# Influence of Demographics on Saving Behavior: A case in Jaffna District

Kamalakumari Karunaanithy1 \*and S.Santhirasekaram2,

<sup>1</sup>.Senior Lecturer, Department of Economics, University of Jaffna; <sup>2</sup>.Senior Lecturer, Department of Economics, University of Jaffna kamal11267@univ.jfn.ac.lk

Abstract - Household saving is a crucial determinant of welfare as it has a smoothening effect on unforeseen fluctuations in income. Though, many factors can shape up the saving behavior, this study mainly focuses on demographic factors, with the aim to delineate their effect on household savings. A questionnaire method was used to collect data from 500 households under a survey method. With the objective of finding out the association of Age, Sex, Region, Education, Family Size, Marital Status, Family Type, Job Categories, Type of Village, Religion, Age At Marriage, House owner ship, Number of Earners, Number of Non-Earners on savings, this study applied One way ANOVA (F test) for Earner and Non- Earner variables and non - parametric tests such as Kruskal-Wallis Test and Jonkheere- Terpstra Test for the others as they showed non-linearity which calls for non- parametric tests. The test results revealed that the mean household Savings does significantly differ across different Regions of the Jaffna District, Level of Education of the Head, Job categories of the Head, Type of Village, Religion, Age at Marriage, Number of Earners, and Number of Non-Earners. Meanwhile, savings does not differ significantly across Age, Sex, Family size, marital status, and Family type. Hence null hypotheses were accepted for these variables that there were no apparent differences in saving across these five variables. Since saving is a tool for development Initiatives, these findings would be of policy significance to Jaffna District while formulating policies to improve personal saving behavior or to develop product and policies to promote regular savings.

Key Words - Demographic variables, Household savings, Mean Difference

## I. INTRODUCTION

In the development strategies of countries, income inequalities have been a focus theme. The World Bank announcement of Sustainable Development Goals in 2016 [1] is also in favour of eradicating poverty and thereby enhancing income. Enhancement of future income earning possibilities, necessarily improve saving of households. Saving can facilitate the households to achieve their financial goals and reduce the risks in facing financial emergencies, when the resources are inadequate. Saving can also play a crucial role in case of individuals, and it can also contribute to regional as well as countries development.

There are different definitions for saving in literature. Some consider saving as a residual or changes in the net worth of an individual in a given period of time; in other words, the leftover after a consumption decision [2] based on income approach. The others define saving as a fundamental dynamic phenomenon. According to them households deliberately save in order to consume later on [3], which is named as discretionary saving by Katona [4]. In addition, saving is defined as will power and foresight by [5], while Thaler [6], postulated it as a result of self– controlling strategy.

Like the diversity in definitions, the variables that affect savings are many. Starting from demographic variables, it could embrace economic, sociological, political and psychological factors. The calculation, explanation and the analysis of the saving behavior vary depending on the factors in usage and the methods, which can be cross sectional or time series. This study focuses only on the demographic factors and their association with the saving behavior by using cross sectional data. Since most of the economic arguments begin with Economic man, knowing differences in saving at household level would be of practical and theoretical importance.

Above all, the motivation behind this study is the concern for the Jaffna society, in which the economic environment is challenging and the standard of living of the households is undergoing many changes. The so called 'debt crisis', occurrences of suicides, prompted to take up this research and to know more about how people adapt to these changes. It is expected that findings of this research could help to broaden the understanding of the policy makers, financial institutions and other stakeholders, about the complexities in this under researched area of saving behavior.

#### 1. Research Question:

Does the total saving of households remain the same or vary across demographic variables in the Jaffna District?

## 2. Objectives:

As it is intended to find tentative answers to the above research question, this study formulated the following objectives.

- To explore the level of the demographic variables and their association with total saving
- To compare the mean differences of the demographic variables in the sample households.
- To suggest possible recommendation to improve savings based on these findings.

#### **II. LITERATURE**

As it is important to reflect upon the previous research regarding the saving behavior, this section is allocated for the theoretical underpinning related to demographic variables and saving behavior.

Beginning with Keynesian Absolute Income Hypothesis, the Permanent Income Hypothesis [7] and the Life – Cycle Hypothesis [8], explained consumption behavior, and thereby the saving behavior. The Life – Cycle theory gave more importance for age structure, as it explains how people save for their retirement. According to Life - Cycle theorists, saving rates differ because of the age difference and various stages of Life [9]. In addition to the population dynamics, such as birth rates, dependency ratio, age groups, another set of variables namely, the financial variables - interest rate and rate of inflation - are also widely used in Literature [10]. Besides, behavioural economic theorists argue that behavior and activities of individuals can affect saving behavior (11). They emphasized saving related preferences and ambitions are not permanent or fixed, but subject to change [12]. Lusardi [13] opines that the changing nature of human behavior, can lead to irrational decisions related to saving. In addition, Leff [14], studied the influence of demographic variables and found substantial evidences that there can be a strong effect on a country's savings by these variables.

In spite of all these diverse arguments, households are still being used as a unit of analysis in research. Anyhow, due to the emergence of various views and the changes that took place in the households composition and structure, the precise definition of households has changed compared with the traditional view [15] households are no longer viewed as a harmonious unit reaching out for an optimal balance. As per Chen & Dunn [16], households economic portfolio, which comprises of the set of resources, activities and their interaction decides the saving behavior. Because of their importance on the above, the same resources are named as capitals, and included in livelihood approach of saving behavior [17]. These capitals would decide the amount and the rate of saving in the households.

Having examined the important role households can play in accumulation of savings, this study attempts to test the influence of the demographic characteristics of households of Tamils on savings in the Jaffna District. When the saving ratio is still inadequate and the policy measures fail to produce desired results, not only the present generation, the future generation would also be under problems. The Jaffna society which was well known for its thrift and bequeath motive, is facing hardships related to debt and over consumption issues. Since there is no such existing study on the whole district on saving behavior, in the postwar period, where suicides were recorded due to indebtedness, this would fill the gap by looking into the Demographic Characteristics and its relatedness to savings.

#### **III. MATERIALS AND METHODS**

## 1. Dependent variable

For this study, the total annual savings is calculated by the Income minus Expenditure method. That is the total annual income from various sources of the Head was calculated and the total annual expenditure (Food, Non food and other) was deducted from that income. Log transformation was made and adjusted with series means for the missing values.

#### 2. Independent variables

The demographic variables in this study include characteristics of the head of the household and the place in which he or she resides. Heads demographics include age of the head (in years), Sex (Male = 1, Female = 2), Education (in years), Marital Status (1= married, 2= unmarried, 3 = divorced, 4 = Separation), Family size (in numbers), religion (1 = Hindu, 2 = Christian), Age at marriage ( in years), Family type (1= nuclear, 2= Joint), Number of earners ( in numbers), number of non earners ( in numbers), Type of residence (1=village, 2= semi urban, 3 = village), region (1= Islands, 2= Vadamaradchi, 3=Thenmaradchi, 4= Valigamum, 5 Jaffna&Nallur), Job Categories (1= agriculture group, 2= Fishing group, 3= Wage earners, 4= Salary group, 5 = Business group), House ownership (0= none, 1= own, 2= rented)

With an objective to generate information about the relationship between savings and the demographic factors, this study selected 500 households, through a stratified, two stage random sampling method. Wider coverage was ensured as sample households were selected from all the 15 Divisional Secretariat Divisions, thence the representatives of the population was established. The sampling design is given in Table 1.

The number of households, which were in proportion to the actual size of the number of families (population) in each DS division, is shown in Table I. The GS divisions and the households to be interviewed were selected by a lottery method from the GS lists. Then the DS divisions are clustered in to five regions, namely, Islands, Vadamaradchi, Thenmaradchi, Valigamum and Nallur& Jaffna, for the purpose of identifying the regional differences. In addition, among the clusters, five job categories were gleaned out, namely, agriculture group, fishermen, wage earners, salary earners and businessmen. Their number was also proportionate to the job categories in that area. This arrangement enabled the researcher to understand the relationship between total savings and the job categories.The distribution of sample households across different regions and job groups are given in Table II.

	Table i           DETAILS OF THE SAMPLE HOUSEHOLDS (BASED ON STATISTICAL HANDBOOK 2016, JAFFNA KACHERI)															
DS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
HH	1374	5419	3022	3539	17577	21963	15582	14707	16916	12169	22708	22372	14537	14091	5017	190993
Sample	4	14	8	9	46	58	41	39	44	32	59	59	38	37	13	500

According to the Table 2, the highest numbers of households are from Valigamum Region which consists of five DS divisions and the largest of the Jaffna district, whereas the smallest size is from the Islands. As the internal war compelled many people to migrate from these islands in search of green pastures, this kind of poor figure was inevitable. The distribution based on job categories shows that each of the Salary group, Business group and the Wage group are accountable for nearly 1/5 of the sample size. Likewise, agriculture group and the fishing group each account for 17% of sample size. Even though, equal amount of questionnaires were distributed, the response rate of the agriculture and fishing group caused the slight deviation from the other three groups.

The content validity was ensured through the literature reviews, where the variable selection was made through previous researches. The scale reliability was also ensured by a pilot study, which performed like a test – retest method.

 Table ii

 JOB CATEGORY OF HH \* REGIONS CROSS TABULATION

			Islands	Vadamarahchi	Thenmarahchi	Valigamam	Jaffna& Nallur	Total
Job category of HouseHolds	Agriculture group	% of Total	1.2%	3.4%	2.8%	9.0%	1.4%	17.8% (89)
	Fishing group	% of Total	2.2%	4.8%	1.4%	5.6%	3.2%	17.2% (86)
	Wage group	% of Total	1.8%	3.0%	3.4%	9.8%	3.2%	21.2% (106)
	Salary group	% of Total	1.2%	3.2%	2.2%	9.6%	7.6%	23.8% (119)
	Business group	% of Total	1.6%	4.0%	2.2%	7.4%	4.8%	20.0% (100)
Total		Count	40	92	60	207	101	500
% of Total		8.0%	18.4%	12.0%	41.4%	20.2%	100.0%	

Source: Field Survey

## **IV. RESULTS AND DISCUSSION**

1. Back ground information of the Research area.

Fig 1 examines the gender – Age distribution in different regions in Jaffna district to give a population profile. It

is evident from the fig I that 3/5 of Heads in the sample households are falling into the 26- 55 age category. That is they are the active members of the labour force since they are in the productive age category. The Fig. I also reveals that

compared with males there are only 38 female heads in the sample Households and 1/3 of female Heads are concentrated in Valigamum division. The Heads are of Middle age or young and mostly seen in Valigamum, Jaffna & Nallur, and

Vadamaradchi regions. From the Fig I, it can be concluded that the Heads in the sample households are skewed toward middle age cohort and male biased.



Fig 1: Age and Sex Distribution of total members

Another characteristic of the households which widely debated in the literature is the size of the households. According to Table III, the highest members are four in number. According to Leff (18), when size of the households increases it reduces the savings, whereas Snyder (19) established that there was not a significant effect on the saving behavior by the household size. As per Kelly and Williamson (20), the extended family system prevailing in developing countries, complicates the findings of the Life Cycle Hypothesis. Constant per capita income and the strong retirement motive are not always seen in developing countries when the household is not nuclear. Similar pattern is seen in the relationship shown by the number of household and the total savings. It seems, as per the descriptive statistics, when the total number of households increases saving also increases. However, the earning capacity of the member can alter this premise. This can be explained by Tables VIII(a) and (b).

## Table iii Total Members In The Sample Households

Total member category	Frequency	Pecen-tage	Annual average saving (Rs)
$\leq 2$	52	10.4	277100.6
3 - 4	275	55.0	428649.6
5 - 6	151	30.2	452412.7
7-8	22	4.4	506206.8
Total	500	100	423477.5

One of the determinants that have a direct effect on saving behavior is the Earner –Non earner ratio. The causal link between the well - developed capital market and number of children implies that, lower the development of the Capital Market, higher the number of Children in the Family. Because both are perceived as alternative means for maintaining income in old age [23]. Life Cycle theorists also highlighted the dependency ratio as a major determinant of saving rates.

Table IV shows the distribution across region in which the highest earner – non earner ratio is recorded for Vadamaradchi region where on average 2 non earners are seen for a single earner. On the other hand, the earner to total member percentage is high for Thenmaradchi region. When the District average for the number of Earners is 2 for the district, Islands, Valigamam and Jaffna & Nallur Clusters have the average of single earning member in each household.

From the tables that were presented so far, it is clear that there seem to be differences in the study variables in sample households. Therefore, the next section is allocated for analyzing the relationship between the saving of the households and their demographic characteristics statistically.

## 2. Hypotheses

In this study, one general hypothesis and 14 specific hypotheses are tested. Holding other variables constant, the demographic variables are significantly related to total savings is the general hypothesis.

-				-		
District	Details	Islands	Vadamarhch	i Thenmarahchi	Nallur& Jaffna	Total
Total members	2043	185	360	248	840	410
Earners	730	67	106	100	312	145
Non - earners	1313	118	254	148	528	265
Ratio of earners to non- earners	1.79	1.76	2.39	1.48	1.69	1.82
Percentage of earners to total members	35.73	36.21	29.44	40.32	37.14	35.36
Average number of earners in the HH	2	1	2	2	1	1

 Table - iv

 Comparison between Earners and Non - Earners in the Sample Households

Fourteen specific demographic variables were hypothesized to have relationship with savings. Therefore, Null and Alternative Hypotheses were formulated separately for each of the following variables namely, Group (region), Age of Heads, Sex of Heads, Education of Head, Marital Status, Family Size, Family Type, House ownership, Number of Earners & Non-Earners, Job Category, Type of Village, religion and Age at Marriage, to check whether there is a significant mean difference between the variables and total savings.

#### 3. Tests Results:

To understand the mean differences of the variables better, an analysis was performed by the application of Kruskal – Wallis Test. This test is more or less the equivalent of the one way between groups analysis of variance (ANOVA) test. It allows possible difference between two or more groups to be analyzed [20]. Eleven variables of concern shown non-linearity and non- normality from the Kolmogrove-Smirov test statistics. As the test statistics were < 0.05, the assumption for the linear Regression was violated. As such, Non-parametric tests were the appropriate choice in this case.

Table V shows the descriptive statistics obtained from Kruskall - Wallis Test. The average saving of the households stood as Rs.423,477 which was derived by the income - expenditure method. The minimum value for saving is a negative figure as there were 108 dissaving households in the sample.

The average level of education is 11.25 years which can be re- coded as G.C.E. O/L, while the lowest is Grade 2 and the highest is 17 years - which means Degree holders. Average Age of the Heads of the Households was 48 years and resulted from the range of between 18 to 80 years. Even though the head become very old and economically inactive and not considered in the labour force- he is still considered as the "Head" as long as he makes decisions pertaining to household.

	lable v									
Descriptive Statistics										
No	Variables	Mean	Standard deviation	Minimum	Maximum					
1	Education Head	11.25	2.779	2	17					
2	Age of Head	48.03	11.492	18	80					
3	Total Members	4.09	1.243	1	8					
4	Age at Marriage	27.19	5.501	16	40					
5	Number of Earners	1.46	0.716	1	5					
6	Number of Non-earners	2.63	1.272	0	7					

The other variable of importance is the age at marriage, which varies in between 16-40, with the average of 27 years. The statistics confirmed the prevalence of marriages at an early age. According to the Table, the sample households have at-least 2 non earners at their home, but it could be as low as zero, which means no dependents at all. On the other hand, Number of dependents goes up to 7 non – earners in the family. Moreover, nuclear families are of majority and most of the Heads are Hindus. Meanwhile their houses are mostly owned by them and the villages they live have characteristics in between village semi urban.

The next table, clearly show the association of the explanatory variables with the dependent variable – Total saving. The figures given in bold show the direction, magnitude and level of significance of the variables. In parenthesis, the significant level for each coefficient is given. Since most of the variable violated normality and linearity assumption, non-parametric Spearman Rho was the choice instead of Pearson correlation coefficient.

## Table Vi Correlation Matrix – Spearman Rho

	LOG OF TOTAL SAVING	Group No	Total Member	No Earners i	Non Earners	Sex Head	EDUCATION OF HEAD	AGE OF HEAD	Job category of HH	TYPE OF VILLAGE	Religion	Marital Status	Age At Marriage	FAMILY TYPE
Log of Total														
Group (region)	.143**													
	(.001)													
Total Member	.076*	046								1				
	(.045)	(.150)												
No Earners	.301*	.040	.248											
	(.000)	(.187)	(.000)											
Non Earners	095**	068	.838	321										<u> </u>
	(.017)	(.065)	(.000)	(.000)										
Sex Head	025	.031	172	.059	201									<u> </u>
	(.291)	(.247)	(.000)	(.094)	(.000)									
Education of	.105**	.174	158	.092	207	.070								
Head	(.009)	(.000)	(.000)	(.020)	(.000)	(.060)								
Age of Head	.034	039	.139	.150	.051	017	251							
	(.222)	(.190)	(.001)	(.000)	(.125)	(.351)	(.000)							
Job category of	.158*	.111	130	.028	143	.081	.349	052						
HH	(.000)	(.007)	(.002)	(.267)	(.001)	(.035)	(.000)	(.123)						
Type of Village	.156*	.342	041	.063	076	060	.211	.093	.177					
	(.000)	(.000)	(.182)	(.078)	(.046)	(.091)	(.000)	(.019)	(.000)					
Religion	.016	.142	.037	.003	.035	079	.013	051	086	.264				
	(.358)	(.001)	(.203)	(.474)	(.219)	(.039)	(.384)	(.128)	(.027)	(.000)				
Marital Status	055	.026	126	044	099	.036	.072	188	.003	058	022			
	(.110)	(.281)	(.002)	(.163)	(.014)	(.213)	(.053)	(.000)	(.475)	(.099)	(.309)			
Age At Marriage	.111**	058	031	.021	042	051	.048	.193	.008	029	133	246		
	(.006)	(.099)	(.248)	(.321)	(.176)	(.126)	(.141)	(.000)	(.427)	(.257)	(.001)	(.000)		
Family Type	.069	017	.262	.073	.215	027	.008	127	.028	.033	025	083	.060	
	(.061)	(.356)	(.000)	(.051)	(.000)	(.275)	(.431)	(.002)	(.268)	(.230)	(.286)	(.032)	(.090)	
House	.094*	.070	022.	107*	.038	.032	.004	-145*	.053	.009	004	.061	080	.061
Ownership	(0.036)	(.002)	(625)	.017	.396	.470	.927	.001	.238	.844	.928	.175	.072	.173

\*\*. Correlation is significant at the 0.01 level (2-tailed).\*. Correlation is significant at the 0.05 level (2-tailed).

Saving is positively related with demographic variables except non earners, which has a negative association. Of all the variables, number of earners in the family has the strong, positive association between saving. This is attributable to the strong positive relationship of the income and the saving which is already established theoretically and empirically starting from Keynes. Even though the exact form of saving-income relationship is not clear, current income is found to be statistically significant determinant in previous studies. Hence, the number of earners in a family has crucial implication on savings

Table VII shows the relevant inferential statistics for the study variables. As stated above, the Kruskall – Wallis Test and the Jonkheere-Terpstra test, both are the non - parametric tests were carried out in the case of the variables which have

shown non linearity. The Kruskall - Wallis test uses Chi -Square, Degree of freedom and the Asymptotic Significance level to find the mean difference between saving and the study variable, whereas, the Jonkheere-Terpstra test uses standard J-T statistics to confirm the acceptance or rejection of hypotheses. Out of the 12 variables which were tested, five variables namely, Age of the heads, Sex of the heads, Family size, Family type and marital status recorded insignificant mean differences with the Dependent variable Total saving. No significant mean differences were apparent in these variables indicating that saving doesn't differ significantly across these variables. The results reveal that differences are evident in the remaining nine variables with respect to saving. Acceptance of alternative hypotheses means, that the nine variables are more likely to have an impact on the saving rather than the rejected ones.

Two of the study variables namely, Number of Earners and Non - Earners in the households, have shown linearity, ( Kolmogrove - Smirov test and Shapiro – Wilk test statistics were above p>0.05level, means linearity), one way ANOVA (F test) was carried out. The results are shown below:

## Table Vii

#### Inferential Statistics Of Non Parametric Tests

No.	Grouping Variable	Kr	Kruskal-Wallis			re-Terpstra	Decision
		Chi-Square	Df	Sig	J – TStat.	Sig	Но
1.	Group (region)	14.401	4	0.006	2.381	0.017	Rejected
2.	Sex Head	1.870	1	0.175	-1.367	0.172	Accepted
3.	Education of Head	31.130	14	0.005	4.765	0.000	Rejected
4.	Age of Head	55.674	54	0.412	-0.205	0.838	Accepted
5.	Job Category	53.588	4	0.000	4.759	0.000	Rejected
6.	Total Members	8.409	7	0.493	0.489	0.625	Accepted
7.	Type of Village	32.395	2	0.000	5.629	0.000	Rejected
8.	Religion	3.917	1	0.048	1.979	0.048	Rejected
9.	Marital Status	0.838	2	0.658	0.177	0.859	Accepted
10.	Age at Marriage	46.058	22	0.002	1.890	.050	Rejected
11.	Family Type	2.129	1	0.145	1.459	0.145	Accepted
12.	House ownership	8.823	1	.003	-2.970	0.003	Rejected

#### Table Viii (A)

Results Of F- Test Total Savings Vs Number Of Non Earners

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	62.543	7	8.935	2.999	.004
Within Groups	1465.537	492	2.979		
Total	1528.080	499			

#### Table Viii(B)

Results Of F- Test Total Savings Vs Number Of Earners

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	126.785	4	31.696	11.197	.000
Within Groups	1401.295	495	2.831		
Total	1528.080	499			

g is an income effect; as the marginal propensity to consume is said to be an increasing function of income, as such saving tends to decrease at higher income levels due to more number of earners and more volume of consumption than before. Synder (1971) also supported that household assets have a significant negative effect on household savings as higher income leads to higher asset holdings and thereby lower savings.

The mean difference between saving and nonearning members is shown in figure 3, where mean saving is decreasing gradually, till it reaches the fourth member, then increases slightly with the 5th and 6th non - earning members. The reason could be the presence of joint families.

As stated above, moving beyond the average size of the households, which is four in number, fall into the extended family system. Therefore, presence of more earning members is also possible in these households, which could propel the saving to increase slightly for the fifth and sixth members. On the other side, the age structure of Sri Lanka doesn't deny the presence of elderly persons in the households. When there are elderly or very young dependents in the household, it leads to a downfall in the saving.



Fig. 2 Saving Vs Number of earners

Therefore, considering the above, it could be summed up that the Kruskal Wallis test, the Jonkheere – Terpstra test

and the ANOVA tests proved that there are variations in the Demographic determinants of saving behavior.

As the number of earners seems to be of the most important variable, it is regressed against total savings and the equation and the scatter plot is given below:

Log total saving = 4.098 + 0.576 Number of earners (0.804) (0.000)

According to the Equation, if earning member increases by one member, saving would increase by log 0.576 units. Contribution by the earning members to household saving is statistically significant at 1% level.



Fig. 4 Total saving Vs Earners



Fig. 3 Saving Vs Non-Earners

Total members in a households consists of earning members as well as non earning members. As non earning members consume more than they produce, household saving tend to decline. Higher the non earning members, the lower the household savings is shown by the figure 6.



Fig. 5 Total saving Vs Non Earners

The following equation shows the contribution of the non earners to total saving.

Logtotsaving = 5.482 - 0.150 Non earners

Hence, if number of non earners increase by one, that would reduce the saving by 0.15 units.

## V. CONCLUSION

In sum, the theoretical demographic determinants of saving behavior, which was discussed in the literature, play a role in the households in the Jaffna District. However, certain of these determinants didn't reveal statistically significant mean difference with the savings as per the results obtained, namely, Age of head, Sex of head, marital status, total members and the Family type. It is evident that nine variables out of 14, namely, Group (region), Education, Job categories, Type of village, house ownership, religion, Age at marriage, Number of Earners and Non- Earners revealed significant mean difference between them and saving of the households.

As the theory says saving behavior could be influenced by a range of other variables, such as economic, social, and psychological variables, a comprehensive analysis is needed. Anyhow, the analysis of those variables is not within the purview of this research, since it is limited within demographic variables only.

The findings related to Age variable or Sex variable in this study were not in line with Attanasio [25] who found significant association with Savings, but in line with Nygus and Webly [26]. The mechanism may be the combined effect of other economic variables or rather psychological variables which call for further research

Total members of the family work in both ways as it include Earners as well as non earning members. Even though, total member variable fail to be significant, the earner non earner variables register significant contribution to saving.

Type of Family also registered insignificant association between themselves and saving, which are in support of Hefforan [25]. As explained by Weiss et al [26], marital status didn't register any significant association with saving in this study.

Education and Job categories of heads found to be significantly associated with Saving as found by Hefforan [27). As Jaffna society is traditionally known to give importance to these variables, and try to raise income through these sources, it is quite natural to obtain such results. Michel [28] suggested, education and occupation determine a family's economic and social position relative to others through higher income and savings.

The premise that Non earners have a significant negative effect on saving was partially supported by the study of Michel [29]. He confirmed when dependency ratio decreases, higher savings rates are considered as substitute for the benefits expected from children. This assures the influence of the changing population structure in the Jaffna district. Due to War and migration households have had to save in order to look after themselves during retirement.

The location differences and the Urban – Rural disparities also proved to be significant in the study. This conclusion suggests that there are variables specific to location, such as culture or in other words, there could be constraints which may lead to difference in savings. Access to financial institutions, extent of consumer culture, reference groups, and female labour force participation can be dissimilar between urban – rural sectors.

To sum up, the nine demographic variables, which show significant associations with savings are not independent, but can have inter- linkages. Therefore, a comprehensive approach is needed coupled with other variables of concern. To improve personal savings, which is a dire need of the Northern region of the country, consideration of the findings would immensely help.

#### References

- 1. State of the Economy, 2017, IPS publication, Sri Lanka
- Beverly et al (2008), Determinants of Assets Build-ings, A report in the Series, Poor Finances: Assets and Low income Households, Centre for Social De-velopment, Washington University, St Louis, U.S.A.
- Attanasio,O and Banks,J.(1998). Trends in house-hold saving: don't justify tax incentives to boost savings Economic Policy, 27, 549-583.
- 4. Katona G. (1980), Essays on Behavioural Econom-ics Ann Arbor, M1: Institute for Social Research, University of Michican.
- Fisher.P.J and Anong.S.T, (2012), Relationship of Saving Motives to Saving Habits, Journal of Finan-cial Counselling and Planning, Vol.23, Issue 1.
- Thaler,R.H.,and Benartzi.S,(2004)'Save more to-morrow: Using Behavioural Economics to Increase Employee Savings', Journal of Political Econo-my,Vol.112, No.1, 164-187
- Friedman, M., (1957), A theory of the consumption function, Princeton, NJ, Princeton University Press.
- Ando,A. and Modighiani,F., (1963). 'The Life Cy-cle' hypothesis of Saving: Aggregate implication and tests. American Economic Review,53 (1), 55-84.
- Beverly et al (2008), Determinants of Assets Build-ings, A report in the Series, Poor Finances: Assets and Low income Households, Centre for Social De-velopment, Washington University, St Louis, U.S.A.
- Muradoglu, G and Taskin, F., (1996), Differences in Household savings behaviuor: Evidence from In-dustrial and Developing Countries, The developing Economics, XXXIV-2.
- Thaler, R.H. (2000), From Homo Economicus to Homosapiens, Journal of Economic Perspec-tives. Vol. 14, No.1.
- Beverly et al (2008), Determinants of Assets Build-ings, A report in the Series, Poor Finances: Assets and Low income Households, Centre for Social De-velopment, Washington University, St Louis, U.S.A.
- Lusardi, A. (2008). Household SavingBehaviour: The role of financial Literacy, Information, and Fi-nancial education Program. (Online).
- Leff, N.,H.,(1971), Dependency Rates and saving rates, American Economic Review, Vol LIX,No.54,PP 886-896.
- Hoos,E.K.,(2010) Saving Behaviuor in Cebu city, Master thesis, International Development Studies, Utrecht University-Faculty of Geosciences.
- Cornia,G., and Jerger,G., (1982),Rural Vs Urban Saving Behaviour: Evidence from an ILO Collection of Household Surveys, Development and Change,Vol.13,No1.
- Triantis, G.S., (1999), Economic Growth and Saving Theory, KYKLOS, Vol.52, 1, P45-P62
- Snyder, D.W., (1974), An Econometric Studies of Household Saving Behaviour in Developing Coun-tries: A Survey, Journal of Development Studies 10,139-153.
- Kelly, A. and Williamson J., (1968),:Household Savings behaviuor in Developing Economics: The Indonesian case, Economic Development and Cul-tural change,16,3,385-403.
- Coakes, J.S., Steed, L., and Price, J., (2008), SPSS 15 Analysis without anquish, John Wiley & Sons Aus-tralia, Ltd.
- Weiss, M.G., Zhan, M., Sherraden, M. (2006) Saving Performance in Individual Development Accounts: Does marital status matter? Journal of Marriage and Family 68 192-204.

## Proceedings of the 4th Jaffna University International Research Conference (JUICe2018)

Track: Humanities, Social Sciences & Law

- 22. Yuh, Y, Hanna, S.D (2010) Which Households think they save? Journal of Consumer Affairs, 44, 70- 97.
- Browning, M., and Lusardi, A., (1996), Household Saving; Micro theories and Micro facts, Journal of Economic Literature, Vol.34, o.4, 1797-1855 ac-cessed from http://links.jstor.org/sici?SICI=.
- 24. DFID (1999).-DFID at the National Strategies for sustainable Developments.
- Hefferan, Collin. (1982), Determinants and Pat-terns of Family Saving, Home Economics Re-search Journal, Vol 11, No 1.
- Nyhus, E.K and Webley.P (2001), The role of Personality in Household saving and Borrowing Behaviour, European Journal of Personality,Eur.J.Pers.15: S85-S85-S103 DOI 10.1002/per.422.

#### Reports

27. Statistical Hand Book, (2016) Jaffna District, District Secretariat, Jaffna.