

# Demographic Factors and Individual Investor's Decision Making

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## Abstract

Objective of the study is examining the impact of demographic variable on individual investor's decision making. The 47 GN divisions located in Jaffna municipal council. Out of these 47 GN divisions, 20 divisions were selected on the basis of their census of population. 100 questionnaires collected for this study purpose. According to the Analysis researchers can conclude that respective  $R^2$  value of 0.630 denotes that 63% of the observed variability in investment decision can be explained by the difference in variables namely gender, educational level, age, marital status and monthly income. Based on Pearson correlation analysis researchers found that demographic factors like age, marital status and monthly income have significant relationship with investment decision while some demographic factors like gender and educational level have no significant relationship with decision making. From one way ANOVA analysis revealed that there is a significant difference in investment decision making amongst individuals from different income groups.

**Key Words:** Demographic factors, individual investor's decision making,

## Introduction

Investment behaviour has become popular discussion topic in today's world. Investment is backbone of the individuals and also Investment is one of the prime concerns of the individuals. The income that a person receives may be used for purchasing goods and services that a person currently requires or it may be saved for purchasing goods and services that a person may require in the future. In other words, income can be what is spent for current consumption or saved for the future consumption. Therefore an investment refers to the commitment of funds made in the expectation of some positive rate of return in future. Expectation of return is an essential element of investment. An investment is an important and useful factor in the context of present day condition.

As Baker, Ruback, and Wurgler (2007) noted, the extension of behavioral ideas to corporate finance has taken two distinct paths.

- Their first path, which indicates investors are less than rational therefore management has the responsible to analysis and make appropriate financial decision for investors
- Second path holds corporate managers is unable to take better decision, because they are overconfident on their abilities

According to their analysis, several factors which are social, demographic, psychological and physiological influence on their investment decision making.

Investor means a person whose principal concern in the purchase of a security is the minimizing of risk, compared to the speculator who is prepared to accept calculated risk in the hope of making better than average profits or gambler who is prepared to take even greater risks. More generally it refers to people who invest money in investment product. There are a lot of investment avenues available today in Jaffna district for individuals.

Investment is also commitment of funds, directly or indirectly, to one or more assets with the expectation to enhance future wealth. Direct investment may take in the forms of either physical assets or financial assets that are traded or non-traded in a financial market. Most of the investors' primary objective of investment is to earn regular income and expected rate of return differs from individual to individual based on their level of market knowledge, decision making ability and risk taking ability. Therefore the objectives of investors can be stated as:

- Maximisation of return
- Minimisation of risk
- Hedge against inflation

Every individual is different from others due to various factors which include demographic factors, age, race and sex, education level, social and economic background, same is the situation with the investors. The most critical

challenge faced by them is the investment decision. Investment behavior of individual is influenced by many factors during investment decision making. Socio demographic profile of individuals is also one of the core decision influencing factors among others.

### **Statement of problem**

Economic liberalization has accelerated the pace of development in the security market, which has undergone a sea change during the last two decades. In Sri Lanka, the role of security market in mobilizing and channelizing private capital for the economic development of the country has increased over the years, and the securities market itself has undergone structural transformation with the introduction of computerized online trading and interconnected market system. Over the years, as investment in securities gathered momentum, the investment decisions were more often made by the whims and fancies of the investors and rumors heard rather than by rational analysis.

Generally individuals try to maximize their returns for a given level of risk they bear, or minimize their risks for a given level of return. In that case, the type of investment instrument selected by individual will depend on his or her risk tolerance, whether the individual is risk seeker, risk averse, or risk indifference. In addition to risk tolerance, demographic factors can influence investment decision. Demographic factors of individuals such as religions, gender, age, education, monthly income and marital status have much important in the investment decision making process, especially in the context of Jaffna Municipal Council area, it assumes greater significance. Thus the research problem is formulated as whether the demographic factors impact on individual investors investment decision making of in the Jaffna Municipal Council area?

### **Research questions**

The research question serves as the basis of the study. The research questions of this study will be as follow:

- How far demographic factors have an impact on individual investor's investment decision making of in the Jaffna Municipal Council area?
- Is there any relationship between demographic factors and individual investor's investment decision making in the Jaffna Municipal Council area?
- Is there any difference in term of investment decision amongst individuals of different income group in the Jaffna Municipal Council area?

### **Objectives of the study**

Every study must have to formulate its objective in order to distinguishable and take place it more rational and fruitful. This study has the primary objective of finding out impact of demographic factors on individual investor's investment decision making of in the Jaffna Municipal Council area.

The secondary objectives are as follows:

- To find out the relationship between demographic factors and individual investor's investment decision making in the Jaffna Municipal Council area.
- To examine the difference in term of investment decision amongst individuals of different income group in the Jaffna Municipal Council area.

### **Significance of the study**

Demographic factors play a major role in deciding the investment behaviour of individuals. Better understanding about the relationship between demographic factors and individual investor's investment decision making helps individuals to improve the quality of their investment decisions and standard of living of them. It will also support financial institutions and policy makers in designing new financial products.

Academicians and Marketers also typically combine several variables to define demographic factor on investment decisions. Economic and financial literature presumes that investors are making investment decisions according to market sentiments and other publicly available information. In addition to that investment decisions could be largely influenced by unavoidable psychological and emotional factors; better understanding will assist the investors to select best fund and best scheme and to avoid mistakes and wrong selection

Policymakers, Investment is no longer a simple process. It requires scientific knowledge, a systematic approach and also professional expertise. Therefore the Policymakers adjust the risk and return associated with newly issued securities on the basis of risk perception and individual's risk behaviour.

### Literature review

During several past years, investment usually based on forecasting, performance, market timing. That used to produce ordinary findings. Investment is a term frequently used in the fields of economics, business management and finance. It can mean savings alone, or savings made through delayed consumption. The word investment can be defined in many ways according to different theories and principles. While dealing with the various options of investment, the defining terms of investment need to be kept in mind. Normally investment is the commitment of money or capital to purchase financial instruments or other assets in order to gain profitable returns in the form of interest, income, or appreciation of the value of the instrument. Investment is related to saving or deferring consumption.

According to Economic theories, investment is defined as per unit production of goods, which have not been consumed, but will however, be used for the purpose of future production. For Examples of this type of investment are tangible goods like construction of a factory or bridge and intangible goods like 6months of on-the-job training. In terms of national production and income, Gross Domestic Product (GDP) has an essential constituent, known as gross investment.

In Finance, investment refers to the purchasing of securities or other financial assets from the capital market. It also means buying money market or real properties with high market liquidity. Some examples are gold, silver, real properties, and precious items. Financial investments are in stocks, bonds, and other types of security investments. Indirect financial investments can also be done with the help of mediators or third parties, such as pension funds, mutual funds, commercial banks, and insurance companies.

According to Personal finance theories, an investment is the implementation of money for buying shares, mutual funds or assets with capital risk.

According to real estate theories, investment is referred to as money utilized for buying property for the purpose of ownership or leasing. This also involves capital risk.

- Commercial real estate: Commercial real estate involves a real estate investment in properties for commercial purposes such as renting.
- Residential real estate: This is the most basic type of real estate investment, which involves buying houses as real estate properties.

Saifud Din Khan et al. (2012) examined the Impact of demographic diversities on the job satisfaction and its consequences. This study exploring the impacts of personal and demographic attributes of the employees on their organizational attitudes. Demographics were tested as the predictor of job satisfaction or dissatisfaction and its consequences like involvement, commitment, absenteeism and turnover. The researchers have proved that demographic analysis is indispensable to understand the employee attitudes.

Lubna Riaz et al. (2012) examined the Impact of psychological factors on investment decision making mediating by risk perception. The result of this study revealed that the stock market and investment situation influences the perceived risk of the investor; especially, information asymmetry was retained as an important explanatory factor of risk perception. Flow of information like decisions made by government bodies, media news etc. causes the stock prices to move up or down. Due to this behaviour of stock market and due to new information, stock investors make their investment decisions.

Ambrose Jagongo & Vincent Mutswenje (2014) investigated the Factors influencing investment decisions: The case of individual investors at the NSE. The objective of the study was to establish the factors influencing investment decisions at the Nairobi Stock Exchange. The study was conducted on the 42 investors out of 50 investors that constituted the sample size. The researcher found that the most important factors that influence individual investment decisions are: reputation of the firm, firm's status in industry, expected corporate earnings, profit and condition of statement, past performance firms stock, price per share, feeling on the economy and expected dividend by investors.

Viswanadham et al. (2014) studied the Perceptual factors influencing investors buying behaviour in Tanzanian Equity Market. This study attempted to find out the buying behaviour of investors in equity market. The literature support the view that macro-factors such as: economic condition and GDP impact, Government policies significantly on the equity market. This means that strong performance of economy results into behavioural finance issues. However, results show that concentration of trading activities is negatively associated with insider trading activities.

Chandran (2008) studied the Behavioral factors and their impact on investors' attitude towards risk and behavioral decision making process. The study concluded that individual investors suffer from heuristics such as representativeness, overconfidence and anchoring, cognitive dissonance, greed and fear, and regret aversion and mental accounting (drawn from prospect theory) all influence investor's perception of risk and subsequently his decision making.

Subramaniam,V.A & Athiyaman,T (2016) investigated the Effect of demographic factors on investor's risk tolerance in Jaffna municipal council area. This study was conducted for the purpose of identifying the relationship between demographic factors and investor's risk tolerance. The sample for the study consists of 100 household investors in the Jaffna Municipal Council area. The sample respondents were selected under convenience sampling technique. Chi Square test and correlation analysis were applied with the support of SPSS, to identify the associations between demographic factors of investors and their risk tolerance. This study was found that demographic factors such as age, education, investment experience and income of the investors are correlated with their risk tolerance and; gender, occupation and civil status are not related with risk tolerance.

Saugat das & ritika Jain (2014) examined the Influence of demographical variables on the factors of investment- a perspective on the guwahati region. This paper focuses on the relationship between the four demographic variables such as: age, gender, education and occupation with the four most important objectives of investment such as risk, return, retirement and tax which influences the buying behaviour of the investors. This study revealed that the various demographical variables have an association with the objectives of investment. Among the demographic variables considered for the study, gender and the occupation are the most influential variables on the objectives of investment. Thus, it can be concluded that demographic variables such as age, gender, education, occupation plays a very important role in investment decision.

## Methodology

### Conceptualization

Conceptualization is the process of defining agreed meaning of the terms used in this study. Based on the literature review and problem statement of the study the following conceptual framework has been constructed

### Demographic factors

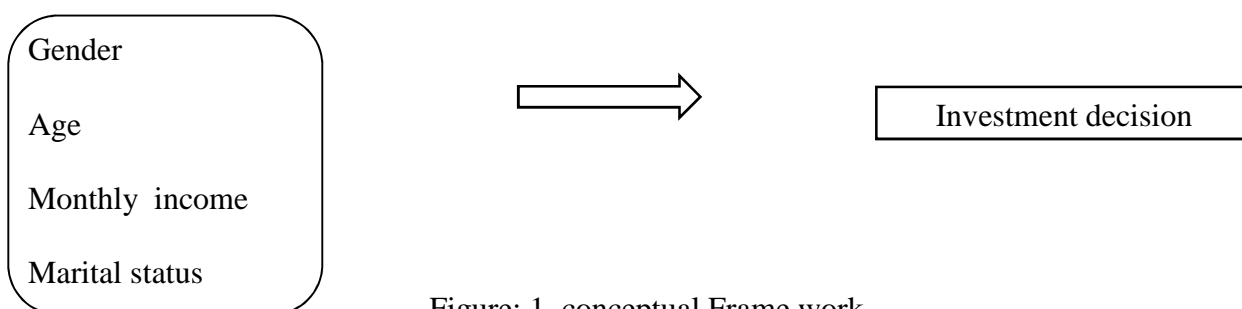


Figure: 1 conceptual Frame work

Developed by researchers

### Hypotheses

Following hypothesis are developed by the researcher for this study :

H<sub>1</sub>: There is a significant impact of demographic factors on individual investor's investment decision making in the Jaffna Municipal Council area.

H<sub>2</sub>: There is significant relationship between demographic factors and individual investor's investment decision making in the Jaffna Municipal Council area.

H<sub>3</sub>: There is a significant difference in term of investment behaviour amongst individuals of different income group in the Jaffna Municipal Council area.

### Sampling method

The 47 GN divisions located in Jaffna municipal council. Out of these 47 GN divisions, 20 divisions were selected on the basis of their census of population. 100 questionnaires collected for this study purpose.

### Data presentation

Based on above sampling method researcher has collected data which are presented below as follows:

Table 1: Data presentation

demographic factors		No. of Respondents / Frequency	Percentage (%)
<b>Total No of respondents</b>		<b>150</b>	<b>100</b>
Gender	Male	82	54.7
	Female	68	45.3
	<b>Total</b>	<b>150</b>	<b>100</b>
Education level	Ordinary level & below	36	24
	Advanced level	47	31.3
	graduate	34	22.7
	Under graduate	16	10.7
	Professional	17	11.3
	<b>Total</b>	<b>150</b>	<b>100</b>
Age group	Below 25 years	17	11.3
	26-35 years	33	22
	36-45 years	50	33.3
	46-55 years	37	24.7
	56-65 years	7	4.7
	Above 65 years	6	4
	<b>Total</b>	<b>150</b>	<b>100</b>
Marital status	Single	46	30.6
	Married	104	69.4
	<b>Total</b>	<b>150</b>	<b>100</b>
Monthly income	Below Rs 10000	14	9.3
	Rs 10000-30000	42	28.0
	Rs 30000-50000	50	33.3
	Above Rs 50000	44	29.4
	<b>Total</b>	<b>150</b>	<b>100</b>

The table 1 summarized and presents the information with regards to gender of respondents. This table indicates that out of the total respondents, 54.7% (n=82) of respondents were male and remaining 45.3% (n=68) of respondents were female. Education level of the individuals were categorized into five groups such as ordinal level / below O/L, Advance level, Graduate, Under graduate and Professional studies like Chartered accountancy, CIMA, Diploma. The table 2 shows that out of the 150 respondents nearly 55.3% of individual have school level (O/L & below 24% and A/L 31.3%) whereas 22.7% (n= 34) were graduates, 10.7% (n=16) were undergraduate and 11.3% (n=17) of them have completed or reading professional level of education.

With regards to the age of the respondents, the table 1 found that a majority of the respondents (33.3%) were between the 36-45 years old. 11.3% (n=17) of respondents were under the 25 years old. 22% (n=33) of respondents were between 26-35 years old. 24.7% (n=37) of the respondents were between 46-55 years old. 4.7% (n=7) of respondents being at the age range of 56-65years. Only 4% (n=6) of respondents were above the 65 years old.

From the table 1 it is understood that 9.3% (n=14) of respondent's have income below Rs 10,000 per month. 28% (n=42) of respondent's have an income between Rs 10,000-30,000 per month. 33.3% (n=50) of respondent's have an income between Rs 30,000-50,000. 29.4% (n=44) of respondent's have income above Rs 50,000 per month

## Data analysis

### Correlation analysis

**Table 2: Correlation analysis of demographic factors and Investment decision**

	GEN	EDU	AG	MS	MI
<b>EDU</b> Pearson correlation	.246**	1			
Sig (2- tailed)	.002				
<b>AG</b> Pearson correlation	-.088	-.165*	1		
Sig (2- tailed)	.284	.044			
<b>MS</b> Pearson correlation	-.087	-.115	.437**	1	
Sig (2- tailed)	.291	.160	.000		
<b>MI</b> Pearson correlation	-.157	.006	.368**	.270**	1
Sig (2- tailed)	.055	.939	.000	.001	
<b>ID</b> Pearson correlation	-.033	-.020	.221**	.189*	.290**
Sig (2- tailed)	.687	.809	.007	.021	.000

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

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

### Where,

GEN – Gender

EDU-Educational level

AG- Age

MS- Marital status

MI- Monthly income

ID-Investment decision

In the above table 2 indicated the relationship between the demographic factors and investment decision . According to the analysis results shown the correlation between gender and investment decision is -0.033 which is not significant at 0.05 level, represent very weak negative or no relationship between the gender and investment decision. Results reveals that the correlation between educational level and investment decision have very weak negative relationship as -0.020 and age and investment decision have 0.221 at significant 0.01 level, which represent weak positive relationship between the age and investment decision. Marital status is significantly correlated with investment decision. The value of correlation between the marital status and investment decision is 0.189 which is significant at 0.05 level, represent very weak positive relationship between marital status and investment decision. Results shown the correlation between monthly income and investment decision is 0.290 which is significant at 0.01 level, represent weak positive relationship between the monthly income and investment decision.

### Regression analysis

**Table 3 Results of the regression model**

	constant	Gender	Educational level	Age	Marital status	Monthly income
Beta	26.264	2.004	.156	1.043	1.171	1.707
Std.Error	5.087	1.114	.434	.503	0.586	.857
p-value	.000	.074	.720	.036	.042	.048
<b>RSquare(R<sup>2</sup>)</b>	<b>0.630</b>					

*Dependent variable: Investment decision*

The above table 3 shows the regressions analysis for this study. According to the table 3 indicates, demographic variable age has significantly impact on investment decision at the 0.05(p=0.036) significant level and the regression coefficient is 1.043 means there is positive relation between age and investment decision. marital status has significantly impact on investment decision as p value of marital status is 0.042 which is less than 0.05 level and monthly income has significantly impact on investment decision at 0.05(p=0.048) significant level too.

According to the table 3 indicates, gender and educational level have not significant impact on investment decision. In this model the specification of variables such as gender, educational level, age, marital status and monthly income revealed the ability to predict investment decision. The value of estimated coefficient is 26.264. The other coefficients estimated the change in investment decision per one unit change in the associated independent variable.

R<sup>2</sup> measure how much of the variation in the dependent variable can be explained by the independent variables. In this study, respective R<sup>2</sup> value of 0.630 denotes that 63% of the observed variability in investment decision can be explained by the difference in variables namely gender, educational level, age, marital status and monthly income, The remaining 37% is not explained which means that the remaining 37% of the variance in investment decision is related to other variables not depicted in this model. The regression equation is formulated as follow:



$$ID = 26.264 + 2.004GEN + 0.156EDU + 1.043AG + 1.171MS + 1.707MI$$

**One way ANOVA analysis**

**Differences between monthly income and investment decision**

**Table 4 Descriptive**

	N	Mean	Std. Deviation	Std. Error	95% confidence interval for mean		Minimum	Maximum
					Lower bound	Upper bound		
Below Rs 10000	14	92.57	5.110	1.366	89.62	95.52	84	100
Rs10000-30000	42	94.52	12.254	1.937	90.61	98.44	55	111
Rs30000-50000	50	95.04	10.490	1.402	92.23	97.84	49	114
Above Rs50000	44	102.15	6.712	1.061	100.00	104.30	82	111
Total	150	96.57	10.289	.840	94.91	98.23	49	114

table 4 express that there are group statistics which provide the means and standard deviation of the different income groups. From table 4 the mean for below Rs10000 is 92.57, for between Rs 10000 to 30000 is 94.52, for between Rs 30000 to 50000 is 95.04 and for above Rs 50000 is 102.15 and further it revealed that , the standard deviation for below Rs10000 is 5.110, for between Rs 10000 to 30000 is 12.254, for between Rs 30000 to 50000 is 10.490 and for above Rs 50000 is 6.712.

**Table 5 Test of Homogeneity of variances**

Levene Statistic	df1	df2	Sig.
4.446	3	146	.005

The table 5 contains the results for the test of homogeneity of variance. The table shows high significant value (.005) is good because it means we don't have homogeneity of variance.

**Table 6 ANOVA**

	Sum of Square	df	Mean square	F	Sig.
Between Groups	1768.401	3	589.467	6.145	.001
Within Groups	14004.432	146	95.921		
Total	15772.833	149			

The table6 shows that results of the ANOVA and the significant value is .001 which is less than 0.05 level represent this income groups are significantly different. This is great to know, but researcher does not know which of the specific groups differed. Luckily, researcher can find this out in the **Multiple Comparisons** table which contains the results of post-hoc tests.The table below, results of the post hoc test, shows which groups differed from each other.



**Post hoc test**

**Table 7 Results of the Tukey Post hoc test**

(I)Income	(J)Income	Mean Difference(I -J)	Std. Error	Sig.	95% confidence interval	
					Lower bound	Upper bound
Below Rs10000 Rs 30000-50000	Rs 10000 -30000	-1.954	3.041	.522	-7.96	4.06
		-2.464	2.926	.401	-8.25	3.32
	Above Rs 50000	-9.579*	3.041	<b>.002</b>	-15.59	-3.57
Rs10000-30000 Rs 30000-50000	Below10000	1.954	3.041	.522	-4.06	7.96
		-.511	2.028	.801	-4.52	3.50
	Above Rs 50000	-7.625*	2.190	<b>.001</b>	-11.95	-3.30
Rs30000-50000 Rs 10000-30000	Below 10000	2.464	2.926	.401	-3.32	8.25
		.511	2.028	.801	-3.50	4.52
	Above Rs 50000	-7.114*	2.028	<b>.001</b>	-11.12	-3.11
Above Rs50000 Rs 10000-30000 Rs 30000-50000	Below Rs 10000	9.579*	3.041	<b>.002</b>	3.57	15.59
		7.625*	2.190	<b>.001</b>	3.30	11.95
		7.114*	2.028	<b>.001</b>	3.11	11.12

\*. The mean difference is significant at the 0.05 level.

***Dependent variable: Investment decision***

From the 7 results revealed that there are significant differences between the groups as a whole. It shows which groups differed from each other. The Tukey post-hoc test is generally the preferred test for conducting post-hoc tests on a one-way ANOVA, but there are many others. there is a significant difference in investment decision between income group that took below Rs 10000 and Above Rs 50000( $p=0.002$ ), between Rs10000-30000 and Above Rs 50000( $p=0.001$ ), and between Rs30000-50000 and Above Rs 50000( $p=0.001$ ) and further , there were no differences between the income groups that took the below Rs 10000 and Rs10000-30000 ( $p = 0.522$ ), between below R10000 and Rs 30000-50000( $p=0.401$ ) and between Rs10000-30000 and Rs 30000-50000( $p=0.801$ ). Therefore it is clear that there is a significant difference in investment decision amongst individuals from different income groups.

**HYPOTHESIS TESTING AND DISCUSSION**

According to the Regression Analysis researchers can conclude that gender and educational level have not significant impact on investment decision. In this model the specification of variables such as gender, educational level, age, marital status and monthly income revealed the ability to predict investment decision. The estimated coefficient of the constant term suggests that the investment decision if value of other variables held constant. The value of estimated coefficient is 26.264. The other coefficients estimated the change in investment decision per one unit change in the associated independent variable. In this study, respective  $R^2$  value of 0.630 denotes that 63% of the observed variability in investment decision can be explained by the difference in variables namely gender, educational level, age, marital status and monthly income. The remaining 37% is not explained which means that the remaining 37% of the variance in investment decision is related to other variables not depicted in this model. So,  $H_2$  is supported in this study.

The researcher analyzed  $H_2$  hypotheses with a help of correlation analysis. According to the correlation analysis results shown the correlation between gender and investment decision is -0.033 which is not significant at 0.05 level. Educational level and investment decision have very weak negative relationship as -0.020 . The educational level has no significant relationship with investment decision. Age and investment decision is 0.221 which is significant at 0.01 level. marital status is significantly correlated with investment decision. According to the analysis results researcher concludes that correlation between monthly income and investment decision is 0.290 which is significant at 0.01 level. Based on Pearson correlation analysis researcher found that demographic factors (like age, marital status and monthly income) have significant relationship with investment decision while some demographic factors (like gender and educational level) have no significant relationship with investment decision. So,  $H_2$  is supported in this study.

The researcher tests  $H_3$  hypotheses with a help of one way ANOVA analysis. According to one way ANOVA analysis Model I the results for the test of homogeneity of variance. The table shows high significant value (.005) is good because it means we don't have homogeneity of variance. The table 4.12 shows that results of the ANOVA and the significant value is .001 which is less than 0.05 level represent this income groups are significantly different.

Finally with the support of post-hoc test, the researcher concludes that there is a significant difference in investment decision amongst individuals from different income groups as p value for investment decision is less than 0.05 level. So,  $H_3$  is supported.

## CONCLUSION

From the analyzing and discussion, research can reached the objective of the study and further it can be answer the research questions which were developed from the problem of the study. all the findings of demographic factors and investment decision of individuals in the Jaffna Municipal Council area, which leads to central argument of the study. Suggestion and recommendation are as follows: In this research, the researcher has used only gender, educational level, age, marital status and monthly income, as the measures of socio demographic among the numerous variables of socio demographic factors and also only used investment decision. So the result will be further valuable when researcher consider varies kinds of measures. Only some methods are used to test hypotheses such as correlation, regression and one way ANOVA. Further the researcher can add much variety of techniques to test their findings. There are 47 G.N divisions within the administrative limits of Jaffna Municipal Council. In this research, the researcher cover up out of these, there are only 20 divisions were selected as top Divisions based on their population size. So the result will be further valuable when researcher consider other divisions in Jaffna municipal council. There should be improvement in the awareness of investment market activities in Jaffna. This calls for holding more awareness programs which should evenly be distributed to districts rather than centralized. This study covered only the 150 respondents in Jaffna Municipal Council area. Therefore, additional investigation is required to examine more respondents in the different area tend to follow different pattern of movement.

## Reference

Ambrose Jagongo Vincent S. M(2014) “A Survey of the Factors Influencing Investment Decisions: The Case of Individual Investors at the NSE” International Journal of Humanities and Social Science Vol. 4 No. 4 [Special Issue – February 2014]

Lubna Riaz and Mehr Ali Shah Arid(2015)” Relationship between Psychological Factors and Investment Decision Making: The Mediating Role of Risk Perception”, Pakistan Journal of Commerce and Social Sciences 2015, Vol. 9 (3), 968-981

Malcolm Baker & Jeffrey Wurgler, 2007. "Investor Sentiment in the Stock Market," Journal of Economic Perspectives, American Economic Association, vol. 21(2), pages 129-152.

Saif-Ud-Din Khan, Dr. Allah Nawaz & Dr. Farzand Ali Jan” Impact of Demographic Diversities on the Job Satisfaction and Its Consequences: Case of Academicians in Higher Learning Institutions of Pakistan (Application of Stepwise Multiple Regression)”,Global Journal of Management and Business Research Volume 12 Issue 19 Version 1.0 Year 2012 Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Saugat das & ritika Jain (2014) a study on the influence of demographic variable on the factors of investment”, International Journal of Research in Humanities, Arts and Literature ISSN(E): 2321-8878; ISSN(P): 2347-4564 Vol. 2, Issue 6, Jun 2014, 97-102.

Subramaniam,VA, Athiyaman, T (2016) ,”The effect of demographic factors on investor's risk tolerance”,International Journal of Commerce and Management Research ISSN: 2455-1627, Volume 2; Issue 3; March 2016; Page No. 136-142.

Viswanadham.N , Edward. N , Dorika and Mwakapala, D(2014) “A Study of Perceptual Factors Influencing Investors buying Behavior in Tanzanian Equity Market”, Journal of Finance and Investment Analysis, vol. 3, no.2, 2014, 99-108 ISSN: 2241-0998 (print version), 2241-0996(online) Scienpress Ltd, 2014