suggested that persons should invest in different types of investment avenues. Decision of investment is taken depends upon following three reasons that are Previous asset, Income from existed Asset and Preference about Asset. His approach to demand for money does not consider any motives for holding money, nor does it distinguishes between speculative and transactions demand for money. Friedman considers the demand for money merely as an application of a general theory of demand for capital assets.

Claycamp (1963) has published his work on “The composition of consumer savings portfolios” Urbana, IL: The Bureau of Economic and Business Research, University of Illinois.) in his study, used respondents saving goals as independent variables (such as saving for old age, inheritance or education of children, paying off debt, major purchase, and preparing for an emergency) in order to examine the ratio of each independent variables to all assets on a dollar basis.

Gupta, K.L. (1970) has written a research paper on “On Some Determinants of Rural and Urban Household Saving Behaviour” in the Economics record in 1970. He explained that Indian urban and rural household’s savings behaviour is completely different. Gupta has estimated savings function is based on aggregation taking data from Indian economy. He concludes that savings behaviour in sectors is not desirable. Marginal propensities to save are very different and there was not similar factors affected on two sectors. Keynesian equation does not apply in urban savings.

Malkiel, B. G. & Fama, E. F. (1970) have written an article on Efficient Capital Markets: A Review of Theory and Empirical Work in The Journal of Finance in 1970. Influential paper argued that the participating agents are rational who, first, update their knowledge correctly on the basis of the available information and, secondly, make choices that are normatively acceptable; the securities prices incorporates all the relevant information as it is available to them and due to this, the securities prices reflect the inherent or intrinsic value at all times. behaviour but permanent income hypothesis is applicable to both sectors.

Kahlon, B. and Singh (1972) have published their work on “Savings and Investment Pattern of Farm Families in the Punjab (India)” in the “Indian Journal of Agricultural
Economics in 1972. This study carries out the study of savings and investment patterns in the state of Punjab. They conclude that farm families’ savings are concentrated in the upper class and the rate of increase in savings is less impressive in modern times.

Tversky & Kahneman (1973) have published research paper on “Availability: A heuristic for judging frequency and probability” in the Journal of Cognitive Psychology in 1973. This study is to observe the limits of human cognitive ability and allow them to appreciate the extent to which human biases often result in making decisions that are simply at odd with those predicted by traditional financial models. A slight change in the pre-conceived states can arouse individual emotions, which can lead individuals to changing their decisions mostly abruptly-decisions that deviate them from their well-planned rational choices. Even casual observations show that human beings behave, especially on the stock markets, vastly differently from what is predicted by economic theories. Based on these conceptions, behavioural economists have identified psychological biases like anchoring, representativeness, and availability biases (Tversky & Kahneman, 1974). Apart from the psychological factors, socio-cultural factors like herding (Grinblatt, Titman & wemers, 1995), contagion (Hatfield, Cacioppo & Raoson, 1993), imitation, and cascades (Ghashghaie, Breymann, Peinke, Talkner & Dodge, 1996) are the most prominent dimensions of behavioural finance, which have played a vital role in identifying the behaviour of individual investors. The socio-cultural factors like income, education, marital status, gender, locality, and so forth have been ignored by traditional financial economists, but in behavioural finance, these factors are the key drivers of the investors to invest their savings in a deferent manner.

Mikesell and Zinser (1973) have published an article on “The Nature of the Savings function in Developing Countries: A Survey of the Theoretical and Empirical Literature” in the Journal of Economics Literature in 1973. They have mentioned savings rate in India has grown over the last four decades. According to them, determinants of consumption become indirectly the determinants of savings also. However, savings is regarded as the key performance indicator of any economy. Knowledge of determinants of savings behavior in any economy is critically important. Gross Domestic Savings as a proportion of Gross Domestic Production,
increased from 10 percent to 22 percent during 1950 to 1970; However, this has
remained almost constant 22.5 percent to 23 percent within the period 1970 to 1988.

**Krishnamurthy N.S. and Subramanian, S. (1977)**\(^\text{11}\) have published Reserve Bank
Staff Occasional Paper on “Financial Assets of Rural Households” at Reserve bank of
India. It is explained that the amount of savings rural households are willing to make
in shape of financial assets is dependent upon the a) surplus available with the
households b) Willingness to save in these assets and c) awareness about and easy
accessibility to the various types of financial investment avenues. The survey
conducted by Krishnamurthy revealed that in 1971-72 the household savings from
rural areas amounted to Rs. 930 crores of which Rs. 638 crores were brought by
cultivators groups. 14 percent of households reported savings in shares and 6.8
percent in deposits. Total investment in shares by all rural households amounted to
Rs. 140 crores which formed 15 percent of total financial assets. Among deposits,
commercial bank deposits were Rs. 136 crores, Rs. 95 crores in post office and Rs. 30
crores with others. The study concluded that financial assets have increasingly
become an important way to save the surplus income over consumption.

**Gothoskar and Venkatachalam (1979)**\(^\text{12}\) have published research paper on
“Household Savings and Investment in India” in the Journal of Margin in 1979. They
have pointed out that, first official estimates of savings in the Indian economy were
prepared and published by the Reserve Bank of India in March 1960 that covered the
period 1950 to 1957. The household sector was eventually given special consideration
by several other studies (and report) including the one by National Council of Applied
Economic Research (NCAER). After carrying out a review of existing literature in the
first few sections the study analyzes saving behavior up to 1977.

**Mujumdar, Venkatachalam and Raghavachari (1980)**\(^\text{13}\) have published an
Occasional paper in Reserve Bank in India on “The High Savings Phase of the Indian
Economy: 1976-1979: A Exploratory Interpretation” in 1980. This is another
important study of savings behavior in India, because in the late 1970’s the savings in
India witnessed a dramatic change. The saving income ratio which was consistently
lower than 15 percent for 24 years rose to 17 percent in 1974, and then suddenly
jumped to 21 percent in 1977.
Bautista, R. M. and Lamberte, M. B. (1990)\textsuperscript{14} have published a working paper on “Comparative Savings Behaviour of Rural and Urban Households in the Philippines” in the Philippine Institute for Development Studies in 1990. It is found that from his study on “Comparative Savings behavior of Rural and Urban Households in the Philippines” the savings behavior of rural and urban household’s differences by region, rural-urban, and by income class. Certain household characteristics have a significant influence on savings. The findings also bear out the hypothesis that the marginal propensity to save out of transitory income is higher than that out of permanent income. MPS rates vary widely among household. It is very difficult to generalize about the relative size of the marginal saving rates between rural and urban households.

Ajzen (1991)\textsuperscript{15} has written an article on "The theory of planned behavior" in the Journal of Organizational Behavior and Human Decision Processes in 1991. He focuses on subjective norm related to the influence of the society, such as friends, relatives, and other influential members on the behavioural intention of the decision maker. In case of investment decision making, two major influences are possible namely, the influence of close friends or relatives, and the influence of the advisors. The advisors, here, include the policy agents who recommend various policies to the decision market and attempt to provide a customized solution to each decision maker.

Schmidt-Hebbel, K., Webb, S. B. and Corsetti, G. (1992)\textsuperscript{16} have published research paper on “Household Savings in Developing Countries: First Cross-Country Evidence” in the World Bank Economic Review in 1992. This study is found that income and wealth are the most important factor for determining household saving in developed countries. A small change occurs in the saving rate due to business cycle. Saving is affected directly or indirectly by public policies. In the short run, household saving are reduced by foreign capital inflows. The change in fiscal policies influences on private saving.

De Bont W.F.M. (1993)\textsuperscript{17} has published research paper on “Betting on trends: Intuitive forecasts of financial risk and return” in an International Journal of Forecasting in 1993. He suggested that investors expected a recent trend to continue and had a tendency to make decisions that followed the trend of financial practitioners and the subsequent effects on the markets.
Nagy, R.A. and Obenberger, R. W. (1994)\(^1\) have published research paper on “Factors Influencing Individual Investor Behaviour in the Financial Analysts Journal in 1994. It is suggested that classical wealth maximization criteria are important to investors, even though investors’ employs adverse criteria while choosing stocks. Two leading professors are from Santa Clara University; Meir Satman and Hersh Shefrin conducted a research in the area of behavioural finance.

Chang, R. (1994)\(^2\) has published his work on “Saving behavior of U.S. Households in the 1980s: Results from the 1983 and 1986 survey of consumer finances” in the Financial Counseling and Planning in 1994. Many empirical studies have been conducted on household savings to examine the influential factors related to savings decision of households such as regular income, accumulated wealth, socio-demographic factors such as age, marital status, education, family size, dependents, expected retirement age, or attitude towards financial matters.

Statman, M. (1995)\(^3\) has written an article on Behavioural Finance versus standard Finance in an AIMR Conference Proceeding, Behavioural Finance and Decision Theory in Investment Management, Charlottesville in 1995. He wrote an extensive comparison between the emerging disciplines of behavioural finance vs, the old school thoughts of “standard finance”. According to Statman, behaviour and psychology influence individual investors and portfolio managers regarding the financial decision making process in terms of risk assessment (the process of establishing information with reference to suitable levels of risk) and the issues of framing (the way investors process information and make decisions depending upon how it is presented).


Powell, M. and Ansic, D. (1997)\(^5\) have published research paper on “Gender Differences in Risk Behaviour in Financial Decision Making: An Experimental Analysis” in the Journal of Economic Psychology in 1997. It was found that gender is an important explanatory factor affecting confidence in investment decisions. Female
were less confident about their decisions after controlling for factors such as age, experience, education, knowledge, and asset holdings. In such a study of financially orientated savers, Stein rock found that women had a lower risk preference and a higher degree of anxiety in financial decisions than men, plus a stronger desire to use financial advisors”. This demonstrates through the research that given most circumstances regarding financial matters, women seek less risk than men.

Olsen (1998)\textsuperscript{23} has published his work on “Behavioural finance and its implications for stock-price volatility” in the financial analysts Journal in 1998. He gave an overview of behavioural finance and its implications on stock price volatility. He stated that behavioural finance focuses on the implications of the psychological decision making process. He concluded that the new theory of chaos and adaptive decision making can help in explaining the circumstances of stock price volatility. The shortfalls of standard finance have led to the emergence of behavioral finance. Behavioural finance tries to explain how, why and when a new scholar may pursue future research; he also stated that behavioural finance is an interdisciplinary approach and has a wide scope for research.

Bernstern (1998)\textsuperscript{24} has published a book on “Against the Gods: The remarkable story of risk by USA” John Wiley & Sons Inc. publisher in 1998. “Evidence reveals repeated patterns of irrationality, inconsistency, and incompetence in the way human beings arrived at decisions and choices when faced with uncertainty”.

Daniel, K., Hirshleifer, D. and Subrahmanyam, A. (1998)\textsuperscript{25} have published research paper on “Investor Psychology and security market under- overreactions in The Journal of finance in 1998. They have stated that investors overreact to private information and under react to public information. Contrary to the findings of traditional finance, behavioural finance-a fairly new area in the field of finance-neglects the concepts of rationality of its participating agents and the efficiency of the markets. In behavioural finance, this information is manipulated by an individual’s self attributes and cognitive biases. Behavioural economists document a number of cognitive biases shown by investors. Behavioral economist smainly focus on the social and psychological factors of the investors. Moreover, neuroscience has also been implemented to show the irrationality of the investors.
Hannig and Wisniwski (1999)\textsuperscript{26} Microfinance promotes effective institutional development at the lower end- the “frontier” – of the financial sector in developing countries. However, its practice has entirely focused on credit delivery, although almost everywhere, poor households can also save in various forms and for different purposes.

Kulkarni and Talele (1999)\textsuperscript{27} have Published a research an article on “Survey of Savings and Investment Behaviour Studies in India” in an “International Journal of Development Banking” in 1999. It is observed that Indian Gross Domestic Savings is mainly depends on households, public and private corporate sectors. Besides, households sector is more dominant than other two which are in deficit.

Ricciardi, V. and Simon H.K. (2000)\textsuperscript{28} have published their work on “What is Behavioural Finance?” in the Business, Education and Technology Journal in 2000. They have discussed some basic concepts of behavioural finance, including overconfidence, cognitive dissonance, theory of regret, and prospect theory. Behavioural finance mainly deals with the psychology of the investors. It investigates the behavior which the investor exhibits in the security market.

Grinblatt M. and Kelohrje, M. (2001)\textsuperscript{29} have written research paper on “How distance, language, and culture influence stockholding and traders” in The Journal of finance in 2001. They have documented that investors were more likely to hold, buy, and sell the stocks of the firms that were located close to the investors, that communicated in the investors native tongue, and whose CEO were of the same cultural background. The Influence of distance, language and culture was more prominent among the most investment savvy institutional than among both households and less savvy institutions.

Daniel, K., Hirshleifer, D.A. and Teoh, S.H. (2001)\textsuperscript{30} have written a research paper on “Investor Psychology in Capital Markets: Evidence and Policy Implications” in the Journal of Monetary Economics in 2001. They found that limited attention and overconfidence caused investors to be credulous about the strategic incentives of informed market participants. It was also found that under reaction to relatively shorter term forecasts (one year) was consistent with the post earnings announcement drift in stock returns and short term momentum in returns; whereas, overreaction to longer term forecasts was consistent with long term reversals in returns. The authors
also revealed that emotions and psychological biases in judgments and decisions seemed to have important effects on public discourses and political processes, leading to mass delusions and excessive focus on transiently popular issues.

Sewell (2001)\(^{31}\) behavioural finance is the study of the influence of psychological on the behavioural.

Hershliefer, D. (2001)\(^{32}\) has published research paper on “Investors Psychology and Assets Pricing in The Journal of Finance in 2001. He proposed that even as a simple form of social interaction, imitation offers a crucial benefit: it allows an individual to exploit information possessed by others about the environment. As a common practice, investors have a tendency of imitating the activities of their social groups. They follow the actions taken by their friend’s family members and peer groups.

Md. A. Salam and Kulsum, U. (2002)\(^{33}\) have published research paper on “Savings Behaviour in India: An Empirical Study” in the Indian Economic Journal, New Delhi in 2002. They have explained that the contribution of total household savings sector in Gross National Saving has risen from 75.9 percent in 1981 to 82.7 percent in 1999. At that time, corporate savings rate had been increased while public sector saving rate decreased. Private corporate savings increased from 8.0 percent in 1981 to 17.2 percent in 1999 while the contribution of public savings reduced from 16.2 percent to 0.15 percent during same period. After post-reform period, corporate sector savings increased. Savings rate was largely impacted by New Economic Policies. It is also found in this study, growth of income does not affect savings rate for increasing domestic savings. There should be liberalization policy in financial markets.

Kamstra, M.J., Kramer L.A. and Levi, M.D. (2003)\(^{34}\) have published a research paper on “Winter Blues: A SAD stock market cycle” in an American Economic Review in 2003. They showed investors psychological changes and established a link between depression due to SAD (Seasonal affective disorder) and equity market participation through the link between SAD and depression and risk aversion. The authors reported that seasonal variation in length of the day could translate into seasonal variation in equity returns. The authors, by considering stock market a SAD effect on the seasonal cycle of stock returns that was both significant and substantial even after controlling for well-known seasonal and other environmental factors. Along with the psychological aspects in the field of investors’ behavior, socio-cultural
influences are also allied with their decision making like peers stock market participation, marital status, education, income, and so forth. In the stock market, herd like behaviour has always been noticed, and is frequently discussed in studies. While displaying herd behaviour, investors follow the trend of investing prevailing in the market-like they follow a particular group of investors without thinking over the outcomes.


**Hong, H., Kubik, J. D. and Stein, J. C. (2004)** have published a research paper on “Social interaction and stock market participation” in The Journal of Finance in 2004. They analysed HRS data and proposed that social households- those who interacted with their neighbors or the ones that attended Church-were more likely to invest in the stock markets than other social households. The impact of sociability was much stronger in those States where stock market participation rate was higher. Finally, because of the participation of social and nonsocial households, the overall participation rate climbed up sharply.

**Lo, W. A., Repin D. V. and Steenbarger, B. N. (2005)** have published paper on “Fear and Greed in Financial Markets: A Clinical Study of Day Traders” in an American Economic Review in 2005. They showed that extreme emotional responses are counterproductive from the perspective of trading performance. Giving that trading is likely to involve higher brain functions such as logical reasoning, numerical computation, and long term planning, automatic emotional responses such as fear and greed often trump more controlled or higher-level responses.

**Lucey, B. M. and Dowling, M. (2005)** have published research paper on “The role of the feeling in investor decision- making” in the Journal of Economic Survey in 2005. A subject whose emotional reaction to monetary gains or losses was more intense on both positive and negative sides exhibited significant worse trading performance. Mood fluctuations induced by variations in weather and body
biorhythms are argued to partially influence equity investment decisions. People who are in a good mood because of good weather are argued to make optimistic judgments about equity investments than people who are in a bad mood.

Nofsinger, J. R. (2005)\(^{39}\) has written a research paper on “Social Mood and Financial Economics” in the Journal of Behavioural Finance in 2005. On the basis of the hypothesis that the general level of optimism/pessimism in society affects the emotions of most of the financial decision makers at the same time, found that the social mood affected the decisions of consumers, investors, and corporate managers alike. High (low) social mood caused an increase in decisions biased by optimism (pessimism) and impacted the aggregate investment and business activity. It was also proposed that as stock market decisions are completed quickly, the stock market itself is a measure of social mood. Finally, as measure of social mood, stock market changes help in forecasting future and economic activities.

Deaton, A. (2005)\(^{40}\) has published paper on “Franco Modigliani and the life-cycle theory of consumption” in the BNL Quarterly Review in 2005. Maximization of utility can be achieved by resorting to inter-temporal consumption strategy, which suggests that people tend to make investment decisions based on their level of spending, which continuously changes over their lifetime.

Sahu, S. and Virmani, A. (2005)\(^{41}\) have published a working paper on “Structure of the Household Sector Assets Portfolio in India” in the Indian Council for Research on International Economic Relations in 2005. It is noted that financial sector has been changed after the new economic policy 1991. Household sector is divided in financial saving and physical saving. It was assumed that due to the substitution of assets, there will be change in household sector. Through this study, it seems that provident fund is the substitution assets in financial saving, this gives high return and tax concessions. This is mandatory to all Government Employees. This study also explains that interest rate and income are the crucial factor for determining household savings. In the connection of budget 2005-06, changes in the household savings rate occurred due to the new rule of Income tax.

Reddy, S.G.(2005)\(^{42}\) has written an article on “Customer perception towards private life insurance companies’ policies with special reference to Bangalore City in the Indian Journal of Marketing in 2005. It is observed that the investors invested their
funds on the basis of rate of return. Most of the investors studied by him had preferred to invest in pension policies in hope of getting tax benefits.

**Prasanna Chandra (2005)** says that investment in various types of assets is an interesting activity that attracts people from all works of life irrespective of their occupations, economic status, education and family background. When a person has more money than he requires for current consumption, he would be coined as a potential investor. The investor who is having extra cash could invest it in securities or any other assets like gold or real estate or could simply deposit in his bank account. The companies that have extra income may like their money in the extension investment.

**Shamika Ravi (2006)** has published research paper on “Uncertainty and Savings Decision” in the SSRN Electronic Journal in 2006. This paper examined the effects of income shock on savings decision of a household. It provides that weather related and health related income shocks lead households to change their asset portfolios. This study also reveals the important differences in determinants of savings of nuclear and joint households.

**Bryant W. K. and Zick C.D. (2006)** have published a book on “The economic organization of the household” (Second ed.), Cambridge: Cambridge University Press in 2006. They have suggested that if consumers’ accumulated savings from past income were sufficient, then they can utilize it when their current income falls short. The level of optimal savings and its determinants are not only based on consumers’ consumption patterns, but is also influenced by their demographic characteristics.

**Avadhani (2007)** in his study considered optional insurance and consumption rules for a wage earner whose life time is random. The wage earner is endowed with an initial wealth and he also receives the income continuously, but this may be terminated by the wage earners premature death. Explicit solutions are found for the life insurance is studies by examining out solutions and doing numerical experiment.

**Agrawal, P., Sahoo, P. and Dash, R. K. (2007)** They have published a working paper on “Saving Behaviour in South Asia” in the ‘ Institute of Economic Growth, university of Delhi Enclave North campus, Delhi in 2007. They have estimated long run relations for total Domestic Savings Rate, Private Domestic Saving Rate, household savings rate and financial savings rate using ECM and DOLS single
equation Co-integration procedure. They found that generally real income per capita positively influences savings rates in India. In both private savings and household savings, the public savings (say through increased tax effect or reduction in expenditure) reduces the private savings significantly but by a lower amount then the correspondence increase in the public saving. Thus increasing public savings would increase aggregate savings rate. They also carried out causality analysis between income per capita and savings rates and the causality was found to run mostly from income to savings. 

Al-Azmi, J. Y. (2008)\textsuperscript{48} has published research paper on “Risk Tolerance of Individual Investors in an Emerging Market” in an International Research Journal of Finance and Economics in 2008. He argues that investors should not be treated as one homogeneous group. Moreover men and women as investors should be treated as separate market niches, each with its own needs and requiring targeted marketing strategies. Investment companies and financial service marketers should design investment programs to respond to the particular needs of women investors, men investors, investors with particular education and age levels, wealthy investors, and expatriate investors.

Agrawal, P., Sahoo, P. and Dash, R. K. (2008)\textsuperscript{49} have published research paper on “Saving Behaviour in South Asia” in the Journal of Policy Modeling in 2008. This paper finds that there is close relationship between growth and savings. Five Asian Countries are considered for analysing the data which are: India, Pakistan, Bangladesh, Sri-Lanka and Nepal. The time series model has been using and savings is impacted by income and Banking Institutions.

Bogan, V. (2008)\textsuperscript{50} has published a research paper on “Stock Market Participation and the Internet” in the Journal of Financial and Quantitative Analysis in 2008. After controlling a number of relevant factors, conclusively supported the idea that households that used the computer/Internet had an increased participation in the stock market than households that did not use the computer/Internet. The relation between online trading, lower transaction cost, and easier access to stock markets meant that all types of frictions had a significant effect on stock market participation.

Bertocchi, G.,Brunetti, M. and Torricelli, C. (2008)\textsuperscript{51} have published article on “Portfolio choice, gender and marital status” in the Rivitsa di politica Economic in
2008. Based on the data set drawn from the 1989-2006 Bank of Italy survey of household income and wealth showed that men and married household heads had a higher propensity to invest in riskier assets than women and single ones. It was also found that the factors like the divorce rate, the rate of female labour, and market participation also played a significant role in regional variations.

Ricciardi, V. (2008)\textsuperscript{52} has published his work on “The psychology of risk: the behavioural finance perspective” in F.J. Fabozzi (ed), Handbook of finance: Investment management and financial management in 2008. He also provided an overview of the concept of perceived risk and notion of decision making from standard finance and behavioural finance point of view. He discussed the behavioural and emotional factors that influence the decision making of investors. Behavioural finance includes cognitive biases and emotional aspects of the decision making process of the investors. Cognitive factors are concerned with the way people organize their information, while emotional factors deal with the way people feel as they register the information (Ricciardi, 2006). The players in the financial markets may be an organization, a group, or an individual. Behavioural finance provides models to understand the phenomenon and functioning of the stock markets. Investors’ behavior analysis is a study made on the psychographics and other contextual factors that attract investors towards a particular investment. Not only do the psychological factors influence the investors’ behavior, but various demographic factors also have their impact on investor psychology and ultimately, their investment decision making process.

Georgorakos, D. and Pasini, G. (2009)\textsuperscript{53} have written an article on “Trust, sociability, and stock market participation” in the “Review of Finance” in 2009. They have examined existing literature and showed that trust and sociability had a district and sizable positive effect on stock market participation, and sociability was likely to partly balance the discouraging effect on stock holdings induced by low generalized trust in a region of residents. Trust in the advice given by financial institutions represented a prominent factor for stock investing as compared to other tangible features in the banking environment.

Pandian, P. (2009)\textsuperscript{54} focused on financial market which provide the basic function of mobilizing the investments needed by corporate entities investment may be defined as an activity that commits funds in any financial/physical form in the resent with an
The expectation of receiving additional return in the future. The expectation brings with it a provability that the quantum of return may vary from a minimum to maximum investment, hence involves the commitment of resources at present that have been saved in the hope that some accrue from them in the future.

**Love, D.A. (2010)** has published research paper on “The effect of marital status and children on saving and portfolio choice” in The Review of Financial Studies in 2010. He proposed that marital status and children could have important effects on optimal household decision making on the allocation of portfolios. Using the data from HRS and PSID, it was found that divorce and widowhood had a particularly strong effect on the allocation, and that these effects differed significantly by gender as well as by the number and age of children. It also indicated that men moved to riskier allocations and women to safer ones.

**Shu, H.C. (2010)** has written an article on “Investor mood and financial markets” in the Journal of Economic Behaviour & Organization in 2010. He slightly modifying the Lucas model, his study bridged the gap between empirical findings and financial theories and showed how investors’ mood variations affected equilibrium asset prices and expected return. Both equity and bill prices positively correlated with investors moods, with higher asset prices being associated with better moods. Overall, this analysis provided a theoretical interpretation of how mood fluctuations influenced asset pricing, and it was suggested that considering an investor’s mood in asset-pricing models can help interpret the growing body of seemingly anomalous evidence in financial markets.

**Pavani, C. and Anirudh, P. (2010)** have presented a research paper on “Investor Behaviour Analysis” which is submitted to II International Conference on “Management Practices for Sustainable growth” (ICMPSC, 2010) during 28-30 July 2010), by Annamalai University, Dept. Business Management, Annamalai Nagar, Tamilnadu. This paper has analysed that some demographic variables like population, age, sex, education, income level, marital status, occupation, religion, death rate, average size of a family, average age at marriage & some psychographic variables such as interest, opinion, attitudes values of an investor which influence on investment of investors.
Stenga, J. (2010) has submitted Master Thesis On “Demand and Challenges of Accessing Saving Products in Tajikistan Micro-finance institutions” to Solvay Brussels School of Economics and Management University, Libre de Bruxelles-Belgium in 2010. It is found that household income, proximity to financial institutions, transaction costs, nature of employment, household social intervention, and level of education are key factors from the perspective of MFI’s clients. As savings products, most of the savings account and term deposits are offered by micro finance institution and micro deposits organization in Tajikistan. It does not have any rigid condition for the time period, interest rate, keeping minimum balance and withdrawal fees. Service provider is the important factor which manages the location of branch and services to clients. This study concludes that most of the people trust commercial banks rather than Micro Finance Institutions and Micro deposit organisation.

Lalit, M. K. and Singhania, K. (2010) have published article on “Investors Knowledge and investment practices of bank employees: An empirical study” in The Indian Journal of Commerce in 2010. They found that print media and websites were the two most important sources of information that helped investors to make investment decision. The investors gave preference to postal deposits, insurance and public provident funds (PPF).

Kasilingam, R. and Jayapal, G.(2010) have published article on “Characteristics of investors based on choice criteria segmentation” in the Journal of Management Research in 2010. This research is pointed out that the choice of individual investors was affected by family income, timing of investment and savings motives.

Chandra, A. and Sharma, D. (2010) have published article on “Investment Management by Individual Investors: A Behavioural Approach” in The IUP Journal of Behavioural Finance in 2010. They have studied five main cognitive biases namely, overconfidence, conservatism, representativeness, under/over opportunities and excess sensitivity to rumors. From the study, it is observed that nearly 85 percent of the investors are influenced by the behavioural factor called representativeness bias, because they are unable to include to their decision making process all the potential data.
Syed, T. S. and Pardhasaradhi, S. (2011) have published research paper on “An Empirical Investigation of the relation between Risk Tolerance and Socio-Economic characteristics of Individual Investors” in the Journal of Advances in Management in 2011. This paper is concluded in their empirical study that Indian individual investors were conservative investors. Marital status, earnings, occupation and number of dependents were significant factors associated with risk tolerance.

Mehta S.K. and Aggarwal, N. (2011) have published article on “The Effects of Demographics on Investment Choice: An empirical study of investors in Jammu” in an Indian Journal of Finance in 2011. They found that there was an association between demographic profiles and personality types of the investors with investment choices made by them. The authors further revealed that the female investors were found to be more conservative as compared to their male counterparts, and also, the investors preferred to consult their family members before making investment decisions.

John, K.C., Kumar S. and Vikkraman P. (2011) have published a research paper on “A study on socio-economic characteristics of Indian share market investors” (with special reference to Coimbatore) an International Journal of Multidisciplinary Research in 2011. They have attempted to discover a relationship between dependent variables like risk tolerance and independent variables like age and gender of an individual investor. It was found that male investors (in the age group of 30-40 years) dominated in the stock market. Most of the investors possessed higher education and Central govt. employees were found to be investing more in the stock market among the various investor groups.

Shanmugsundaram, V. and Balakrishanan, V. (2011) have published their work “Investment decisions-Influence of behavioural factor” in an Indian Journal of Finance in 2011. He also suggested that demographic factors influence investment decision making. Behavioural finance is related to the psychology which involves the study of the mind of an investor. The investment environment is highly complex and is difficult to understand. Traditional theories of finance emphasize that an investor is rational, but behavioural finance deviates from this assumption and states that there are many psychology and environmental factors, which influence the decision making of an investor. Psychological factors include investment objective, feelings, emotions, risk attitude, time, behavioural biases, mental capabilities of evaluating the
alternatives, and personal characteristics, that is, personality, attitude, perception, motivation, and so forth.

**Shaikh and Kalkundrikar (2011)** have published their work “Impact of demographic factors on retail investors investment decisions an exploratory study” in an Indian Journal of Finance in 2011. They empirically found that risk is an important factor for an investor in taking an investment decision. The investment environment includes factors like accounting information, recommendations of others, investment alternatives available to the investors, information sources, market structure, and other relevant external factors. The table 1 lists down the factors which influence the decision making of investors.

**Bime, M.J. and Mbanasor, J. (2011)** have published their work on “Determinants of Informal Savings amongst Vegetable Farmers in North West Region: Cameroon” in the Journal of Development and Agricultural Economics in 2011. The role of household savings in economic development is very important, and it can be described as a driving force necessary for economic growth. However, savings are influenced by the behaviours of individuals. The saving habit of a person is measured by his or her marginal propensity to save and this, in turn, is determined by his/her disposable income. On the other hand, the marginal propensity to save is determined by a number of factors.

**Abdela (2012)** has written an unpublished thesis on “Determinants of Urban Household Savings Behaviour in Tigray Regional State: A Survey in Mekelle city, Ethiopia in 2012”. Author who studied the determinants of urban household savings in FFIs, households being headed by females, total income of the household, and savings experiences had a positive and significant impact on household savings; however, age of the household head, additional earners in the household, and dependency ratio of the household showed negative and significant influence on household savings.

**Chowa, G. A., Masa, R. D. and Ansong, D. (2012)** have published a research paper on “Determinants of Savings among Low-income Individuals in Rural Uganda: Evidence from Assets Africa” in the Online Journal, Advances in Applied Sociology in 2012. This study is related to poor and low income individuals concerned to rural Uganda region. Savings is affected by wealth and financial institutions. This study
found element that decide savings of rural low income individuals institutions theory has developed from low-income individuals. Sociological theories do not explain the savings of rural people. It also reported that wealth, proximity to financial institutions, financial education, and financial incentives were positively associated with higher household savings performance.

Selvakumar, Jegatheesan and Gandhi (2012) have written an article on “A comparative study of investment behaviour of rural and urban investor in Sattur taluka, Tamilnadu” in the NICE Journal of Business in 2012. This study is explained that awareness about investment avenues was very low among rural people as compared to the urban people. The research scholars suggested that educational status should be improved in the rural sector.

Vyas R. and Moonat, S. C. (2012) have published research paper on “Perceptions and behaviour of mutual funds investors in Indore, Madhya Pradesh” in the Indian Journal of Finance in 2012. It is found that gold was the first preference of the investors; followed by bank deposits, life insurance, and postal deposits.

Kesavan, S. K., Chidambaram V. and Ramechandran, A. (2012) have published their work on “An evidence-based investigation into the implications of socio-economic factors for private investment decision making in the context of India” in an Investment Management and Financial Innovations Journal in 2012. It is noticed that age, gender, educational qualifications, occupation and annual income did not influence the type of investment avenues.

Kaustia, M. and Knupfer, S. (2012) have published their work on “Peer performance and stock market participation” in The Journal of Financial Economics in 2012. They showed that the returns earned by existing inventors in a neighborhood in a given month encouraged new investors to enter the market in the following month if the returns were positive. Two channels through which peer outcomes could have an impact on individual actions were extrapolated expectations and selective communication with relative wealth concern.

Shanmugham, R. and Ramaya, K. (2012) have published their work on “Impacts of social factors on individual trading behavior” in the Proceeding of Economics and finance, 2, of The 2nd Annual International Conference on Accounting and Finance (AF 2012) and Qualitative and Quantitative Economics Research (QQE in 2012. They
found that social interaction and media were found to have a positive relationship with an attitude towards trading; whereas, the Internet did not seem to influence the investors’ attitude towards trading.

**Jain, D. and Mandot, N. (2012)** have published a research paper on “Impact of demographic factors on investment decision of investors in Rajasthan” in the researcher’s world Journal of Art, Science and Commerce in 2012. They have indicated the relationship between the level of risk and demographic factors of investors confined to the state of Rajasthan. The study revealed that there was a negative correlation between marital status, gender, age, educational qualification, and occupation of the investors, and there was a positive relation between cities, income level and knowledge of the investors.

**Arora and Marwaha (2012)** have published their work on “Investment Patterns of individual stock investors: An empirical analysis of Punjab” in an Asia-Pacific Journal of Management research and Innovation in 2012. They found that individual investors saving needs were influenced by projected benefits, personal financial needs, taxation benefits and security needs. It was observed that non-retired people did not plan their savings and believed that their current savings would be enough to take care of their post-retirement needs.

**Gupta, N. and Agarwal, V. (2013)** have published their work “A study of the constituents of domestic savings and investments in urban cities with special focus on Mumbai and Delhi” in an Indian Journal of Finance in 2013. In the cities of Mumbai and Delhi among 251 households found four important constituents of domestic savings and investments. These were a) place of residence b) income of the households c) age group and d) interest rates.

**Seetharam and Britten, 2013** have written a research paper on “An Analysis of Herding Behaviour during Market Cycles in South Africa” in the Journal of Economics and Behavioural Studies in 2013. According to them, all this behaviour is the replica of human behaviour. Financial researchers incorporates human behaviour in describing the actions of the financial markets, Behavioural finance finds it reasonable to account for investor thoughts, emotions, and actions rather than only accounting for the ideology of a rational investor, who acts in a preplanned manner at
every point of time, and as a result, the behaviour of a rational investor provides the foundation for an efficient market.

Kamstra, M. J., Kramer, L.A. and Levi, M. D. (2013)\textsuperscript{79} have published report on “Effects of Daylight-saving Time Changes on Stock Market Returns and Stock Market Volatility” Rebuttal Psychological Reports in the Socio-cultural Issues in Psychological in 2013. This report explains the psychological aspects in the field of investors’ behavior. The socio-cultural influences are also allied with their decision making like peers stock market Participation, marital status, education, income, and so forth. In the stock market, herd like behaviour has always been noticed; and, is frequently discussed in studies. While displaying herd behaviour, investors follow the trend of investing prevailing in the market like they follow a particular group of investors without thinking over the outcomes.

Kumar R. and Arora, R.S. (2013)\textsuperscript{80} have published research paper on “Investors perceptions about mutual funds in India” in the Indian Journal of Finance in 2013. This work is suggested that investors needed investment education and needed to be informed about investment avenues through TV, the Internet, newspaper and professional journals in order to enhance their awareness levels.

Priyadhanlaxmi M. and Dhanlaxmi, M (2014)\textsuperscript{81} have published paper on “A study of upcoming stakeholders’ preferences towards various investment avenues in Salem District” in an Intercontinental Journal of Financial Research Review in 2014. This paper is examined investor’s preference towards various forms of investment, that is, shares, bank deposits, gold, real estate, life insurance, postal savings and mutual funds and found that bank deposits were popular among the investors. The researchers concluded that there was no significant association between income level and investment awareness levels.

Mangala, D. and Sharma, M. (2014)\textsuperscript{82} have published research paper on “A Brief Mapping of Theory and Evidence of Investors Behavioural biases” in the Indian Journal of Finance in 2014. This paper observed that Based on review of literature, Behavioural biases significantly influence the financial decision making of investors. The factors which lead to different biases can be related to personal characteristics of an investor or to the investment environment. The paper also concludes that these biases lead to different types of irrational behaviour such as the disposition effect,
endowment effect, over and under reaction. Behavioural factors are investor specific. It is not necessary that an investor would get influenced by a single bias as more than one bias may simultaneously influence an investor.

**Lokhande, M. A. (2014)**[^83] has published research paper on “A study of investment Awareness and Patterns of Savings and Investments by Rural Investors” in the Indian Journal of Finance in 2014. The study disclosed that rural investors placed great trust in products and services provided by the government banks. The first rank given by majority of the investors to bank deposits supports this observation. It was also observed that gold and jewelry were the second preference of the investors. The third preference was given to real estate (land), which signals towards the traditional attitude of the rural investors. Rural people prefer to invest in agricultural land and plots in nearby talukas. Naturally, rural investors preferred to invest their money in bank deposits, savings certificates and government bonds. They preferred to invest in life insurance policies issued by LIC. Hence, it is clear from the study that there is a strong bond between rural culture and buying and consumption pattern of the rural consumers. While investing money, the rural investors lay emphasis on safety and liquidity rather than earning high returns. They study concluded that majority of the rural investors were somewhat conservative.

**Raut, R. K. and Das, N. (2015)**[^84] have published research paper on “Behavioural Prospects of Individual Investors Decision making process” Review in the Indian Journal of Finance in 2015. It is found that the concept of individual’s full rationality and the concept of full market efficiency are not real. The decision making ability of individual investors is mostly influenced by social influences like herding, contagion, imitation, and information cascades. At the same time, psychological factors like representativeness, availability, and anchoring heuristics are the most cited biases which deviate investors from their rational decisions.

**Vadde, S. (2015)**[^85] has published a research paper on “Impact of Socio-Demographic and Economic factors on Households Savings Behaviour: Empirical Evidence from Ethiopia” in the Indian Journal of Finance in 2015. In this study, an attempt is made to examine the socio-demographic and economic factors affecting poor household savings behavior in micro finance institution of DECSI in Wikro Town, Ethiopia. Concerning the socio-demographic variables of gender, female household heads were more of savers as compared to male household heads. On the other hand, married...
households constituted the lion’s share of both savers and non-savers and these also accounted for above 60 percent of the total respondents. The educational level of the respondents did not account for them being savers or non-savers, as majority of the saver and non-saver households had college/diploma holders. Most of the households were found to have a total family size of between 1-3 members, which constituted 57.14 percent as saver households, while 47.94 percent of them were not savers. With regards to economic factors of occupation, the results indicated that the majority of the saver households were found to be self-employed as compared with public and private employees. The result also indicate that the average monthly income of the households had a positive effect on household savings, and as the level of average monthly income increased, the saver households also increased.

2.3. Research Gap:

Most of the earlier studies have explained the importance of household sector in Gross Domestic Savings as well as how demographic, social and psychological factors influence investment decisions. A few studies have analysed that behavioural finance and behavioural biases are also important determinants that influence the preference for investment avenues. All previous studies are mostly concerning to rural and urban households. No studies analysed the factors such as, behavioural approaches, behavioural biases, demographic factors, social factors, psychological factors and source of information which are considered in the present study. Highly educated investors also are taken as respondents such as government and semi-government employees and self-employed investors from the field of health, engineering, legal and commerce sectors.
2.4 References:


