Chapter 3
Review of Literature and Research Methodology

3.1 Introduction

In this chapter, the researcher has referred to various related literature in the area of savings and investment behavior of the households. This will provide the researcher with a methodological as well as content related clarity. At the same time, the researcher will get a glimpse of the research work carried out in the said area which will give him a clear guideline to carry out his thesis.

Following are the review of literature referred by the researcher.

3.2 The Review

Following are the extracts from earlier writings, researches on the theme of research undertaken by the researcher. These are distributed into sections as follows:

3.2.1 Impact of Saving on Economic Growth

Bozella Fraczek (2011) from University of Economics in Katowice in his paper “The Factors Affecting The Level of Savings and Their Influence on Economic Development” expressed his views as follows.

There is a relationship between savings and economic growth. According to him the factors influencing individual savings can differ from country to country. He quoted that the difference between household disposable income and consumption is household savings.

Household income comprises of wages revenue from self-employment income from net property. On the other hand expenditures are on goods and services. A negative savings is where the expenditures are more than income. By and large the savings are influenced by income, interest rate, fiscal factors, demographic factors, psychological factors, culture and social factors. Income is the most important factors amongst all which has been stated as Absolute Income Hypothesis given by S. M. Keynes. This theory examines the relationship between income and consumption, income and savings.
There is an increase in both consumption and savings with increase in income but the rates of increase in savings and consumption may differ.

One of the alternative hypothesis in the life cycle mode of consumption developed by F. Modigliani, the consumption is younger and older generation is very high then the savings and in the younger generation, it is the other way round the savings are more than consumption.

There is a relationship between household savings and economic growth. This largely depends on the forms of savings which are as follows –

1. Accumulation of savings in form of investment in durable household goods. This has a positive relation on economic development.
2. The savings in form of securities increase capital and stimulate investment demand.
3. Money saved in banks will increase the loans that can be given by banks. The conclusion of this paper is that household savings play important role in the economic development how over higher savings would necessarily may not mean higher and factor economic growth.

3.2.2 Impact of Savings on GDP

Singhal, Ritesh Kumar (2008)\(^\text{3}\) in his article Impact on Savings on GDP and Rate of Interest in India in ICOAE 2008 International Conference on applied economics is stated his views. His hypothesis was to find out the impact of changes in savings due to changes in GDP and rate of interest in Indian Economy in both pre and post reform periods. There is a drop in the information rate this head to a drop in interest rate in the financial markets. This adversely affects the savings. The rate of interest in the year 1990 to 1991 for a period of one to three years period in the bank where as high as 9.5 percent which came down to 6.5 percent in the year 2005-2006, for the same span of three years in commercial banks. In spite of this real rate of interest has increased due to a drop in inflation rate. In the post L.P.G. Period the savings in India has increased has more attractive alternative savings are available. He concluded by saying that the drop in the rate of interest does not have a direct relationship with the savings. In the post reformed period the M.P.S. is higher than the pre L.P.G. Period.
M. D. Abdul Salam and Umma Kulsum (2001)\(^3\) jointly from the department of economics AMC Aligarh had carried out an empirical study on savings behavior in India. With the objective of establishing the functional relationship between income and savings but they could not have any conclusive evidence or proof for the co-relationship. According to them there are three sectors that save. They are private public household. The household sectors consist of individuals, private collectives like temples, schools, colleges.

The saving can be in form of liquid assets in banks like shares, securities, insurance, physical assets. The corporate sector includes J.S.C., ICICI etc. Amongst the above stated three, household sector contribute to more than 75 percent of savings in India. To be precise, household savings in 1980-81 constituted 75.9 percent, in 1988-89 82.7 percent and in 1990-91, 84.4 percent of the national savings.

They concluded by saying that if a favourable macroeconomic environment, supported by strong structural reforms including liberalization of financial market will help increasing the volume and relative share of household savings in National Savings.

\subsection*{3.2.3 Saving Investment Relationship}

Seth, Bichitrananda (2011)\(^4\) in his article “Long Run and Short Run savings investment relationship in India” from R.B. I. working paper series. he examined the relationship between short and long run domestic savings and investment on one hand and private corporate savings and private corporative investment on the other hand and concluded that, The G.D.S. Gross domestic savings and investment are co integrated and coefficient of savings is closed to one which talks of lack of inflow of capital in to India which would mean that domestic investment is funded by domestic savings. So there is a need to strengthen the financial system so that our household savings can be effectively channelized for investment.

According to Vachani, Tarasingh (2014)\(^5\) Who is a CEO is very positive to note that “An Investment Fund By Women For Women”. By the name “Sankhya Women’s Impact Fund” will help both the women who could save and women entrepreneur who are in need of money for investments in Ventures’. She is of the opinion that 70 percent of the population of the world is represented by the poor women. She had given her opinion in Economic Times dated 20th Dec. 2014.
Jindal, Deepika (2014) who is an MD in ISL Architecture and ISL Life Style also presented her views in Economic Times dated 20th Dec. 2014. She stated that investing in women enterprises is the need of the hour. According to her women are free to take independent decisions on savings and investment. This will not only employ their funds productively in the market but also in turn will have an overall growth and prosperity of the nation.

Divate, K. B. and Joshi, H. A. (2014) who is from M. G. Palesha Commerce College have jointly written a paper in Arthasanwad July September 2014, page 216. They carried out a study in the city of Dhulia regarding savings / investment behavior. They were of the opinion that every individual saves, but the amount of savings may differ from individual to individual. Objectives of savings may be different. The objectives which were pointed out by them were Government employees saved for the old age and for the education of children. So was the course of employment from private sector. The businessmen were not bothered to save a lot in spite of the fact that they are not getting pension. All the savers used to save in multiple forms of savings. The investors also gave importance to the returns from savings.

3.2.4 Impact of Economic liberalization on Savings

According to Nair Laxmi R. (2005) who is a Doctoral Scholar of R.B.I. from Thiruvananthapuram, Kerala, who had penned her views in the paper “Financial Sector Liberalization and Household Savings in India” that financial liberalization has a negative impact on the savings pattern of household in India, rather it has a positive impact on increased credit availability which results in addition spending rather than increased savings. She also stated that absolute income has a positive impact on household savings in India. According to her, real interest rate and inflation rate are insignificant determinants of household savings in India. Also same is true with younger and older dependency ratios of household savings rate.

In the opinion of Athukorala, Prema Chandra (2001) who is from the Australian National University and Kernel Sen who is from University of East Anglia jointly have written a paper “The Determinants of Private Savings in India” Both of them were of the opinion that real interest rate, growth of per capita income and level of per capita income, large network of banking, the inflation rate do have a positive impact
on the savings in India. Their study also stated that changes in terms of trade and inward remittances by NRI have a negative impact on savings. The Fiscal policy of any government docs have a positive impact on savings in the economy. According to them, a small or a moderate inflation rate will have a positive impact on savings. The most important finding of the study showed that even when two different countries income levels were at the same level, the rate of savings in India was on a higher side. According to them, the savings rates of households in India have increased due to a better banking network.

3.2.5 Impact of levels of Income on Savings

Fernando Aportela (1999) of Banco De Mexico Research Department concluded in his paper “Effects of Financial Access on Savings By Low Income People”. The section of population who are from low income groups, if are exposed to better financial instruments, will have better savings rates and furthermore this lead to new savings.

In the concluding remarks in their paper by Upendra M. and Reddy N. L., (2007) “Savings behavior in the Indian Economy”. They stated that there is a spurt in the growth rate of household savings. The Marginal Propensity to save is relatively higher in the household sector as compared to the private and government sector. There is a empirical study carried out which examined, the savings behavior of households in the Indian economy and the study revealed that there is a growth in the acceleration in the growth rate of domestic savings, responsiveness to the domestic savings to the change in GDP and extent to discrepancy between actual change and desired change in domestic savings at the aggregate and disaggregate levels between 1950 – 2002. The estimate of constant income elasticity of household savings is found to be more than unity and relatively higher than both private and government sector.

Rockefeller Foundation (2013) in the paper “Solutions for the poorest” insights on savings behavior of clients brought out a unique weathered to inculcate the habit of savings in the poor household, they first must be brought under one group like the Self Help Groups [SHGs] and the starting point must be giving them understand the importance of savings as they get loan facilities only when some people save it is like a demonstration effect. There is also a fact that socio economic factors like income,
unplanned expenditure and migration for the search of jobs are the facts of life of the poor, so the products of savings and the process of savings should also have elasticity or should be of less rigidity accommodate the poor households to save. According to Rockefeller Foundation dynamics of households are equally responsible for the savings of households and the other members of the family encourage women to save in regular investments and the fact also is that illness, marriages are other main reasons of dissavings.

Sinha Dipendra and Sinha Tapen (2007) of Ritsumeikan Asia Pacific University, Japan and Macquarie University, Australia and ITAM, Mexico where of the opinion that higher the gross domestic product [GDP] or in other words growth rate higher will be the rate of savings and the other way around that is higher savings will have an negative impact on the growth rate of the economy.

3.2.6 Savings with Permanent Income Hypothesis

The author Bhalla, Surjeet S. (2000) in his article “The measurement of permanent income and its application to savings behavior” in the journal of political economy published by Chicago Press specifies that the current income is not a proper yard stick which can be applied to understand the savings pattern, but permanent income/transitory income are better determents of savings by rural households. The definition of permanent income does not make any differences on the result of calculation of savings. They also stated that the MPS of the transitory $Y^+$ income is higher than that of the MPs out of the permanent income $Y_p$. [$MPS Y^+ > MPS Y_p$] but less than one. They also specified that savings rate are not independent of the permanent income rather savings increase with the increase in $Y_p$.

This result suggests that both the permanent income model and the Keynes model can describe the savings behavior of households in the rural India.

The level of income and the distribution of income are important factors which decide the household savings.

Deolalikar, Anil and Rose, Elaina(1998) in their paper “Gender and Savings in Rural Savings in India” in Journal Population Economics Vol. 11 No. 4 in Dec. 1998 published by Springer, stated that there is a difference in the income and savings in rural India depending on the birth of a boy baby and a girl baby in a house. Their study
revealed that when a boy baby is born, the family has gained an asset in the long run and on the contrary when a girl baby is born it is a net liability of the family.

The allocation of resources of the households on production and consumption also depend to the gender of a child in the family. When a male baby is born the expenditure on bringing up of the child is significantly higher on items like education, health care, clothing, and food than when the newly born baby is a female child.

3.2.7 Impact of Income Change on Savings & Growth

Paul R. Masson, Tamim Bayaumi and Hossein Samiei (2014) International Evidence on the Determinants of Private Savings” in the World Bank Economic Review Vol. 12 No. 3 Sept. 1998 published by Oxford University Press mentioned that there are a number of unsolved issues. According to them a small increase in the government deficit will decrease the consumption by the private households i.e. there is an inverse relationship between the two. Increase in the government spending may lower the resources of the households and there by having a resource on savings.

Savings is positively correlated with the income growth, the high growth countries like Japan and Korea have high savings rate. In 1967 Tobin pointed out that with the expectations of the further increase in the future income, savings will remain unchanged. In the year 1994 Carroll and Weil confirmed that lagged values of increase in income seems to explain higher savings rate. Another argument is that high growth rate is a proxy for high rate of returns.

The effect of liberalization on savings behavior can operate through two channels. 1] The financial development may provide outlets for financial savings 2] Secondly the liberalization of access to bank credit have permitted the banks to lend more for the purchase of house and other consumer goods consumption and this will reduce the savings.

A rise in the per capita income leads to a higher savings rate. The age structure composition of the economy has an impact of savings pattern i.e. if a larger section of population is in the working age group the rate of savings rate will be high then the population with children and old aged households.
Another opinion pointed out by Laursen Matzlcr[17] is that improvement terms of trade have a possible relationship with the savings rate as it causes a transitory change in income which leads to increase in the savings.

Luis Serven (2014)[18] in their article "Savings in developing Countries " the sources in the world bank Economic Review Vol. 14 in Oxford Journals Oxford University press have stated that this article tries to uncover the relationship between growth and savings and the impact of some specific policies on the rate of savings. The rate of savings differ from region to region , it is absorbed that East Asian Countries, savings rate is around 30 percent of GDI while the same rate in Sub Saharan African countries is less than 15 percent.

It is observed that there is a positive co-relationship between the growth rate and the saving rates.

3.2.8 Impact of small savings schemes on household savings

A Committee (2004)[19] was formed to justify the cost incurred on collection of funds from different small savings schemes like KVP, NSC, PPF etc. Call money and forex markets, primary market, secondary market was of the opinion that it is difficult to justify the cost of borrowings in the present form but however scrapping the instruments will have an adverse effect on the individual savers like marginal farmers, agriculture labour etc. and in turn will have an effect on finance of the government and will have an effect on the infrastructural development in the economy. This committee has put forth its views in EPW August 2004.

Raymond F. Mike Sell and James E. Zinsser (1973)[20] in their article "The nature of the savings function in Developing Countries: A survey of the Theoretical and Empirical Literature" published by American Economic Association [Source: Journal of Economic Literature Vol. II No. 1 (March1973) PP-1-26] stated that The average or marginal rate of savings is regarded as a key indicator to a satisfactory rate of economic growth. The gross domestic savings is derived by subtracting from gross domestic savings, Government savings or Government revenue minus current Government expenditure.

The study carried out by them revealed that average saving rate is proportional to per capita income under the conditions of steady growth but the savings rate is
positively associated with the rate of growth of GNP, according to them there is a problem in deriving a proper concept of saving which would be relevant to people who regard the purchase of Jewelry and precious metals as savings and children and their education as security of their old age.

They also found a substantial agreement among the investigators that savings in the developing countries is negatively related to net capital imports and savings is positively associated with exports. There is also no consensus on effects of fixation on savings. They also concluded that savings is a function of number of interdependent variables.

R. Ramanathan (2014)\(^2\) in his article “Composition of Household Savings in Urban India” published by Department of Economics, Delhi, School of Economics, University of Delhi.

R. Ram Nathan – He in his article used a word like contractual savings. According to him, the contractual savings increase with the increase in income, The MPS (Marginal Propensity to save) increase with increase in income. He had categorized two heads one the house owners and the other renters, both of them have strong income effect, the wealth effect was positive for home owners and war insignificant for renters. He had taken up a comparative study between two house owners with the same income group. He found that the wealthier had a larger contractual savings as they can afford to pay larger premiums; also they are more secure so need lesser protection. He was of the opinion that same is true with the self employed businessman and self employed person. R. Ram Nathan also pointed out that with the increase in income contractual savings increases for all age groups but at a later state, the increase will be at a diminishing rate. The entrepreneurial class saves a larger part of their income. Business returns are expected to be higher and external funds tend to be expensive. Therefore they prefer to plough back profits. The MPS in liquid assets increase with increase in income. He also stated that net investment in durable goods like cars, motorcycles etc. account for 2.4 percent of average income which is a forth of the mean savings.
3.2.9 Consumption and Saving In Developing Economies

Raut, Laxmi K. and Virmani, Arvind (2014)\(^{22}\) had written jointly a paper titled “Determinants of Consumption and Savings Behavior in Developing Countries” published by Oxford University Press. According to them, the real interest rates in the financial markets have a positive effect on consumption, the nominal interest rate and inflation rates have negative effect on consumption and the effect of inflation is higher than the effect of nominal interest rate. The two plausible explanations for such an effect of inflation are –

1. Higher inflation can increase the uncertainty levels about the future incomes and so increase the precautionary demand for savings and

2. Inflation has an adverse impact on real financial wealth requiring a reduction in consumption and thereby increases savings.

Authors Allen C. Kelley and Jeffrey G. Williamson (2014)\(^{23}\) had jointly written a paper titled “Household Saving Behavior in the Developing Economics” The Indonesian Case published in the University of Chicago Press.

According to them the implications regarding the relationship of household savings, sources of income and age are several.

1) As the development takes place both the age structure and composition of income are changing.

2) If the divergent savings behavior by income sources are confirmed then the Government attention to words the development of financial sector will be warranted.

3) The impact on education on consumption and savings is complicated.

4) The possibility of building up aggregate personal savings relationship from micro data seems promising.

Norman Loayza and Rashmi Shankar (2014)\(^{24}\) in their article “ Private Savings in India ” published by Oxford University Press had put forth their views on the above mentioned topic and observed that the rate of savings in India is high when compared to other countries with comparable per capita income. Even the post LPG in 1991, there is not a big change in the scenario as the policies laid down by the government are oriented
towards savings which play a big role in the economic development of the country. According to them, there are some valid reasons for this to happen –

1) The households that some appear to pierce the corporate veil in that they internalize the savings action of the corporate sector this finding supports the study focuses on private savings rather than its components.

2) The rate of private savings is positively correlated with the share of agriculture in GDP as a larger share of GDP is from agriculture and also larger population lives in rural areas.

3) The real interest rate is associated positively with private savings rate.

4) Financial development has changed the demand for consumer durable goods but does not affect the total volume of savings.

5) The dependency ratio has a negative impact on private savings rate.

Masao Ogaki, Jonathan D. Ostry and Carman M. Reinhart(2014) in their paper “Savings behavior in Low and Middle income developing countries a comparison” published by Palgrave Macmillan Journal on behalf of I.M.F. Vol. 43 No. 1 March 1996 Page No. 38-71 have stated that –

The savings rate and its sensitivity to changes in real interest rates are a rising function of income that has a strong empirical support. However, there is a huge level of variation in savings rate through the levels of income are the same. The findings in the article suggest that higher savings rate may not be forthcoming, even with an increase in the interest rate, if the country in question is at the lower end of the income spectrum.


His study revealed that the size of the family and the composition of the family have an impact on the savings rate more the children in the house lesser will be the rate of savings as children consume but fail to produce, they are a social burden. The expenditure on children education may be a capital accumulation and may provide stimulus to the amassing of estates.

Nayals, Subhashree (2013) have carried out “A study on ‘Determinants and pattern of Savings Behavior in rural households of western Odessa’” In her study
she has taken into consideration different determinants of savings behavior of the rural households. She has brought out a considerable significance and non-significance of different variables which are useful in analyzing savings behavior in the Sundergarh district of Odessa. The dominant variables gender, age, occupation, education, land holding size, the strength of family, marital status of the individual, all of them are equally responsible for the quantum of savings, changes in savings, mode of savings, future expectations, types of savings, problems related to savings, types of accounts in the bank, malpractices of various financial instructions etc.

Deaton Angus (2005) in his article "Savings in Developing Countries: Theory and Review" had given their views in proceedings of World Bank annual conference on Development Economics in 1989.

The author has put forth his views in three sections; I, II & III, according to him savings is not only about accumulation but also about consumption smoothening in the face of volatile income and providing insurance for poor people whose lives are uncertain. It is also important to understand how government responds to fluctuations in revenues. He is of the opinion that the World Bank should take a lead. Useful work can be done by bringing together nation income accounts and survey statisticians. There is also a need for experimental household surveys which will tract cash flows with in households so that we can learn whether the apparent pattern of savings and dissavings are real, if not how to improve the survey questionnaires.

3.2.10 Saving Behavior in Rural and Tribal Societies

Gadela Surya Prakash Rao (2012) in her article "Determinants of saving behavior in Rural and Tribal households" in IJRSS Volume 2, issue 3, had penned his views on the topic as follows.

According to him the savings behavior in the district of Vishakhapatnam is largely influenced by age of the head of the family, sex, dependency ratio, income and medical expenditure. He also states that the medical expenditure has an adverse effect on the savings of household. He concludes by saying that income is the most important factor which decides the savings pattern. He specifies that one percent increase in income will increase the savings by 71.1 percent in the tribal households which is very high when compared to non-tribal rural households. He also states that male headed households save
more than female headed households. Further he mentions that dependency ratio has a strong and negative influence on household savings. He also states that the same is true with medical expenses. According to his experimental study average prosperity to save is 0.85 and of the tribal region, it is 0.56 and rural household it is 0.90, when there is an increase in income by Re. 1/-, increase in savings would be 61 paisa overall and for rural population, savings would increase by 99.1 paisa but for tribal region, the increase in savings is more.


This paper considers the interdependencies between per worker household, private corporate and public sector savings and investment, foreign capital inflows and GDP in multivariate settings. The major findings of the study are –

1. The Carroll-wail hypothesis is supported for household savings per worker at the one percent level of significance in both long and short run.
2. Savings directly of effect investment within each sector in the short run at one percent level of significance.
3. Per worker GDP has large effect on per worker private corporate investment with a long run elasticity of 7.17 and short run elasticity of 3.32 at one and ten percent level of significance respectively.
4. Per worker public investment is found to affect GDP per worker in both the short and long run adversely and significantly.
5. Foreign Capital inflow per worker is not found to be important in the growth process.
6. The dummy variables analysis show significant increase in annual growth in per worker household and private corporate savings.

Purohit, Brijesh (1990) in his article “Corporate Savings Behavior in India” had given his opinion in EPW in February 1990, concluded in his article as follows –

“My model links investment and savings decision explains the Indian Corporate Savings behavior in a satisfactory manner.” He noticed that during the period 1950 to 1980, the country had to face a number of periodical stocks like in 1962, 1965 and 1971;
we had to face three wars, oil crisis in 1973, 1979 and severe draught in 1965 and 1966. Apart from supply constraints and industrial disputes have be depression factor. Coupled with this demand constraints also added to growth of the industry, which in turn, had an adverse effect on Corporate Savings.


According to them since 1983, there is a sharp decline in wage disparities between SC/ST’s and non-SC/ST’s and the disparities in also are reduced in education levels and occupational choice. The observation showed that in 1983 SC/ST are used to save more than the SC/ST’s. The gap in the savings has reduced over a period of three decades due to the rise in income.

Based on the standard Economic Theory, our result on the decline of savings of SC/ST’s may indicate decline in uncertainty surroundings their income process. It was found that effect of uncertainty on the level of precautionary savings of SC/ST’s is ambiguous as higher job insecurity for them is offset by lower wage dispersion in their job opportunities. The SC/ST’s are predominant occupations like casual employment, agrarian and blue collar occupations compared to white collared. Regular employment of non-SC/ST’s workers may have facilitated their savings.

Another observation is that between the period 1983-2010 a decline in savings was noticed due to increase in education levels and permanent income resulted in consumption levels, this brought down the gap of savings between SC/ST’s and non-SC/ST’s. One more finding indicates that changes in wage uncertainty rather than uncertainty associated with job security may have covering the gap of savings of two groups that is SC/ST’s and non-SC/ST’s.

If the Government continues these measures the gap could be further marred between lower and upper caste.
3.3 Research Methodology

The title of the work at hand is “Changes in investment behavior of urban and rural household with special reference to Nasik City (1999-2009)” This study implies a comparative study of changes in the saving and investment behavior of the households in the selected area over time. Though the title suggests a study of a period of eleven years ending 2009, the period is extended up to year 2012-13 while the work was in progress in order to keep the information on the topic updated till the work was finished. Thus, the study now covers a period of 14 years ending 31-3-2013.

Lot of changes took place in the socio-economic conditions of the people over the period under study. Persons young in 1999 turned middle aged by 2013. Some of those have meager income years ago are earning attractive income now due to a variety of reasons. Many unemployed persons in 1999 are now employed, singles are now married, small families turned into macro families and so on. The basic idea was to study the impact of a number of factors on changes in saving investment behavior of sample households with a view to verify the validity of macroeconomic theory on household behavior in response to changes in parameters determining this behavior. Population of this study is a mix of households engaged in variety of economic activities such as males and females, persons engaged in services, both government and private, farmers, persons in SMEs and business activities, self-employed professionals, and such other households with more than one person working and engaged in mix of economic activities (involved in more than one economic activity) to study the differences, if any, in their saving-investment behavior.

With a view to carry out detailed investigation of income, savings and avenues of investment, the sample respondents were grouped in to gender, marital status, age, qualifications, occupations size of income and the size of family to find differences, if any, in the impact of macroeconomic changes on their saving investment behavior. A fairly representative sample of 1300 households was chosen for collection of detailed primary data on the theme of study. The investigation covered information on:

1. Sex, Age and occupations of the population
2. Occupational distribution of population
3. Distribution of population by size of annual income of the family

80
4. Conventional and new sources of savings of the households
5. Rate of saving as per cent of disposable income
6. Changes in income, saving and investment over time

Today the investment of urban as well as rural household and the financial institution have ample scope for saving and investment under financial inclusion due to opening the new avenues of savings. Now a day, Govt. Bonds and Treasury bills is not the only source of secured savings. People have a number of options open to the people to convert inactive savings into active investment with high return.

The gross domestic savings has three important sources as follows - 1) household sector, 2) private sector, 3) public sector.

In this study, researcher has tried to focus on savings and investment by household sector.

3.3.1 Justification of the choice of the topic

The title of the study is “Changes in investment behavior of urban and rural household with special reference to Nasik City (1999-2009)” This topic is chosen with the main object of testing the validity of macroeconomic theory explaining the functional relationship of income (Y) and saving, (S) and (I) with the help of an empirical study based on facts and figures over two different financial years covering a time span of 14 years. Furthermore, to the best of researcher’s knowledge, there is no study which has been carried out by any other researcher during recent years for the area and period under study. Hence the area selected is totally unexplored area of research through which the researcher would contribute something new the existing fund of knowledge on the theme.

3.3.2 Significance of the study

The study is very important from the point of view of today’s scenario as these are the days of globalization. The world has come very close. There is a lot of information available to the people due to media like TV, Radio, print media, internet facilities, hoardings, pamphlets etc. Today the household income has increased the GDP due to the spurt in the overall growth of industries and service sectors. In addition to this increased avenues in the job market. Previously there were jobs available only in the Govt. sector, post offices, railways, banks etc.
Today, during post liberalization era, there are many jobs other than government service in private sector like call centers, hotels, malls, cinema halls, fast food centers etc. even people are turning towards self-employment. All these factors have increased the income. On the other hand, size of the family has reduced from an extended family pattern to a nuclear family. Increased level of income of the people has left surplus funds with them. Hence with the increased avenue of savings it is necessary to expand the investment facilities as well. There has been a significant change in investment behavior of households both rural and urban.

The type of research is exploratory based on extensive information derived from primary and secondary sources.

3.3.3 Research Methodology

The title of the work at hand is “Changes in investment behavior of urban and rural household with special reference to Nasik City (1999-2009)” This study implies a comparative study of changes in the saving and investment behavior of the households in the selected area over time. Though the title suggests a study of a period of eleven years ending 2009, the period is extended up to year 2012-13 while the work was in progress in order to keep the information on the topic updated till the work was finished. Thus, the study now covers a period of 14 years ending 31-3-2013.

Lot of changes took place in the socio-economic conditions of the people over the period under study. Persons young in 1999 turned middle aged by 2013. Some of those have meager income years ago are earning attractive income now due to a variety of reasons. Many unemployed persons in 1999 are now employed, singles are now married, small families turned into macro families and so on. The basic idea was to study the impact of a number of factors on changes in saving investment behavior of sample households with a view to verify the validity of macroeconomic theory on household behavior in response to changes in parameters determining this behavior. Population of this study is a mix of households engaged in variety of economic activities such as males and females, persons engaged in services, both government and private, farmers, persons in SMEs and business activities, self-employed professionals, and such other households with more than one person working and engaged in mix of economic activities (involved

82
in more than one economic activity) to study the differences, if any, in their saving-investment behavior.

With a view to carry out detailed investigation of income, savings and avenues of investment, the sample respondents were grouped in to gender, marital status, age, qualifications, occupations size of income and the size of family to find differences, if any, in the impact of macroeconomic changes on their saving investment behavior. A fairly representative sample of 1300 households was chosen for collection of detailed primary data on the theme of study. The investigation covered information on:

1. Sex, Age and occupations of the population
2. Occupational distribution of population
3. Distribution of population by size of annual income of the family
4. Conventional and new sources of savings of the households
5. Rate of saving as per cent of disposable income
6. Changes in income, saving and investment over time

Today the investment of urban as well as rural household and the financial institution have ample scope for saving and investment under financial inclusion due to opening the new avenues of savings. Now a day, Govt. Bonds and Treasury bills is not the only source of secured savings. People have a number of options open to the people to convert inactive savings into active investment with high return.

The gross domestic savings has three important sources as follows- 1) household sector, 2) private sector, 3) public sector.

In this study, researcher has tried to focus on savings and investment by household sector.

3.4 Objectives of the study

This research was undertaken with following objectives to be achieved via the study:

1. To study the savings behavior of household prior to globalization 1991.
2. To study macroeconomic changes in income and level of savings of households.
3. To study behavioral changes in savings and savings by sample household during the post economic reforms (since 1999-2009)
4. To analyze the reasons for change in saving of rural and urban households in Nashik.
5. To study the emerging avenues of saving of rural and urban households.
6. To predict about future savings pattern of household.

3.5 Statements of Hypotheses

Hypothesis is a tentative position formulated for empirical testing.\(^1\) The researcher has tested the following statement of hypothesis via this study

\(H_1\) "There is a considerable increase in the savings of people and change on the number of avenues available after globalization."

\(H_2\) In the recent years, households are going for the risky investment rather than embarking upon fixed interest rate.

\(H_3\) Now a day, people who save are not influenced by mare interest rate but at times, influenced by non-interest factors.

3.6 Sample Design

Sampling is widely used in business as a means of gathering useful information about a population.\(^2\) As an individual researcher can take up a small fraction of 0.5 per cent population as the sample unit, the sample units are picked up using simple random sampling method\(^3\) for the detailed investigation. Working population as percent of total urban population in Nasik city is around 30 per cent and the estimated occupational distribution of working population is given below.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>category</th>
<th>size</th>
<th>Sample size</th>
<th>Method of Sample selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government Service</td>
<td>4,42,673</td>
<td>387</td>
<td>Simple Random</td>
</tr>
<tr>
<td>2</td>
<td>Private employees</td>
<td>2,94,127</td>
<td>257</td>
<td>Simple Random</td>
</tr>
<tr>
<td>3</td>
<td>Farmers</td>
<td>1,79,744</td>
<td>157</td>
<td>Simple Random</td>
</tr>
<tr>
<td>4</td>
<td>Industry/ Bus. Persons</td>
<td>1,27,753</td>
<td>112</td>
<td>Simple Random</td>
</tr>
<tr>
<td>5</td>
<td>Self Employed</td>
<td>2,79,272</td>
<td>244</td>
<td>Simple Random</td>
</tr>
<tr>
<td>6</td>
<td>Mixed Eco Activities</td>
<td>1,63,404</td>
<td>143</td>
<td>Simple Random</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14,86,793</td>
<td>1300</td>
<td></td>
</tr>
</tbody>
</table>
3.6.1 Method for Tabulation and Analysis of Data

Secondary data was collected from Library sources and official sources were compiled in the forms of tables. The figures in the table were processed further to suit the requirements of further analysis in tune with the topic of research.

A uniform questionnaire was served to the respondents from all the 6 strata of earners to get information on almost all bits of information. The questions in the questionnaire were coded and decoded. The data collected through questionnaire was fed to excel spread sheet that helped in turning out as many data tables as were required for complete data analysis.

3.6.2 Statistical Tools in Analysis of Data

For analysis of secondary and primary data tables, simple statistical techniques such as averages, percentages and ratios were used. For the purpose of testing hypotheses, since the sample size was quite large, ‘Z-test’ and ‘$X^2$ (Chi square) Test’ are used.

3.7 Contribution to Existing Fund Knowledge

The research has been carried out and tested on the real by factors i.e. whether or not people have really changed their investment pattern from the safety zone, to the risk plus safety zone, and part risk zone whatever information revealed has shown similarities and differences from macroeconomic predictions on aggregate human behavior on the relationship between income, saving and investment considering both, economic and non-economic factors. This is undoubtedly a fresh knowledge to the existing fund of knowledge for the society. Researcher feels this is his contribution to the existing fund.

3.8 Scope of the study

1) The scope of this study extends to the population of Nashik Municipal Corporation Area Population in this context would mean earners of income from various economic activities, who spend their earnings on household consumption, save a part of their income in one or more avenues of saving and also invest for making further income as ‘rate of return’ or make provision for coping with family responsibilities. A fairly
representative sample of 1300 households was drawn from a vast population of around 15 Lakh to carry out detailed investigation on saving-investment behavior using appropriate methodology explained above.

2) The geographical area covered extends to Nashik Municipal Corporation Area.
3) The time period covered is of 14 years from 1999-2000 to 2012-13
4) This study covers the saving investment behavior of the sample cross section of earners from different occupations by sex, age groups, and income groups and extends to the extent of saving as per cent of their disposable income.

An attempt is made to compare the changes in saving investment behavior of the sample households during the years 1999-2000 and 2012-13.

3.9 Limitations of the study

1) The researcher was suspicious about the bias of respondents and their reservations is revealing true and reliable estimates of income, saving and investment information to him. This limitation has refrained some of the respondents who denied responses to the questionnaire.

2) It is said that public memory is short; people remember little about events held in the past. This limitation also faced by the researcher. Quite a good number of respondents were unable to give feedback on their income, savings and investment in the year 1999-2000. These responses had to be eliminated for a comparative study over time.

3) Though the study has a lot of scope to carry out, one of the limitations experienced was that some households did not furnish information due to the fear of being exposed to the Govt. norms.

3.10 Chapter scheme

This research report is distributed over 7 chapters as detailed below:

1. Introduction to saving investment behavior.
2. Theory of Income, Saving and Investment
3. Review of Literature and Research Methodology
4. Profile of Nashik District
5. Aggregative Analysis of Saving-Investment Behavior
6. Analysis of saving investment behavior of sample household.
7. Summary, findings and estimates of future trends.

3.11 Summing Up

Above review of literature has helped the researcher in developing an approach in handling the topic under the present scenario. Researcher could determine his parameters for determining the functional relationship between GDP, consumption, savings, investment, inflation and its impact on saving investment behavior of private sector including household sector, private corporate sector, financial sector and real sectors of growth and finally, the impact of changes in domestic household savings on aggregate investment and economic growth in an economy.
References

1. **Bozella Fraczek (2011)** from University of Economics in Katowice in his paper “The Factors Affecting The Level of Savings and Their Influence on Economic Development”

2. **Singhal, Ritesh Kumar (2008)** in his article Impact on Savings in GDP and Rate of Interest in India in ICOAE 2008 International Conference On Applied Economics

3. **M. D. Abdul Salam and UmmaKulsum (2001)** jointly from the department of economics AMC Aligarh had carried out an empirical study on savings behavior in India.

4. **Bichitranaand Seth (2011)** in his article “Long Run and Short Run savings investment relationship in India” from R.B. I. working paper series

5. **Tarasingh Vachani (2014)** who is A C.E.O. In Anta Senior Living Is Very Positive In The Note That “An Investment Fund By Women For Women”.


7. **Divate, K. B. and Joshi, H. A. (2014)** who is from M. G. Palesha Commerce College have jointly written a paper in Arthasanwad July September 2014, page 216.

8. **Laxmi R. Nair (2005)** who is a Doctoral Scholar of R.B.I. from Thiruvananthapuram, Kerala, who had penned her views in the paper “Financial Sector Liberalization and Household Savings in India”

9. **Prema Chandra Athukorala (2001)** who is from the Australian National University and Kernel Sen who is from University of East Anglia jointly have written a paper “The Determinants of Private Savings in India”

10. **Fernando Aportela (1999)** of Banco De Mexico Research Department concluded in his paper “Effects of financial access on savings by low income people”.


12. **Rockefeller Foundation (2013)** in the paper “Solutions for the poorest”

13. **SinhaDipendra and SinhaTapan (2007)** of Ritsumeikan Asia Pacific University, Japan and Macquarie University, Australia and ITAM, Mexico


17. Laursen Matzler (2005) is that improvement terms of trade have a possible relationship with the savings rate as it causes a transitory change in income which leads to increase in the savings.


19. A Committee (2004) was formed to justify the cost encored on collection of funds from different small savings schemes like KVP, NSC, PPF etc. Call money and forex markets, primary market, and secondary market. EPW August 2004


21. R. Ramanathan (2014) in his article “Composition of Household Savings in Urban India” published by Department of Economics, Delhi, School of Economics, University of Delhi.

22. Raut, Laxmi K. and Virmani, Arvind (2014) had written jointly a paper titled “Determinants of Consumption and Savings Behavior in Developing Countries” published by Oxford University Press.


31. Purohit, Brijesh(1990) in his article “Corporate Savings Behavior in India” had given his opinion in EPW in February 1990,


33. O.R. Krishnaswami, Methodology of Research in Social Sciences, Himalaya Publication House, p. 100

34. Ken Black, Business Statistics for Contemporary Decision Making, Wiley India, p. 222

35. Ibid, p. 22

36. C. R. Kothari, Research Methodology, Methods and Techniques, New Age International Private Limited Publishers, 2012, p. 95-

37. Ibid, 195-196

38. Ibid, 195-196