International Journal of Current Research and Modern Education (IJCRME)
Impact Factor: 6.925, ISSN (Online): 2455 - 5428
(www.rdmodernresearch.com) Volume 3, Issue 1, 2018

DEMOGRAPHICS PERSUADE THE SAVINGS AND INVESTMENT PATTERN OF FARMERS - AN EMPIRICAL STUDY

C. Radha Priya* & Dr. R. Gayathri**
* Assistant Professor, Department of Commerce, Sree Narayana Guru College, Coimbatore, Tamilnadu
** Assistant Professor, PG department of Commerce, Sree Saraswathi Thyagaraja College, Pollachi, Tamilnadu

Cite This Article: C. Radha Priya & Dr. R. Gayathri, "Demographics Persuade the Savings and Investment Pattern of Farmers - An Empirical Study", International Journal of Current Research and Modern Education, Volume 3, Issue 1, Page Number 111-125, 2018.

Abstract:

Agriculture is the backbone of the Indian economy. Father of our nation, Mahatma Gandhi said "India lives in villages and agriculture is the soul of Indian economy". Agricultural land accounts for about 60% of the total landscape of India (The World Bank). Agriculture and allied activities accounts for about 15% of India's GDP offering employment to two-thirds of India's population (OECD, 2011). Indian farmers have high inclinations to save and invest. It is imperative to magnetize the earnings of the farmers and divert those appropriately into the financial system to facilitate industrialization which will result in the economic prosperity of India. This research mainly focuses on investment preferences of farmers in Tamil Nadu, India. The survey was conducted with help of 513 respondents. This study identified various significant constructs and sub constructs to study the investment preference and investment decisions of the farmers. These constructs include awareness about the Investment Avenues, factors influencing investment decision, Investment avenues that will be preferred in future. The study shows that the farmers with high business experience are able to make better decisions with the help of experts' advice and usage of investment tools. The descriptive analysis, rank correlation, one way ANOVA test has been used to check the significance between demographic factors and constructs. The research findings and suggestions would be more useful for farmer's to take better investment decisions and also would serve as an eye opener for the financial service institutions and firms to device appropriate strategies so that all the investment avenues have an effectual reach.

Key Words: Agriculture, Employment & Earnings

Introduction:

Savings and investments are amongst the most significant factors that silhouette the economic well-being of any country. The kernel of Keynes's theory is states that "decisions to save and decisions to invest are made largely by different people and for different reasons". Savings and investments are distinctive concepts. Capital formation is the key for economic development as it eradicates poverty and enhances productivity by building strong infra structure facilities, advanced technologies, multifaceted production methods and efficient utilization of natural and human resources. Effectual capital formation paves way for the increase in the productivity of agricultural and industrial goods and services, superior rates of economic growth, augmented levels of per capita income, improved standard of living and less dependency on foreign capital. Developing countries strive hard to achieve the benefits of capital formation by initiating measures like increasing savings, augmenting investments, utilizing ideal resources, improving infra structure facilities, restricting imports, motivating exports, enhancing employment opportunities, offering bountiful investment avenues, increasing the number of financial institutions, etc. A well-organized financial system configured together with sound policies and adroit investment avenues bequests capital formation of a nation thus pacing way for its economic development. India, the seventh major economy of the globe stands as the best example here. India has sustained in the growth path since independence. At present India witnesses' increased agricultural production, improved technologies, augmented corporate earnings, superfluous disposable income, enhanced levels per capita incomes, low dependency ratios, etc. leading to raised levels of consumption and greater scope for savings. This research mainly concentrates on the investment pattern of farmers in Tamil Nadu.

Need for the Study:

In the modern society everything is based on money. As the famous saying goes, "money makes the world go around", it occupies a predominant position today and it is wanted by everyone for everything. Savings and investment has become utmost indispensible for individuals to survive. More than fifty percent of India's population dwells in agriculture. In Tamil Nadu most of the farmers do not have sufficient levels of income from agriculture because of the taboos vested with the same. The lifestyle of the farmers has not improved as they struggle neither to save nor to invest in various investment avenues. Nearly 2,00,000 farmers have committed suicide since 1997 according to the National Crime Records Bureau. Their families continue to

live in a stressful situation because of the taboos associated with farming and their administrative innocence or apathy. Lack of financial literacy amongst farmers has lead to insufficient money for their survival in the society. This research primarily focuses on the problems faced by the farmers in investing, their inherent capacity to save, the avenues preferred by them and the various factors influencing their saving and investment pattern of farmers in Tamil Nadu.

Objectives:

- ✓ To study the income, savings and investment pattern of farmers in Tamil Nadu.
- ✓ To know about the savings and investment objectives of farmers.
- ✓ To examine the awareness echelon of farmers about investment avenues and recognize how their investment decisions are influenced.
- ✓ To understand the perception of farmers towards various investment avenues and their contemporary investment pattern.
- ✓ To identify and suggest if necessary, the strategies to improve the farmers' investment pattern in Tamil Nadu.

Review of Literature:

Haiyang Chen and Ronald P. Volpe did an analysis to determine the personal financial literacy among college students in the year 1998. The study had three purposes. First, it provided evidence of personal finance literacy among college students. Second, it examined why some college students are relatively more knowledgeable than others. The analysis helped in identifying the factors that determine the level of competency possessed by college students. Lalit Mohan Kathuria and Kanika Singhania (2012) analyzed the level of knowledge regarding various investment avenues, select investment practices, and factors influencing investment decision making among male and female employees of private sector banks in Ludhiana city of India. Various statistical tools like percent, mean score, rank score, Spearman's rank correlation coefficient, and t-test were applied for the analysis. The findings of the study reveal that both male and female respondents were using magazines, internet, and TV channels as the three most important sources of awareness regarding various investment alternatives. Dr. Bhawana Bhardwaj, Dr. Nisha Sharma and Dr. Dipanker Sharma (2013) studied the Income, Saving and Investment Pattern of Employees of Bahra University, Solan. The authors determined to study the income, consumption, savings and investment pattern of employees, to examine in depth the most popular investment avenues, to evaluate the awareness level investment in industrial securities and to scan the preferences and possibilities of new investment avenues. According to the analysis of investments majority of the employees are investing in jewellery, gold, land and buildings because they feel it's a safe investment. Apart from this the employees have been largely investing especially in bank deposits and post office schemes. The study inferred that deposits with the banks, post office and fund schemes enjoy a high degree of liquidity and marketability followed by investments in land buildings, jewellery and gold which enjoy comparatively less of liquidity and marketability. The study by Ms.Smita Pandey, Mr. Narendra K. Sharma, and Mr. Ashok K. Mittal (2013) was the pioneer in the field of investors' information search for financial products where information search behavior of common stock purchase was assessed by investors with respect to their demographic characteristics, subjective knowledge, and risk levels. Puneet Bhushan (2014) examined the awareness level of salaried individuals about various financial products as well as to find out the investment preference of salaried individuals towards various financial products. All salaried individuals of Himachal Pradesh whether in government or non-government job were considered as the population in the study. Primary data from the respondents was collected by using a structured questionnaire. The study adopted multistage sampling for collection of the data. Results indicated that highest awareness is for bank fixed deposits followed by savings account, life insurance, post office savings, public provident fund, national savings certificate, kisan vikas patra, pension funds, mutual funds, stock market, bonds, debentures, commodity market and forex market. B.Thulasipriya (2015) attempted to premeditate the investment preference of government employees in Coimbatore district using convenient sampling method. The author aimed to analyse the risk tolerance levels of the Government employees by understanding the type of financial instruments preferred by them and to examine the duration for which they hold the investments. This in depth analysis was undertaken to help the Government to work out the various feasible schemes to mobilize finance from salaried class investors. Investment is one of the major issues of the middle class families as their small savings of today are to meet the expenses of tomorrow. Prof. Ujwala Bairagi and Prof. Charu Rastogi (2013) examine the investment pattern and awareness of the Pune based Investors about different investment instruments such as bank deposits, real estate, small savings, life insurance schemes, bullions, commercial deposits, corporate security- bonds, mutual funds, and equity and preference shares. This research found the impact of age, education, occupation and income level of the individual on investment. An attempt has been in this study to measure the level of awareness of investors about several pre-identified investment products; to rank the investment products in terms of awareness; to analyze the relation between awareness and socio-economic factors relating to the investors; to study the preferences of investors for different investment products; and finally to identify the factors influencing investor awareness and preferences

Ms. Vrushali Shah, Ms. Priyanka Zanwar and Ms. Pratibha Deshmukh (2011) attempted to peep into rural investors' investment inclinations and examined the stage of life cycle of individual with their investment inclination and objectives behind investment. It found that Mutual fund, ELSS, Debt Instrument, Company deposits, NBFC Schemes, Precious stones, Art objects, Personal Landings and Systematic Investment Plans are the most neglected investment avenues by rural investors of all age categories whereas PO Schemes and Bank deposits are the preferred investment avenues at all life cycle stages. R. Suyam Praba (2011) analysed how the Investor's Behavior is changing and they are now leaving behind the sacred investment options like the POSB, Mutual funds, Insurance, Bank deposits, gold etc among salaried respondents in Coimbatore city who either work for IT, Bank or for NBF. The objectives of the research are to study the savings pattern, factors influencing the decision making process of savings and investment, to do risk profiling of investors and to assess the conceptual knowledge, awareness level and perception about Mutual funds Mr. Deepak Sood and Dr. Navdeep Kaur (2015) examined the savings and investment pattern of salaried class people of Chandigarh (India).The authors aimed to evaluate the saving habits, investment pattern and investment selection behaviour of salaried class people using a structured questionnaire. According to the survey maximum preference has given to LIC and after that to PPF and RE by the salaried investors for savings and investment. Majority of the investors objective for investment is returns from the followed by tax benefits and emergency purposes. It is evident from the study that investment decisions of majority of the investors are made by themselves and their annual savings dependent on their age, income, education and employment. The study suggests that the saving mode must attract people by providing many offers and new attractive schemes to enhance the saving habits as there is lack of awareness about other avenues like equity, and mutual fund etc. Mrs. L.Nithya and Dr. (Mrs.) S.Suma Devi (2014) mainly because this group of the population comprises of a large demographic segment of consumers with high spending power. The authors have collected the data required for the study through a structured questionnaire and tools like Simple percent, Friedman Test, Chi- Square and ANOVA are used to analyse the same. The study concluded that the respondent who are in the category of living with children only and Living with Family (Spouse & Children) have preferred medium saving habit, living with spouse only and living alone have preferred high saving habit and there is significant difference between the monthly income of respondents and their level of investment.

The USAID funded Rural Savings Promotion & Enhancement of Enterprise Development project (Rural SPEED), conducted a nationwide survey of rural Ugandans' savings habits, needs and priorities in the year 2005 through Rich Pelrine and Olive Kabatalya with the goal of providing financial intermediaries' insights into developing market demand driven savings products, policies and strategies. The quantitative survey was conducted in Western, Eastern, Central and Northern Uganda and questionnaires were administered to 852 respondents. The study revealed that 80% of rural Ugandans save in cash or in kind. Most rural Ugandans save in both formal and non-formal organizations though no organizational form has a dominant position. Furthermore, there is much more saving in cash and in kind than there is organized saving. There are clear seasonal trends mirroring the agricultural seasons for saving. The most common reasons for saving are planning for medical emergencies, school fees and unforeseen problems. Dr. Odoemenem, I.U., Ezihe, J.A.C. & Akerele, S.O (2013) studied the saving and investment pattern of Small Scale Farmers in Makurdi Local government Area of Benue State, Nigeria. 120 farmers were randomly sampled using multi-stage sampling techniques and data were collected using structured questionnaire for interview schedule. Lifestyle is an important factor which influences the investment behaviour of people. The intermediaries and capital market operators need to know the lifestyle of investor to better design the instruments and programmers to become successful. The lifestyle of investors can be determined by studying the activities, interest and opinion of investors. Mugdha Shailendra Kulkarni (October, 2014) attempted to study the influence of demographics on the investment behavior of the investors. This study attempts to find changes in investment decision with age, gender, income, education level, occupation, annual income, no of dependents. Saxena's (2013) study based on demographic and psychographic factors tries to anticipate the preferred portfolio of an investor in Jhansi. It was found that high income group was willing to invest in high risk securities and young investors are looking for wealth maximization and hence they invest in lump sum maturity amount. Gold and real estate are considered as the safest and investors were not very keen on pension plans. is an empirical study conducted on the middle class household's investment behaviour Das's study (2012)at Barak valley in Assam to understand the various investment options available to investors and tries to analyse the common problems faced by investors. The study found that the bank deposits remain the most popular investment option followed by insurance and small savings. It was found that people preferred investment options with fixed investment bearing options. Samudra & Burgate (2012) tried to analyze the influence of the age of the head of the family, along with the other demographic variables, as an important factor in decision making, and the reasons for increase in savings and change in the investment pattern, in Nagpur, Maharashtra. The study by John K. C., Sasi Kumar & Vikkraman (2011) was an effort to understand if there exists a relationship between risk tolerance level dependent variable and age, gender of an individual investor (independent variables) on the basis of the survey, while discussing the characteristics of the Indian individual investors with a sample size of 150 share brokers and 450 individual investors. It was concluded that

the responsibility lies with the stock exchanges and the government to utilize this potential. Giridhari & Debashish (2011) analyse the investment perceptions among urban investors in Cuttack and Khurda in Orissa. Their study indicates that there is significant role of income and occupation in selecting investment avenues and the male investors are more active in selection avenues than female investors. Lisa Grace S. Bersard and Dennis S. Mapa Philippines (2006) focused on the savings pattern of households of Philippines at the national and regional levels based on the national per capita where the income details are presented and the study covered the period from 1985 to 2005. From the analysis of micro level data obtained from family income and expenditure survey which includes the rate of savings, level of savings, deposits in banks, it is derived that rural households of Philippines saves more percent of their income than their urban counterparts, but, in general, the behaviour towards savings was declined during 2000-2003. Moreover, among the various regions, under study, Cagayan valley is identified with highest percent of savings rate. Shamika Ravi (2006) revealed that the savings portfolio data and level of household income and analyzed the impact of idiosyncratic income shocks on the household savings decisions. The study major focusing only on behaviour of joint and nuclear families of rural and it indicates that joint families are more likely hold more wealth in the form of procedure assets and the household having the land in the form of agriculture were only severely influenced by idiosyncratic income shocks. Adeymo and A.S Bamire (2005) examined the saving and investment patterns of cooperative farmers in South Western Nigeria. The existing income level, pattern of investment, and the savings of cooperative farmers are the selected variables undertaken in the study and collected through a micro level survey. From the analysis of the study, it is concluded that the strategies and policies on savings and investment are significantly influenced the savings and investment pattern of cooperative farmers of South West Nigeria. Rajarshi Ghosh and Assis Kumar (2005) looked into the determinants of the household savings. The prime saving modes of Indian households are cash and jewellery which will be helpful during the loss or absence of household income. According to the study, less than 10 percent of the population only concentrated and interested in savings. In the present economic situations, rural people are aware about the various deposit schemes instead of opting the informal savings and they depend on the formal savings. The main motive of savings of the rural household India is to meet their children's education and marriage expenses and to meet out the contingencies. Thus, it is understood that the determinants of savings of Indian households are identical. Ernest Aryeety (2004) explained the households' choices on their assets with reference to Ghana. The study critically evaluated the Ghana Living Standard Survey, in addition to the variables such as household demographic characteristics, income of households. In particular the study explained the difference between the asset holdings and the wealth of the households. Thus, it is learned from the study that rural people of Ghana, prefer to save and invest their excess income, mostly on the productive assets and they are not even participate with the informal sector.

Research Methodology:

The research is a single cross sectional descriptive research done using survey methodology. A cross section of famers in Tamil Nadu was considered in the study. A descriptive study is undertaken in order to ascertain and describe the characteristics and association of the variables of interest in a situation. This study is aimed at bringing out the different variables that influence the investment preference of farmers and how the farmers level of awareness influence their investment decision. This study uses both types of data; Primary and Secondary data.

Pre-Testing and Pilot Study:

The questionnaire prepared for the respondents has been pre-tested by the researcher in person. Comments on the questions were noted and after careful analysis necessary modifications have been made in the questionnaire. After pre-testing, a pilot study was conducted on 100 respondents. Confirmatory Factor Analysis was used to check the reliability and validity of group in the questionnaire. A reliability of 0.7 (Cronbach alpha) demonstrates sufficient instrument reliability for data collection. The results of the study are demonstrated in the following construct reliability table.

Reliability Analysis Result for the Pilot Study:

Construct	Reliability (Cronbach's alpha)	Remark
Awareness of Investment Avenue	0.851	Sufficiently reliable
Factors influences on investment decision	0.821	Sufficiently reliable
Investment avenues that will be preferred in future	0.933	Sufficiently reliable

Study Setting:

The study was conducted in natural environment, that is, in non-contrived settings. No extraneous factors were controlled.

Unit of Analysis:

Since the study is aimed to analyze the behaviour of farmers, the unit of analysis is 'individual'. The data collected from each individual is treated as an individual data source.

Time Horizon:

This is a cross – sectional study. The time duration of the study is three years. The variables which influence the farmers behaviour and their preference may vary with time.

Sampling Technique:

The sampling technique followed here is two stage cluster sampling. Cluster Sampling is a sampling technique used when "natural" groupings are evident in a statistical population. In this technique, the total population is divided into these groups (or clusters) and a sample of the groups is selected. Then the required information is collected from the elements within each selected group. This may be done for every element in these groups or a subsample of elements may be selected within each of these groups. A common motivation for cluster sampling is to reduce the average cost per interview. In the first stage of the sampling process all major cities of Tamil Nadu state were considered.

Statistical tools to be used.

Analysis of data and interpretation is done using the below mentioned methodologies:

- ✓ Descriptive analysis
- ✓ Rank Correlation
- ✓ One way ANOVA test

Simple Percent Analysis:

$$\text{Percent} = \frac{\text{Individual value}}{\text{Total}} \times 100$$

A percent is defined as a fraction whose denominator is 100. Therefore in order to change a decimal into a percent you will have to multiply the decimal by 100.

Chi-Square Test:

$$X^2 = \frac{\sum (O-E)^2}{E}$$

Where O indicates the observed frequency, E indicates the expected frequency

The formula to calculate the expected frequency is,

$$Ei = \frac{\text{Row total i x Column total i}}{\text{Grand total}}$$

One Way ANOVA Test:

$$F = \frac{MST}{MSE}$$

Where, F = ANOVA Coefficient, MST = Mean sum of squares due to treatment, MSE = Mean sum of squares due to error.

Formula for MST is given below:

$$MST = \frac{SSE}{P - 1}$$

$$SSE = \sum(n-1)S2$$

Where, SSE = Sum of squares due to error, S = Standard deviation of the samples, N = Total number of observations. For analyzing collected data, the Statistical tools such as a simple percent, ANOVO has been used to test for significant relationship between age, gender, income, educational qualification, occupation, return, stock, experience and marital status with respect to few decision making process.

Analysis and Interpretation:

Table 1.1: Age of the Respondents

Age (in years)	**Frequency**	**Percent**
Less than 25	25	4.9
26-35	60	11.7
36-45	129	25
46-55	154	30.1
Above 55	145	28.3
Total	513	100.0

From the above table it can be inferred that 30.1% of the respondents are in the age group of 46-55, 28.3 % of the respondents are in the age group of above 55 years and nearly 25 percent of the respondents are in the age group of 36-45 years.

Table 1.2: Gender of the Respondents

Gender	Frequency	Percent
Male	328	63.9
Female	185	36.1
Total	513	100.0

From the above table it can be inferred that nearly 63.9% of the respondents are male and 36.1% of the respondents are female

Table 1.3: Education level of the respondents

Education level	Frequency	Percent
Illiterate	45	8.8
Less than School	150	29.2
Higher secondary	161	31.4
Graduate	88	17.2
Post graduate	69	13.5
Total	513	100.0

From the above table it can be seen that nearly 8.8% of the respondents are illiterate, 29.2 % of the respondents have an education level of less than school, 31.4 % of the respondents have an education level of higher secondary, 17.2% of the respondents are graduates and 13.5% are post graduates.

Table 1.4: Marital status of the respondents

Marital Status	Frequency	Percent
Unmarried	35	6.8
Married	384	74.9
Widow/Widower/Separated	94	18.3
Total	513	100.0

From the above table it can be seen that 6.8% of the respondents are unmarried, 74.9% of the respondents are married and 18.3% of the respondents belong to either the category of widow/widower/separated.

Table 1.5: Family type of the respondents

Family Type	Frequency	Percent
Nuclear	292	56.9
Joint	221	43.1
Total	513	100.0

From the above table it can be inferred that 56.9% of the respondents belong to a nuclear family type and 43.1% of the respondents are from a joint family type.

Table 1.6: Earning members in the family

Earning Members	Frequency	Percent
1.00	230	44.8
2.00	222	43.3
>3	61	11.9
Total	513	100.0

From the above table it can be seen that 44.8% of the respondents have only 1 earning member in their family, 43.3% have at least 2 earning members in their family and 11.9% of the respondents have about 3 or greater than 3 earning members in their family.

Table 1.7: Dependents to the respondent

No. of Dependents	Frequency	Percent
<3	245	47.8
3-4	183	35.7
>4	85	16.6
Total	513	100.0

The above table shows that the 47.8% of the respondents have less than 3 family members dependent on the earning members, 35.7% of the respondents have 3 to 4 family members dependent on the earning members and 16.6% of the respondents have more than 4 members dependent on them.

Table 1.8: Occupation of the respondents

Occupation of the Respondents	Frequency	Percent
Agri and Business	144	28.1
Agri and White collar	23	4.5
Agri and Blue collar	94	18.3

Only Agriculture	252	49.1
Total	513	100.0

The above table shows that the 4.5% of the respondents are involved in agriculture and white collar jobs, 18.3% are involved in agriculture and blue collar jobs, 28.1% of the respondents are involved in agriculture and business and nearly 49.1% are involved only in agriculture for their livelihood.

Table 1.9: Tax assessment status of the respondents

Tax Assessment Status	Frequency	Percent
Yes	65	22.7
No	250	28.7
Exempted	198	38.6
Total	513	100.0

The above table shows that only 22.7% of the respondents are income tax assesses and 28.7% are not assesses and 38.6% of the respondents are exempted from tax.

Table 1.10: Agriculture land area of the respondents

Agriculture Land Size	Frequency	Percent
</=1	37	7.2
1-5	105	20.5
6-10	217	42.3
11-15	118	23.0
>15	36	7.0
Total	513	100.0

From the above table it can be inferred that 7.2% of the respondents have an agriculture land area of less than or equal to 1 acre, 20.5% of the respondents have 1 to 5 acres, 42.3% have 6 to 10 acres, 23 % have 11 to 15 acres and 7% of the respondents have more than 15 acres of agriculture land.

Table 1.11: Annual income of the respondents

Annual Income of the Respondents (in Rupees)	Frequency	Percent
</=1,20,000	1	0.2
1,20,001-1,80,000	76	14.8
1,80,001-2,40,000	86	16.8
2,40,001-3,00,000	140	27.3
>3,00,000	210	40.9
Total	513	100.0

Above table shows that only 0.2% of the respondents have an annual income of less than Rs 1,20,000/-, 14.8% of the respondents have an income between Rs 120000 and Rs 180000, 16.8% have an annual income between Rs 180000 and 240000, 27.3% of the respondents have an annual income between Rs 240000 and Rs 300000 and nearly 40.9% have an annual income of more than Rs 400000.

Table 1.12: Annual savings of the respondents

Annual Savings	Frequency	Percent
</=65,000	73	14.2
60,001-90000	96	18.7
90,001-1,20,000	110	21.4
1,20,001-1,50,000	152	29.6
>1,50,000	82	16.0
Total	513	100.0

The above table shows that 14.2% of the respondents make an annual savings of less than or equal to Rs 65000, 18.7% of the respondents make a savings of between Rs 60001 and Rs 90000, 21.4% make a savings between Rs 90001 and Rs 120000, 29.6% of the respondents make a savings between Rs 120001 and Rs 150000 and 16% of the respondents make a savings of more than Rs 150000.

Table 1.13: Ranking of expenditure for farmers

Expenditure	Mean Rank
Food	1.45

Housing	4.11
Health	4.37
Transport	7.65
Education	7.79
Clothing	7.33
Fun & celebrations	8.13
Durables	9.61
Agri equip maintenance	9.08
Agri land preservation	5.50
Vehicle Maintenance	9.63
Livestock Maintenance	8.84
Crop Maintenance	7.50

The above table shows the expenditure pattern of the farmers by applying the Friedman Non-Parametric test. According to the test the least mean will be given the first rank. The expenditure on food is the highest priority to the farmer with a mean rank of 1.45 followed by expenditure on housing, health, land preservation in second, third and fourth position with a mean rank of 4.11,4.37 and 5.50 respectively. The expenditure on durable commodities is the last priority for the farmer.

Table 2.1: H1. ANOVA test results for comparing the demographic variables of the farmers and Awareness about Investment Avenues.

		Age	Gender	Edu	Occ.	Income
		Sig.	Sig.	Sig.	Sig.	Sig.
Aware-Livestock	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-Chit funds	Between Groups	.002	.000	.000	.202	.000
	Within Groups					
	Total					
Aware-POS	Between Groups	.000	.000	.002	.509	.000
	Within Groups					
	Total					
Aware-Coop Pigmi	Between Groups	.000	.001	.000	.000	.000
	Within Groups					
	Total					
Aware-Bank deposits	Between Groups	.000	.000	.000	.069	.000
	Within Groups					
	Total					
Aware-Com deposits	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-Insurance	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-PF	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-Real Estate	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					

Aware-Precious Metals	Between Groups	.005	.000	.000	.003	.000
	Within Groups					
	Total					
Aware-Govt Bonds	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-Debentures	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-IPO	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-Sec Market	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Aware-MF	Between Groups	.000	.000		.000	.000
	Within Groups					
	Total					
Aware-Derivatives	Between Groups	.000	.000		.000	.000
	Within Groups					
	Total					

From the above table it can be inferred that the age of the respondents influences their level of awareness towards the various investment options such as investments in livestock, chit funds, post office savings schemes, cooperative societies, bank deposits, company deposits, insurance, PF, real estate, precious metals, government bonds, debentures, IPO, secondary market, mutual fund and derivatives. There seems to be significant relationship between age and all the investment options with a p value = 0.000 < 0.05 at 5 % level of significance and an F value of 13.13, 66.94, 47.00, 7.08, 53.19, 40.80, 57.77, 31.32, 66.40, 9.21, 150.93, 53.15, 66.40, 9.21, 150.93, 53.15, 39.2, 45.98, 37.97, 53.8 respectively. Age has greater influence on the awareness of the respondents towards investments in governments bonds with a F value of 150.93.

From the above table it can be inferred that the Gender of the respondents influences their level of awareness towards the various investment options such as investments in livestock, chit funds, post office savings schemes, cooperative societies, bank deposits, company deposits, insurance, PF, real estate, precious metals, government bonds, debentures, IPO, secondary market, mutual fund and derivatives. There seems to be significant relationship between age and all the investment options with a p value = 0.000 < 0.05 at 5 % level of significance and an F value of 13.13, 66.94, 47.00, 7.08, 53.19, 40.80, 57.77, 31.32, 66.40, 9.21, 150.93, 53.15, 66.40, 9.21, 150.93, 53.15, 39.2, 45.98, 37.97, 53.8 respectively. Gender has greater influence on the awareness of the respondents towards investments in governments bonds with a F value of 150.93.From the above table it can be inferred that the education level of the respondents influences their level of awareness towards the various investment options such as investments in livestock, chit funds, post office savings schemes, cooperative societies, bank deposits, company deposits, insurance, PF, real estate, precious metals, government bonds, debentures, IPO, secondary market, mutual fund and derivatives. There seems to be significant relationship between age and all the investment options with a p value = 0.000 < 0.05 at 5 % level of significance and an F value of 31.17, 16.6, 4.44, 5.30, 20.90, 72.99, 45.40, 106.56, 42.48, 26.43, 56.87, 112.065, 85.48, 70.38, 70.96, 83.89 respectively. Education level has greater influence on the awareness of the respondents towards investments in Debentures with a F value of 112.065.

From the above table it can be inferred that there is significant influence of social status of the respondents and their awareness towards the various investment options like livestock, cooperative societies, company deposits, insurance, PF, real estate, precious metals, government bonds, debentures, IPO, secondary market, mutual fund and derivatives with a p value of less 0.05 at 5 % level of significance. There is no significant relationship between social status and awareness of investment options such as chit funds, post office savings, bank deposits with a p value of 0.20, 0.50, 0.069 respectively. From the above table it can be inferred that there is significant influence between the occupation of the farmers and their awareness towards the various investment options like livestock, chit funds, post office savings schemes, cooperative societies, bank deposits, company deposits, insurance, PF, real estate, precious metals, government bonds, debentures, IPO, secondary

market, mutual fund and derivatives with a p value of less 0.05 at 5 % level of significance. The F value is the highest on Government bonds with 99.21.

Table 2.2: H2. Anova Test Results for Comparing the Demographic Variables of the Farmers and Influence on Investment Decision

		Age	Gender	Edu	Occ.	Income
		Sig	Sig.	Sig.	Sig.	Sig.
Influ_Fam	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Influ_Spouse	Between Groups	.000	.035	.000	.000	.000
	Within Groups					
	Total					
Influ_Fri	Between Groups	.000	.000	.000	.000	.001
	Within Groups					
	Total					
Influ_Emedia	Between Groups	.000	.001	.000	.000	.000
	Within Groups					
	Total					
Influ_Pmedia	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Influ_Aprgs	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Influ_Lead	Between Groups	.000	.128	.000	.000	.000
	Within Groups					
	Total					
Influ_FC	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					

From the above table it can be inferred that the age of the respondents influences the modes to take investment decision such as family members, spouse, friends, electronic media, print media, awareness programmes, opinion leaders, financial consultants. The p value for all the modes for investment decision is 0.000 < 0.05. Therefore we conclude that there is relationship. The F value is the highest for family with 103.6. Therefore we can conclude that all age groups have consultation with family members for decision making.

From the above table it can be inferred that the gender of the respondents influences the modes to take investment decision such as family members, spouse, friends, electronic media, print media, awareness programmes, and financial consultants. The p value for all the modes for investment decision is less than 0.05. Therefore we conclude that there is relationship. The F value is the highest for financial consultant with 207.7. There is no relationship between gender and opinion leader as a mode to take investment decision, since p=0.128>0.05. From the above table it can be inferred that the educational qualification of the respondents influences the modes to take investment decision such as family members, spouse, friends, electronic media, print media, awareness programmes, opinion leaders, financial consultants. The p value for all the modes for investment decision is 0.000 < 0.05. Therefore we conclude that there is relationship. The F value is the highest for opinion leaders and electronic media with 161.07 and 144.9 clearly indicating that educated respondents consult experts and opinions on electronic media for taking investment decisions. From the above table it can be inferred that the social status of the respondents influences the modes to take investment decision such as family members, spouse, friends, electronic media, print media, awareness programmes, opinion leaders, financial consultants. The p value for all the modes for investment decision is 0.000 < 0.05. Therefore we conclude that there is relationship. The F value is the highest for opinion of spouse and electronic media with 651.3 and 104.2 clearly indicating that social status of the respondents are influences by spouses on investment decisions. From the above table it can be inferred that the occupation of the respondents influences the modes to take investment

decision such as family members, spouse, friends, electronic media, print media, awareness programmes, opinion leaders, financial consultants. The p value for all the modes for investment decision is 0.000 < 0.05. Therefore we conclude that there is relationship. The F value is the highest for financial consultants with 59.3 clearly indicating that the respondent consults financial consultants for taking investment decisions. From the above table it can be inferred that the Tax assessment and planning of the respondents influences the modes to take investment decision such as family members, spouse, friends, electronic media, print media, awareness programmes, opinion leaders, financial consultants. The p value for all the modes for investment decision is 0.000 < 0.05. Therefore we conclude that there is relationship. The F value is the highest for financial consultants with 57.4 clearly indicating that respondent falling under the tax bracket seek the help of financial consultants.

Table 2.3: H3. Anova Test Results for Comparing the Demographic Variables of the Farmers and Constraints of Savings

ANOVA						
		Age	Gender	Edu	Occ.	Income
		Sig.	Sig.	Sig.	Sig.	Sig.
Cons_Ininc	Between Groups	.000	.648	.000	.000	.000
	Within Groups					
	Total					
Cons_Fneeds	Between Groups	.000	.946	.000	.000	.000
	Within Groups					
	Total					
Cons_RCL	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_LoA	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_LoI	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_SAO	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_PC	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_USA	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_LoT	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_IFFI	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_IPP	Between Groups	.000	.000	.000	.000	.000
	Within Groups					
	Total					
Cons_TM	Between Groups	.000	.000	.000	.000	.000

	Within Groups					
	Total					

The above table shows that the age of the respondents influences the constraints of savings such as inadequate income, numerous family needs, risk of capital loss, lack of awareness, lack of information, seasonality of agricultural operations, procedural complexities, unusable savings avenues, lack of trust about investment avenues, insufficient formal financial institutions, instability of prices for the produce, traditional mind set. All the constraints show a p value = 0.000 < 0.05 at 5% level of significance. Traditional mind set of the respondents happens to be a major barrier with a high F value of 137.68.

The above table shows that the gender of the respondents influences the constraints of savings such as inadequate income, numerous family needs, risk of capital loss, lack of awareness, lack of information, seasonality of agricultural operations, procedural complexities, unusable savings avenues, lack of trust about investment avenues, insufficient formal financial institutions, instability of prices for the produce, traditional mind set. All the constrains show a p value = 0.000 < 0.05 at 5% level of significance. But it does not influence saving constraints such as inadequate income and numerous family needs with a p=0.64 and 0.94 respectively which is greater than 0.05.

The above table shows that the educational qualification of the respondents influences the constraints of savings such as inadequate income, numerous family needs, risk of capital loss, lack of awareness, lack of information, seasonality of agricultural operations, procedural complexities, unusable savings avenues, lack of trust about investment avenues, insufficient formal financial institutions, instability of prices for the produce, traditional mind set. All the constraints show a p value = 0.000 < 0.05 at 5% level of significance. Lack of information on the part of the respondents happens to be a major barrier with a high F value of 208.

The above table shows that the occupation of the respondents influences the constraints of savings such as inadequate income, numerous family needs, risk of capital loss, lack of awareness, lack of information, seasonality of agricultural operations, procedural complexities, unusable savings avenues, lack of trust about investment avenues, insufficient formal financial institutions, instability of prices for the produce, traditional mind set. All the constrains show a p value = 0.000 < 0.05 at 5% level of significance. Traditional mindset has the greatest influence with F value = 106.53.

The above table shows that the annual income of the respondents influences the constraints of savings such as inadequate income, numerous family needs, risk of capital loss, lack of awareness, lack of information, seasonality of agricultural operations, procedural complexities, unusable savings avenues, lack of trust about investment avenues, insufficient formal financial institutions, instability of prices for the produce, traditional mind set. All the constrains show a p value = 0.000 < 0.05 at 5% level of significance. Lack of information on the part of the respondents happens to be a major barrier with a high F value of 177.3.

Table 3.1: Ranks of Investment Avenues Preferred by the Farmers in Future

Ranks	
Investment Avenues	**Mean Rank**
Livestock	1.1
Chit funds	1.33
Post Office savings	2.11
PIGMI of Cooperative	5.97
Bank Deposits	1.94
Company deposits	7.92
Insurance	7.34
Provident Fund	7.32
Real estate	3.96
Precious metals	4.1
Government bonds	9
Debentures	10.23
IPO	12.75
Secondary Markets	12.43
Mutual funds	12.28
Derivatives	16.85

From the Friedman Rank Test be inferred that the livestock as the first option for investment having a least mean score of 1.1, followed by chit funds having a mean score of 1.33. The third and fourth option for

investment goes to bank deposits and post office savings with a mean score of 1.94 and 2.11 respectively. IPO, Secondary market, Mutual funds and Derivatives are considered to be the last option for investments having a mean score of 12.75, 12.43, 12.28 and 16.85 respectively.

Findings and Suggestions:

- ✓ The 30.1 percent of the farmers fall in the age group of 46-55 and 28.3 percent of the respondents fall in the age group of above 55 and followed by 25 percent of the respondents fall in the age group of above 36-45. Only a few percent of the respondents fall in the age group of less than 25. It's clearly found that the young people are not much interested in agricultural.
- ✓ Amongst the respondents included in the study that 63.9 percent of them are male and 36.1 percent of the respondents are female. It's clearly shows that the female involvement in agricultural is very less as compared to male.
- ✓ The majority of the respondents (31.4%) have an education qualification of less than schooling. 29.2 percent of the respondents have an education level of higher secondary. Only a minimum percent of the respondents are graduates and post graduate. It is shows that the education level of farmers is poor.
- ✓ Among the respondents included in the study, 79.4 percent of them are married and only a few percent of the respondents are unmarried, it shows that the people who are involved in agricultural are married.
- ✓ 56.9 percent of the respondents are living in nuclear family system and 43.1 percent of the farmers are living in joint family pattern. Its shows that the farmers are living together with their family members. The 44.8 percent of the farmer's family have only one member earnings and 43.3 percent of the farmers have two members family. It shows that the only one or two members are working in the farmer's family. Majority of the respondents have 3 dependents in their family followed by 3-4 dependent.
- ✓ The 38.6 percent of the respondent income exempted from tax and 28.7 percent of the respondents are not paying any tax to the government, only a few percent of the respondent are paying tax to the government. It shows that the earnings of the farmers is very less.
- ✓ 42.3 percent of the respondents own 6-10 acres of agricultural land and 23 percent of the respondents own about 11-15 acres of agricultural land. It found that the respondents have sufficient land for agricultural but the income derived from agriculture is insufficient.
- ✓ The 40.9 percent of the respondent have an annual income of more than Rs.3,00,000, and 27.3 percent of the respondent have an annual income of around Rs.2,40,000- Rs.3,00,000. It found that the income for the farmers is not so high.
- ✓ Majority of the respondents are spending their money for food and Housing and followed by health. It shows that the majority of the respondents are spending their money for their day to day life survival.
- ✓ According to one way ANOVA that there is a significant relationship between the demographic variables of the farmers such as age, gender, educational qualification, occupation and income level and awareness of investment avenues, factors influencing the investment decisions and future investment. It is shows that the farmer's demographic variables play a vital role in determining the investment behavior of the farmers.
- ✓ Though investment decisions of the respondents are influenced by their family members, spouse, friends, electronic media, print media, awareness programmes, opinion leaders and financial consultants irrespective of their age and gender; the study reveals that educated respondents consult experts and consider the opinions on electronic media for taking investment decisions whereas the respondents falling under the tax brackets seek the help of financial consultants.
- ✓ Farmers face many constraints in savings like insufficient income, numerous family needs, risk of capital loss, lack of awareness, lack of information, seasonality of agricultural operations, procedural complexities, unusable savings avenues, lack of trust about investment avenues, insufficient formal financial institutions, instability of prices for the produce, traditional mind set irrespective of their respective demographic variables. Traditional mindset of the farmers and lack of information happens to be the major constraints which deter their savings and investment.
- ✓ The rank correlation demonstrates that the farmers prefer investing more on chit funds, followed by livestock's, bank deposits and post office savings respectively. It is clearly indicated that the farmers prefer risk free investment avenues.

Implications for Practitioners:

The study has several important implications for practitioners

- ✓ Results show that the demographic variables influence of the farmer's influence their investment decisions significantly. In practice, most of the literature indicates that the demographic variable of the farmers plays a vital role for investment in the various investment avenues. Therefore the financial service providers and financial institutions can look into these variables in order to have a better understanding about the investment pattern of the farmers and guide them accordingly which would be mutually beneficial.

- ✓ The governments (central and state) and the policy makers, on having a magnificent understanding about the savings and investment of farmers through this study could design financial instruments to attract the farmers' savings which will lead to industrialization and result in the economic prosperity of India.
- ✓ As the agricultural income is unstable and subject to wide fluctuations because of various reasons like monsoons, prices fluctuations, demand variations, etc farmers who hold higher saving inclinations are forced to save as a precautionary measure. The study is a kind of eye opener for the financial product designers to design and introduce more customized financial instruments. The findings of this study would throw light on facts which can be used by marketers of financial products and services for getting a strong foothold in the present competitive era.
- ✓ The study indicates that the avenues like bank deposits, post office savings, insurance policies, provident funds, government bonds and PIGMI of cooperatives are habitually preferred to IPOs, secondary market instruments, mutual funds, ULIPs and derivatives. Such a kind of inclination will impede the economic development of the country until these savings get transferred into the financial markets leading to industrialization. It is time for the government and financial institutions to undertake financial literacy campaigns to enable farmers in making pertinent investment decisions.

Scope for Further Research:

The limitations mentioned above lead us to the possibility of better research in future studies.

- ✓ Blue collar employees of the unorganized sector such as construction, street vendor can also be included in the study to know their respective awareness levels and investment patterns in Tamil Nadu.
- ✓ Behavioral economists recognize that individuals are usually subject to emotional decision making and short-term thinking. Saving and spending are not constant decisions, they keep changing. There are several factors which cause modification in the decisions such as increase in income levels, demographic changes, variations in utility derived from spending and savings, commitments, attitude, differences in circumstances, mid-course corrections in the perceptions held on investment avenues, changes in awareness levels, etc. Brain chemistry plays a gargantuan role in spending and saving decisions. Thus it becomes essential to resume studies about the savings and investment patterns of all the segments of populous regularly.
- ✓ Future research can be conducted by categorizing the farmers based on technological awareness and its applications. This will be helpful to all farmers and also to those into the financial sector to know about the impact of technology on their respective areas.
- ✓ The study used only first order constructs. Second order constructs can be used if bootstrapping feature is added into Visual PLS software package.
- ✓ Individual sub-constructs can also be analyzed for their impact on investment decisions of farmers.

Conclusion:

Savings is one the best habits of a prudent man. Wealth creation in the society becomes possible only by the people who are able to spend less and save more. Savings and investment pattern of the people not only decides their fortune, but also that of the nation. Though harvesting periods present the farmers the potential to save they don't do so because of the lower financial literacy levels and financial management skills. This research analyzed the income, spending, savings and investment pattern of farmers in relation to their respective demographic variables like age, gender, qualification, occupation, income level, family pattern, number of dependants, etc. and their awareness towards various investment avenues. The results of the study signify that farmer's demographic variables play a vital role in determining the investment behavior of the farmers. The study indicates that the farmers prefer investing in livestock, bank deposits, post office savings, insurance policies, provident funds, government bonds and PIGMI of cooperatives than in IPOs, secondary market instruments, mutual funds, ULIPs and derivatives. The study also revealed that the traditional mindset of the farmers and lack of information happens to be the major constraints faced by the farmers which deter their savings and investment. And this serves as an indication for the government and financial institutions to undertake financial literacy campaigns to enable farmers in making pertinent investment decisions. The research would be helpful for the investors to understand the impact of the demographic variables on their investment decisions and also would serve as an eye opener for the financial service institutions and firms to device appropriate strategies so that all the investment avenues have an effectual reach.

References:

1. Bhardwaj Dr. Bhawana, Sharma Dr. Nisha, Sharma Dr. Dipanker (2013)," Income, Saving and investment pattern of employees" of Bahra University, Solan. International Journal of Management & Business Study. Vol. (3), Pp. 137-141.
2. Deepak Sood and Dr. Navdeep Kaur (2015), "a study of saving and investment pattern of salaried class people with special reference to Chandigarh (India)", International Journal Of Advanced Research, Vol.3 (4), Pp.487-501.

3. Dhiraj Jains, Nakul Dashora, (2012), a study on impact of market movements on investment decision "an empirical analysis with respect to investors in udaipur, rajasthan" International Refereed Research Journal, Vol.3 (2), Pp. 78-89.
4. Giridhari Mohanta & Dr. Sathya Swaroop Debasish (2011) "A Study on Investment Preferences among Urban Investors in Orissa" Prerna Journal of Management Thought and Practice, ISSN: 0974-908X volume: 3 Issue: 1 March 2011, pp 1-9
5. Haiyang Chen and Ronald P. Volpe, (1998), "An Analysis of Personal Financial Literacy among College Students" Financial Services Review, 1998, vol. 7, issue 2, 107-128.
6. Lalit Mohan Kathuria and Kanika Singhania (2012)," Investment Decision Making: A Gender-Based Study of Private Sector Bank Employees" Vol.5 Pp. 34-42.
7. Ms.Smita Pandey, Mr. Narendra K. Sharma, and Mr. Ashok K. Mittal (2013), "young investors with different risk aversion attitude across financial knowledge levels", International Journal of Trade, Economics and Finance, Vol 11, Pp. 45-67.
8. Mrs. L.Nithya, Dr. Mrs. S. Suma Devi." 2014. Saving and Investment Pattern of Retired Households", Indian Journal of Applied Research, Vol.4 (5), Pp.123-136.
9. Dr. Odoemenem, I.U., Ezihe, J.A.C. & Akerele, S.O (2013), "Saving and Investment Pattern of Small-Scale Farmers of Benue State, Nigeria", Global Journal of HUMAN SOCIAL SCIENCE Sociology & Culture, Vol. 13(1), Pp.1-10.
10. Puneet Bhushan (2014), "Relationship between Financial Literacy and Investment Behaviour of Salaried Individuals", Blue ocean research journals, Vol.3 (5), Pp. 86-95.
11. Rich Pelrine and Olive Kabatalya, (2005), "savings habits, needs and. priorities in rural. uganda', review by the United States Agency for International Development.
12. Suyam Praba R (2011), "Investors' Decision Making Process and Pattern of Investments- A Study of Individual Investors in Coimbatore", SIES Journal of Management,Vol.7 (1), Pp.1-12.
13. Samudra, D. A. and Burgate, D. M. (2012). A study on Investment Behavior of Middle Class Households in Nagpur. International Journal of Social Science &Interdisciplinary Research, 1(5), 43-54. Retrieved from http://www.indianresearchjournals.com/pdf/IJSSIR/2012/May/7_IJS_MAY2012. Pdf.
14. Thulasipriya B (2015), A Study on the Investment Preference of Government Employees on Various Investment Avenues, International Journal of Management Research and Social Science, Vol.2 (1), Pp.9-16.
15. Ujwala Bairagi and Charu Rastogi, (2013). "An Empirical Study of Saving Pattern and Investment Preferences of Individual Household with Reference to Pune City". ASM"s International e-Journal of ongoing Research in Management and IT. Incon13-Fin-042
16. Dr.Shanmugapriya.S & Veerakumar.K, (2014) "Determinants of Investment decision on Online Commodities" Acme International Journal of Multidisciplinary Research, Vol-II, Issue-IX, September-2014.P.No.39-45
17. Vikkraman,P., and John Sasi Kumar, K.C.(2010) "Investors Preference on Financial Services", Global Business and Management Research (GBMR)"Vol.2, No.2&3, Pp.253-274.
18. Vrushali Shah, Priyanka Zanwar, and Pratibha Deshmukh (2011), "Information Technology Professional investment Preferences and Selection of investment options. Research Journal of social science and Management, Vol.6 (3), Pp. 165-172.
19. Warren, W. C., Robert, E. S., William, C. M. (1996) "Using Demographic and the Life Style Analysis to Segment Individual Investorsǁ". Financ. Anal 20: Pp.74-77.