



1st Asia Pacific Symposium on Academic Research (APSAR-2019)

Kuala Lumpur, Malaysia

ISBN :978-0-6482404-2-6

Asia Pacific Institute of Advanced Research (APIAR)

[www.apiar.org.au](http://www.apiar.org.au)

## **FACTORS INFLUENCING INVESTMENT DECISIONS IN STOCK MARKET: EVIDENCE FROM INDIVIDUAL INVESTORS IN THE NORTHERN PROVINCE OF SRI LANKA**

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### **Abstract**

The study aims to identify factors that influence investment decisions of individual investors and to explore how these factors are connected to the investors' socio-economic characteristics in the Sri Lankan Stock Market. The study covers individual investors from all five districts belonging to the Northern Province of Sri Lanka and data were marshalled from 272 individual investors with a self-administrated questionnaire using a convenient sampling technique. The collected data were then analysed with a number of statistical techniques including Independent t- test, Analysis of variance (ANOVA) and relevant post hoc tests. The study identified eight most influencing factors on investment decisions: past performance of the company's stock, company stability, firm's goodwill, firm's reputation in the industry, dividend paid, expected corporate earnings and expected dividend. Further results highlighted seven least influencing factors on investment decisions: opinions of firm's majority stockholders, easy to obtaining borrowing funds, diversification needs, friends/co-workers' opinions, forms governing body and social status. The study disclosed that the socio-economic characteristics of investors (age, gender, marital status, educational qualifications and monthly income) have a statistically significant impact on the investment decisions of individual investors. The study has made a theoretical contribution and proffers many useful practical implications to the investors, practitioners and policy makers.

**Keywords:** Investment Decision, Individual Investors, Stock Market, Sri Lanka.

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### **1. Introduction to the Study**

Capital investment decisions are vital at both firm level and national level (Northcott, 1995). At the firm level, capital investment decisions would have implications for many aspects of company operations and the results have a crucial effect on survival, profitability and growth. At the national level, healthy planning and allocation of capital investment are crucial for an efficient use of other resources; on the other hand, poor investment negatively affects the productivity of labour, materials and the economy's potential output. Therefore, study on factors influencing individual investors decision making receives significant attention.

Investors differ from one another in different aspects and demographic factors, as socio-economic, education, sex, race, age and experience in the field. Different sets of factors have been used in various studies that influence stock selection process of individual investors in Sri Lanka (Ponnamperuma, 2003; Kengatharan & Kengatharan, 2014; Gunathilaka, 2014; Menike, Dunusinghe & Ranasinghe, 2015; Perera, 2016; Subramaniam & Velnampy, 2017). It generally believed that investment decisions are a function of several factors such as market characteristics, behavioural factors and individual risk profiles, in addition to the general accounting information. Individual investors need to determine the factors which are influencing their investment decision, however most of them are face difficulties to identify that to make effective investment decisions in Sri Lanka.

Sri Lanka faced more challenges in the past such as 30 years civil war, natural disaster (tsunami) and political issues. These critical factors affect investor's decision making through changing their attitudes and thoughts on investments. During this critical period, investment market in North part of Sri Lanka did not have the stability because investors were not ready to invest their money in the market. Generally, investors are expecting to earn more return with lower risk therefore they should decide about their decisions with changing the environment. The investor decision making plays an important role in the investors' return, but factors influencing decision making of individual can be differ from individual to individual because of their different socio, economic and psychological factors. Beyond the laws and regulations of investment decisions making in stock market, certain factors are influencing investment decisions of investors. Major focuses of the previous studies are on institutional investor and less attention has been giving to retail equity investor behaviour. Moreover, majority of these studies are in the context of on developed countries with limited focus on developing countries. Especially, there are very few studies focused on factors influencing individual investors decision making in Sri Lanka (Kengatharan & Kengatharan, 2014; Menika, Dunusinghe & Ranasinghe, 2015; Udeepa, 2015) and lack of studies carried out in North Part of Sri Lanka as it was severely affected by civil war. Therefore, this current study tries to fill this research gap by identifying the factors that influence on decision making of individual investors. The fundamental questions arising for this study are: What are the most important factors that influence the individual investors' investments decision making in the Colombo Stock Market? How these factors are connected to the investors' socio-economic characteristics in the Stock Market? Therefore, objectives of the study are: to identify factors that influence on investment decisions of individual investors and to explore how these factors are connected to the investors' socio-economic characteristics in the Sri Lankan Stock Market.

## 2. Literature Review

Capital investment decisions invariably involve large sums of money over the long period. 'Capital investment decisions are critical in managing strategic change and sustaining long term corporate performance' (Emmanuel, Harris & Komakech, 2010, p.477). Therefore, the factors influencing on investment decisions have been given much concentration by the researchers, Gunathilaka (2014) studied the factors influencing stock selection decision of retail investors in Colombo Stock Exchange with 168 participants. Results of his study revealed that the firm's perceived value is the most influencing factor in the investment in equity. The study further identified that accounting information, advocate's recommendation and self-image/ firm- image are also significant factors to influence the stock selection.

Obamuyi (2013) focused a study to determine the most influencing factors on investment decision of individual investors and to explore the relationship between these factors and investor's socio-economic characteristics in Nigerian Capital Market. Study used convenient sampling method to select 297 investors and data was collected through structured questionnaire. Results of the study identified the following factors as most influencing factors: past performance of the company's stock, expected stock split/ capital increases/bonus, dividend policy, expected corporate earnings and get rich quick. Also, the study found out that the socio-economic characteristics of investors: age, gender, marital status and educational qualification significantly influenced on investment decisions.

Sadiq and Ishaq (2014) conducted a study to examine the effect of demographic factors on investors level of risk tolerance on the choice of investment with 100 investors from two cities of Pakistan. Results of their study indicated that demographic factors of investors: academic education, income level, investment knowledge and investment experience effect the investors level of risk tolerance. Further, study revealed that gender, marital status, occupation and family size did not show any effect on investment level of risk tolerance. There is another study carried out to examine the impact of demographical factors on investment decision on Vietnam Stock Market by Ton and Nguyen in 2014. Results of their study made known that the demographic factors (gender, age and marital status) influenced on the decision making of investors on Vietnam Stock Market.

Udeepa (2015) tried to find out the factors influencing investment decisions of investors in Colombo Stock Exchange and also tried to evaluate the relationship between these factors and demographic characteristics of individual investors. 162 respondents were chosen using convenient sampling method and structured questionnaire was used to collect data. Past performance of the company stock, expected corporate earnings, dividend policy, get rich quick, marketability of the company were identified as most influencing factors. There were some least influencing factors also identified in this study including religious reasons, rumours, loyalty to the company's products, government has share in the company and insider's information. Finally, this study found the demographic characteristics of investors (age, gender, marital status, income per month and educational qualifications) were significantly influenced on individual investors investment decision. Menika, Dunusinghe and Ranasinghe (2015) conducted a study to examine whether behavioural factors and contextual factors influence on irrational behaviour of individual investors in Colombo Stock Exchange. Results revealed that herding, heuristics, prospect, market and contextual factors influenced investment decisions.

Rosemary and Bitrus (2016) conducted a study with the aim to identify the fundamental factors influencing individual investors in the shares of Nigerian capital market. Primary data was collected from 130 individuals using structured questionnaires. Study identified the followings influencing factors on individual investors decision making: past performance, expected bonus issue, growth potential, future dividend and the profitability of the company. Chavali and Mohanraj (2016) studied to examine the impact of demographic variables and risk tolerance on investment decisions in India. 110 investors participated in the survey and data was collected using questionnaires. The study found that gender had an impact on the investment pattern and decision making of respondents.

Perera (2016) examined the influence of investor's gender attitudes on investor behaviour in Colombo Stock Exchange. The Outcome of the study revealed that individual's gender differences significantly influenced on cognitive factors, emotional factors and herding factors. Also study found that there was a strong correlation among the investor's demographic factors, market factors, risk bearing capacity, lifestyle characteristics and behaviour.

There was another study conducted by Patel and Modi in 2017 to examine the impact of demographic factors: gender, age, marital status, education, income and family members on investor's tolerance and investment preferences. Data was collected using structured questionnaire from 100 investors from Gujarat region and they were selected using convenient sampling technique. Findings of their study revealed that age, gender, income had impact on investment decision making.

Khanam (2017) carried out a study with randomly selected 300 investors of Dhaka Stock Exchange to evaluate the impact of demographic factors on the decisions of investors during dividend declaration. Findings of the study illustrated that relationship between demographic factors (age, educational level, occupation, experience and income level of investors) and investment decision of the investors.

With the evidence of literature survey, it has been notified that very few studies have been conducted in Sri Lanka. Therefore, this study tries to identify the most important factors influencing on investment decisions and to explore how these factors are related to socio-economic factors of individual investors.

Following hypothesis has been formulated for this study:

*H<sub>1</sub>: Socio-economic characteristics of individual investors (gender, age, marital status, educational qualification and monthly income) have significant influence on individual investors investment decision making.*

### 3. Data Collection

The current study is based on a field survey and the appropriate data was collected using structure questionnaire from 272 individual investors from Northern Province of Sri Lanka. Participants were selected using convenient sample method and 600 individual investors were selected for this survey. Field survey was conducted from March to August 2018. However, only 272 were usable for this survey.

### 4. Analysis

#### 4.1 Descriptive Statistics of Survey Respondents

Following table describes descriptive statistics of investors Socio-Economic Characteristics

Table 1: Investors' Socio-Economic Characteristics

Variable	Investors' category (n=272)	Frequency	Percentage
Gender	Male	201	73.9
	Female	71	26.1
Age	18-25 years	51	18.8
	26-35 years	93	34.2
	36-45 years	60	22.1
	46-55 years	49	18
	Over 55	19	7
Marital Status	Single	86	31.6
	Married	175	64.3
	Divorced	11	4
Educational Qualification	G.C.E.O/L or Less	38	14
	G.C.E.A/L	84	30.9
	Diploma	41	15.1
	Bachelor Degree	81	29.8
	Postgraduate Degree	26	9.6
Monthly Income	Any other	2	7
	50,000 or Less	105	38.6
	50,000 - 75,000	110	40.4
	75,000 - 100,000	37	13.6
	100,000 - 125,000	12	4.4
	125,000 - 150,000	8	2.9
Over 150,000	-	-	

Source : Survey data

The socio-economic characteristics of participant reflected in table 1. The sample consisted of 201 male (73.9%) and 71 female (26.1%) investors.

Age distribution in the sample was categorized as 18-25, 26-35, 36-45, 45-55 and over 55. Age range between 26-35 is highly represented in the sample which was 34.2% of the sample. Age ranges above 55 was less represented in the sample which was 7 %. Respondents proportion was 22.1% consisted 36-45 years of age range and 18.8% consisted 18-25 years of age range.

In terms of marital status, 64.3 % of investors ( $N= 175$ ) were married and 31.6 % of investors were not married ( $N= 86$ ), 4% of investors were divorced ( $N=11$ ).

Education level of the investors were categorized into six groups such as Ordinary Level (O/L), Advanced Level (A/L), Certificate/ Diploma Holder, Degree holders, Postgraduates and Other qualification. Highest percentage of the respondents was 30.9% belonged to Advanced Level qualification. Second higher percentage of respondents was 29.8 % belonged to degree holders and 15.1 % belonged to diploma qualification. Very small percentage of respondents was 7 % consisted of other qualifications. Income distribution in the sample was categorized as LKR 50,000 or less, 50,001- 75,000, 75,000-100,000, 100,000 - 125,000, 125,000 - 1500,000 and over 150,000. Income between 50,000-75,000 is highly represented in the sample which was 40.4% of the sample. Income between 125,000- 150,000 was less represented in the sample



which was 2.9 %. Respondents proportion was 38.6% consisted 50,000 or less income and 13.6% consisted 75,000-100,000 range of income.

Table 2: Factors influencing investment decisions in the Sri Lankan stock market

	Influencing factors	Mean	Std. Deviation
1	Past performance of the firm	4.04	.819
2	Company stability	4.00	.756
3	Firm goodwill	3.97	.736
4	Dividend paid	3.94	.937
5	Firm reputation in industry	3.94	.744
6	Expected earning	3.88	.961
7	Expected dividend	3.86	.999
8	Maximizing profit/ returns	3.80	.857
9	Recent price movement of the firm stock	3.71	.934
10	Current condition of financial statements	3.68	.896
11	Have risk tolerance towards investment decision	3.66	.996
12	Stock marketability	3.58	.856
13	Information on previous share prices	3.57	.897
14	Current interest rate	3.50	.941
15	Information obtained from internet	3.40	.927
16	Current economic indicators	3.37	.832
17	Political stability	3.36	.954
18	Big- quick profit	3.28	.899
19	Current inflation rate	3.12	.942
20	Individual market awareness	3.11	.836
21	Minimizing risk	3.06	.972
22	Brokers recommendations	3.00	.917
23	Opinions of firm majority stockholders	2.94	.913
24	Easy to obtaining borrowing funds	2.86	.729
25	Diversification needs	2.84	.886
26	Friends/ co-workers opinions	2.82	.910
27	Family members opinions	2.74	.929
28	Firm governing body(Board of directors and CEO)	2.56	.912
29	Social status	2.47	.933

Source: Survey data

There are 29 factors have been considered in this study and means and standard deviations for each factors are presented in the table 2. According to the results presented in the table 2, 8 factors have been identified as most influencing factors on investment decisions in Sri Lankan stock market as those factors have mean values above 3.75. Identified factors were : Past performance of the firm (M=4.04, SD = .819), Company Stability (M= 4.00, SD = .756), Firm Goodwill (M= 3.97, SD = .736), Dividend Paid (M= 3.94 , SD = .937), Firm Reputation in the Industry (M= 3.94 = .744), Expected Earnings (M= 3.88, SD = .961), Expected Dividend (M= 3.80 , SD = .999) and Maximizing Profit/ Return (M= 3.80, SD = .857). Also, it was notified that there were seven least influencing factors on individual investors characteristics as those have mean value less than 3. least influencing factors were Opinions of firm majority stockholders (M= 2.94, SD = .913), Easy to obtaining borrowing funds (M= 2.86, SD = .729), Diversification needs (M = 2.84, SD = .886), Friends and co-workers opinion (M = 2.82, SD = .910), Family members opinion (M= 2.74, SD = .929) Firm's governing body (M= 2.56, SD = .912) and Social Statistics (M = 2.47, SD = .933). Findings of the study: most influencing factors in terms of past performance of the firm, expected earnings and dividend paid is consistent with the Obamuyi (2013) and Udepa (2015).

#### 4.2 Socio Economic Factors and Factors Influencing Investment Decisions

Following section explains the relationship between socio economic factors and factors influencing on investment decisions.

#### 4.2.1 Gender Differences and Factors Influencing on Investment Decisions

Table 3: T-Test of gender differences and factors influencing on investment decisions

S/N	Factors	Mean Value		T Value	Sig.
		Male	Female		
1	Past performance of the firm	4.13	3.77	3.168	<b>0.002</b>
2	Company stability	4.04	3.89	1.602	0.111
3	Firm goodwill	3.98	3.97	0.033	0.974
4	Dividend paid	4.00	3.77	1.613	0.110
5	Firm reputation in industry	3.92	3.99	-.616	0.539
6	Expected earning	3.99	3.59	3.209	<b>0.002</b>
7	Expected dividend	3.96	3.59	2.681	<b>0.008</b>
8	Maximizing profit/ returns	3.79	3.81	-.167	0.868

Source: Survey data

Identified, most influential factors were included in the t test to examine the influence of gender differences on the factors influencing on investment decisions. As t test results shown in the table 3, t-value is significant for the past performance of the firm ( $t=3.168, p<.05$ ), expected earnings ( $t=3.209, p<.05$ ) and expected dividend ( $t=2.681, p<.05$ ). Therefore, it can be inferred that there was a significant difference for gender in the factors of past performance of the firm, expected earnings, expected dividend. However, it has been observed that the influencing factors of company stability ( $t=1.602, p>.05$ ), firm goodwill ( $t=0.033, p>.05$ ), dividend paid ( $t=1.613, p>.05$ ), firm reputation in industry ( $t=-.616, p>.05$ ) and maximizing profit/returns ( $t=-.167, p>.05$ ) did not show any significant differences with gender differences. Findings of the study consisted of findings of Obamuyi (2013); Patel and Modi (2017); Ton and Nguyen (2014); Chavali and Mohanraj (2016).

#### 4.2.2 Age Groups and Investors' Investment Decision Making

It was performed one-way ANOVA to examine the relationship between different age groups of participants and identified factors influencing on investment decision making. Results are presented in the table 4.

Table 4: Influence of Age Groups on Factors Influencing Investors' Investment Decisions

Between Groups	Sum of Squares	df	Mean Square	F	Sig.
Past performance of the firm	8.544	4	2.136	3.295	<b>.012</b>
Company stability	3.257	4	.814	1.433	.223
Firm goodwill	4.983	4	1.246	2.345	.055
Dividend paid	18.943	4	4.736	5.768	<b>.000</b>
Firm reputation in industry	.560	4	.140	.250	.909
Expected earning	28.673	4	7.168	8.638	<b>.000</b>
Expected dividend	29.206	4	7.301	8.073	<b>.000</b>
Maximizing profit/ returns	5.215	4	1.304	1.794	.130

Source: Survey data

As results of the ANOVA shown in table 4, there was a statistically significant difference between age groups and four influencing factors out of eight most influencing factors (past performance of the performance ( $F(04, 267) = 3.295, p< 0.05$ ); dividend paid ( $F(04, 267) = 5.768, p< 0.05$ ); expected earnings ( $F(04, 267) = 8.638, p< 0.05$ ); and expected dividend ( $F(04, 267) = 8.073, p< 0.05$ ). It implies that age groups were significantly related to past performance of firm, dividend paid, expected earnings and expected dividend. Further, it was revealed that there was no significant different between age groups and other four influencing factors on investment decision making (company stability ( $F(04, 267) = 1.433, p> 0.05$ ); firm

goodwill( $F(04, 267) = 2.345, p > 0.05$ ); firm reputation in industry( $F(04, 267) = .250, p > 0.05$ ); and maximizing profit/returns ( $F(04, 267) = 1.794, p > 0.05$ ).

The homogeneity of variance of the age groups for the factors which were significantly differ with age groups in the ANOVA were performed and results are presented in table 5.

Table 5: Test of Homogeneity of Variances

Dependent variables	Levene Statistic	df1	df2	Sig.
Past performance of the firm	3.078	4	267	.017
Dividend paid	.302	4	267	.877
Expected earning	2.473	4	267	.045
Expected dividend	2.788	4	267	.027

Source: Survey data

Levene's test for homogeneity of variances tests whether the variance in scores is the same for each of the five groups. As per the results presented in table 5, past performance of the firm, expected earnings and expected dividend have violated the assumption of homogeneity of variances as they have significant value ( $p < 0.05$ ) for Levene statistics. However, dividend paid had  $p = 0.877$  value for Levene test, therefore homogeneity assumption has not violated. As three factors mentioned above have violated the homogeneity assumption it was further performed the Robust Test of Equality of Means (Welch test) and results are presented in table 6.

Table 6: Robust Test of Equality of Means

Welch Statistics <sup>a</sup>	Statistic <sup>a</sup>	df1	df2	Sig.
Past performance of the firm	3.968	4	92.804	.005
Dividend paid	6.163	4	91.356	.000
Expected earning	11.038	4	93.661	.000
Expected dividend	9.616	4	94.526	.000

Source: Survey data

Welch test found to be significant for all variables in table 6. Therefore, Games-Howell post hoc test was performed for multiple comparison and results presented in table 7. As per the results presented in table 7, the Games-Howell post hoc test of multiple comparisons for significance implies that the investors with the over 55 years were significantly different from those with years of 18-25 and 26-35 in terms of the influencing factors: past performance of the firm and expected earnings. However, dividend paid and expected dividend factors of investors with the 45-55 years and over 55 significantly differed from those with years of 18-25 and 26-35.



Table 7: Games-Howell post hoc test for multiple comparison

Dependent Variable	(I) Age of respondent	(J) Age of respondent	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Past performance of the firm	18-25	26-35	.001	.131	1.000	-.36	.36
		36-45	-.251	.138	.367	-.63	.13
		46-55	-.342	.160	.212	-.79	.10
		<b>Over55</b>	-.539	.169	<b>.023</b>	-1.02	-.05
	26-35	18-25	-.001	.131	1.000	-.36	.36
		36-45	-.252	.134	.336	-.62	.12
		46-55	-.343	.157	.193	-.78	.09
		<b>Over55</b>	-.539	.166	<b>.020</b>	-1.02	-.06
	36-45	18-25	.251	.138	.367	-.13	.63
		26-35	.252	.134	.336	-.12	.62
		46-55	-.091	.162	.980	-.54	.36
		Over55	-.288	.171	.457	-.78	.20
Dividend paid	18-25	26-35	.342	.160	.212	-.10	.79
		36-45	.077	.158	.989	-.36	.52
		46-55	-.335	.166	.261	-.79	.12
		<b>Over55</b>	-.762	.214	<b>.009</b>	-1.38	-.15
	26-35	18-25	-.077	.158	.989	-.52	.36
		36-45	-.412	.153	.060	-.83	.01
		<b>46-55</b>	-.516	.161	<b>.015</b>	-.96	-.07
		<b>Over55</b>	-.838	.205	<b>.002</b>	-1.43	-.25
	36-45	18-25	.335	.166	.261	-.12	.79
		26-35	.412	.153	.060	-.01	.83
		46-55	-.104	.168	.971	-.57	.36
		Over55	-.426	.210	.275	-1.03	.18
Expected earning	46-55	18-25	.439	.173	.090	-.04	.92
		26-35	.516	.161	<b>.015</b>	.07	.96
		36-45	.104	.168	.971	-.36	.57
		Over55	-.322	.216	.574	-.94	.30
	Over55	<b>18-25</b>	.762	.214	<b>.009</b>	.15	1.38
		<b>26-35</b>	.838	.205	<b>.002</b>	.25	1.43
		36-45	.426	.210	.275	-.18	1.03
		46-55	.322	.216	.574	-.30	.94
Expected earning	18-25	26-35	-.066	.158	.994	-.50	.37
		36-45	-.431	.166	.079	-.89	.03
		<b>46-55</b>	-.676	.164	<b>.001</b>	-1.13	-.22
		<b>Over55</b>	-1.063	.195	<b>.000</b>	-1.62	-.50
	26-35	18-25	.066	.158	.994	-.37	.50
		36-45	-.366	.160	.155	-.81	.08
		<b>46-55</b>	-.610	.157	<b>.002</b>	-1.04	-.18
		<b>Over55</b>	-.997	.190	<b>.000</b>	-1.54	-.45
36-45	18-25	.431	.166	.079	-.03	.89	
	26-35	.366	.160	.155	-.08	.81	
	46-55	-.245	.165	.577	-.70	.21	



		Over55	-.632*	.197	.021	-1.19	-.07
	46-55	18-25	.676*	.164	.001	.22	1.13
		26-35	.610*	.157	.002	.18	1.04
		36-45	.245	.165	.577	-.21	.70
		Over55	-.387	.194	.291	-.94	.17
	Over55	18-25	1.063*	.195	.000	.50	1.62
		26-35	.997*	.190	.000	.45	1.54
		36-45	.632*	.197	.021	.07	1.19
		46-55	.387	.194	.291	-.17	.94
Expected dividend	18-25	26-35	-.001	.166	1.000	-.46	.46
		36-45	-.448	.171	.074	-.92	.03
		46-55	-.758*	.166	.000	-1.22	-.30
		Over55	-.800*	.197	.002	-1.36	-.24
	26-35	18-25	.001	.166	1.000	-.46	.46
		36-45	-.447	.168	.065	-.91	.02
		46-55	-.757*	.162	.000	-1.21	-.31
		Over55	-.799*	.194	.002	-1.35	-.24
	36-45	18-25	.448	.171	.074	-.03	.92
		26-35	.447	.168	.065	-.02	.91
		46-55	-.310	.167	.351	-.77	.15
		Over55	-.352	.199	.405	-.92	.22
	46-55	18-25	.758*	.166	.000	.30	1.22
		26-35	.757*	.162	.000	.31	1.21
		36-45	.310	.167	.351	-.15	.77
		Over55	-.042	.194	.999	-.60	.51
	Over55	18-25	.800*	.197	.002	.24	1.36
		26-35	.799*	.194	.002	.24	1.35
		36-45	.352	.199	.405	-.22	.92
		46-55	.042	.194	.999	-.51	.60

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

Source: Survey data

#### 4.2.3 Marital Status and Investors' Investment Decision Making

Table 8: Influence of Marital Status on Investors' Investment Decisions

	Sum of Squares	df	Mean Square	F	Sig.
Past performance of the firm	2.140	2	1.070	1.604	.203
Company stability	.105	2	.052	.091	.913
Firm goodwill	1.613	2	.807	1.494	.226
Dividend paid	3.335	2	1.668	1.910	.150
Firm reputation in industry	2.082	2	1.041	1.894	.153
Expected earning	2.693	2	1.346	1.463	.233
Expected dividend	7.328	2	3.664	3.742	.025
Maximizing profit/returns	.147	2	.073	.099	.906

Source: Survey data

As results of the ANOVA shown in table 8, there was a statistically significant difference between marital status and expected dividend ( $F(02, 269) = 3.742, p < 0.05$ ). It implies that marital status were significantly related to expected dividend. As per the ANOVA results presented in the table 8, It was noted that there was no significant different between marital status and all other seven influencing factors on investment decision making. The homogeneity of variance of the marital status for the dividend paid was performed and results are presented in table 9.

Table 9: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Expected dividend	1.114	2	269	.030

Source: Survey data

Levene's test of homogeneity of variance of the marital status was performed and ascertained Levene's test was significant ( $F(2,269) = 1.114, p = 0.030$ ). Therefore, the assumption of homogeneity of variance was violated. Thus, this violation was warranted to perform Robust Tests of Equality of Means and results was found to be significant in table 10. Therefore, the Games-Howell post hoc test was pertained.

Table 10: Robust Tests of Equality of Means

	Statistic <sup>a</sup>	df1	df2	Sig.
Expected dividend Welch	3.924	2	28.595	.031

a. Asymptotically F distributed.

Source: Survey data

Table 11: Games-Howell Post Hoc Test of Multiple Comparisons

	(I) Marital status of respondent	(J) Marital status of respondent	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Expected dividend	Single	Married	-.326*	.133	.040	-.64	-.01
		Divorced	-.554	.252	.103	-1.21	.10
	Married	Single	.326*	.133	.040	.01	.64
		Divorced	-.228	.238	.618	-.86	.41
	Divorced	Single	.554	.252	.103	-1.10	1.21
		Married	.228	.238	.618	-.41	.86

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

Source: Survey data

From the table 11, the Games-Howell post hoc test of multiple comparisons for significance implied that the single status ( $M = 3.63$ ) was significantly different from the married status ( $M = 3.95$ ), with mean difference of .326 and a p value of .040. However, the single and divorced groups did not differ significantly.

#### 4.2.4 Educational Qualification and Factors Influencing on Investors' Investment Decision Making

Table 12 indicates the results of one-way ANOVA test between the different educational groups of participants and the identified most influencing factors on investment decisions.

Table 12: Influences on educational qualifications on individual investors decision making

	Sum of Squares	df	Mean Square	F	Sig.
Past performance of the firm	6.709	5	1.342	2.041	.073
Company stability	5.236	5	1.047	1.860	.102
Firm goodwill	4.724	5	.945	1.768	.120
Dividend paid	24.336	5	4.867	6.054	.000
Firm reputation in industry	1.525	5	.305	.547	.741
Expected earning	18.587	5	3.717	4.269	.001
Expected dividend	18.100	5	3.620	3.812	.002
Maximizing profit/ returns	4.133	5	.827	1.127	.346

Source: Survey data

As results of the ANOVA shown in table 12, there was a statistically significant difference between level of educational qualification and three influencing factors out of eight most influencing factors (dividend paid ( $F(05, 266) = 6.054, p < 0.05$ ); expected earnings ( $F(05, 266) = 4.269, p < 0.05$ ); and expected dividend ( $F(05, 266) = 3.812, p < 0.05$ ). It implies that

levels of educational qualification were significantly related to dividend paid, expected earnings and expected dividend. Further, it was revealed that there was no significant different between levels of educational qualifications and other five influencing factors on investment decision making (past performance of the firm ( $F(05, 266) = 2.041, p > 0.05$ ); company stability ( $F(05, 266) = 1.860, p > 0.05$ ); firm goodwill ( $F(05, 266) = 1.768, p > 0.05$ ); firm reputation in industry ( $F(04, 267) = .547, p > 0.05$ ); and maximizing profit/returns ( $F(05, 266) = 1.127, p > 0.05$ ).

The homogeneity of variance of the groups of educational qualification for the significant factors in the ANOVA performed and results are presented in table 13.

Table 13: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Dividend paid	1.976	5	266	.082
Expected earning	2.552	5	266	.028
Expected dividend	2.238	5	266	.051

Source: Survey data

Levene's test for homogeneity of variances tests whether the variance in scores is the same for each educational group. As per the results presented in table 13 expected earnings has violated the assumption of homogeneity of variances as it has significant value ( $p < 0.05$ ) for Levene statistics. However, dividend paid ( $p = 0.082$ ) and expected dividend ( $p = .051$ ) have not violated the assumption. It was further performed the Robust Test of Equality of Means (Welch test) and results are presented in table 14.

Table 14: Robust Tests of Equality of Means

		Statistic <sup>a</sup>	df1	df2	Sig.
Dividend paid	Welch	9.131	5	11.044	.001
Expected earning	Welch	4.612	5	10.893	.017
Expected dividend	Welch	6.371	5	11.069	.005

Source: Survey data

Welch test have been found to be significant for all variables in table 14. Therefore, Games-Howell post hoc test is performed for multiple comparison.



Table 15: Games- Howell Post Hoc Test of Multiple Comparisons

Multiple Comparisons							
Games-Howell							
Dependent Variable	(I) Educational qualification of respondent	(J) Educational qualification of respondent	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	G.C.E.(O/L) or less	G.C.E.(A/L)	-.250	.143	.504	-.67	.17
		Diploma	-.476	.183	.112	-1.01	.06
		Bachelor degree	-.623*	.156	.002	-1.08	-.17
		Post graduate degree	-1.077*	.154	.000	-1.53	-.62
		Any other	-1.000	.511	.609	-12.81	10.81
	G.C.E.(A/L)	G.C.E.(O/L) or less	.250	.143	.504	-.17	.67
		Diploma	-.226	.179	.805	-.75	.30
		Bachelor degree	-.373	.151	.139	-.81	.06
		Post graduate degree	-.827*	.149	.000	-1.27	-.39
		Any other	-.750	.509	.737	-12.86	11.36
	Diploma	G.C.E.(O/L) or less	.476	.183	.112	-.06	1.01
		G.C.E.(A/L)	.226	.179	.805	-.30	.75
		Bachelor degree	-.148	.190	.970	-.70	.40
		Post graduate degree	-.601*	.188	.025	-1.15	-.05
		Any other	-.524	.522	.879	-10.48	9.43
Expected earning	G.C.E.(O/L) or less	G.C.E.(A/L)	.156	.182	.955	-.38	.69
		Diploma	.031	.221	1.000	-.62	.68
		Bachelor degree	-.410	.189	.264	-.96	.14
		Post graduate degree	-.506	.185	.084	-1.05	.04
		Any other	-.237	1.012	.999	-25.97	25.49
	G.C.E.(A/L)	G.C.E.(O/L) or less	-.156	.182	.955	-.69	.38
		Diploma	-.125	.188	.985	-.68	.43
		Bachelor degree	-.566*	.148	.003	-.99	-.14
		Post graduate degree	-.662*	.144	.000	-1.08	-.24
		Any other	-.393	1.005	.995	-27.71	26.93
	Diploma	G.C.E.(O/L) or less	-.031	.221	1.000	-.68	.62
		G.C.E.(A/L)	.125	.188	.985	-.43	.68
		Bachelor degree	-.441	.195	.221	-1.01	.13
		Post graduate degree	-.538	.191	.069	-1.10	.02
		Any other	-.268	1.013	.999	-25.75	25.21
Bachelor degree	G.C.E.(O/L) or less	.410	.189	.264	-.14	.96	
	G.C.E.(A/L)	.566*	.148	.003	.14	.99	
	Diploma	.441	.195	.221	-.13	1.01	
	Post graduate degree	-.096	.152	.988	-.54	.35	
	Any other	.173	1.006	1.000	-26.84	27.19	

Table 15: Games- Howell Post Hoc Test of Multiple Comparisons

	Post graduate degree	G.C.E.(O/L) or less	.506	.185	.084	-.04	1.05
		G.C.E.(A/L)	.662*	.144	.000	.24	1.08
		Diploma	.538	.191	.069	-.02	1.10
		Bachelor degree	.096	.152	.988	-.35	.54
		Any other	.269	1.005	.999	-26.91	27.45
	Any other	G.C.E.(O/L) or less	.237	1.012	.999	-25.49	25.97
		G.C.E.(A/L)	.393	1.005	.995	-26.93	27.71
		Diploma	.268	1.013	.999	-25.21	25.75
		Bachelor degree	-.173	1.006	1.000	-27.19	26.84
		Post graduate degree	-.269	1.005	.999	-27.45	26.91
Expected dividend	G.C.E.(O/L) or less	G.C.E.(A/L)	.011	.173	1.000	-.50	.52
		Diploma	.127	.224	.993	-.53	.78
		Bachelor degree	-.214	.192	.875	-.77	.35
		Post graduate degree	-.802*	.184	.001	-1.34	-.26
		Any other	-.763	.520	.735	-10.95	9.42
	G.C.E.(A/L)	G.C.E.(O/L) or less	-.011	.173	1.000	-.52	.50
		Diploma	.116	.195	.991	-.46	.69



	Bachelor degree	-.224	.158	.715	-.68	.23
	Post graduate degree	-.812*	.148	.000	-1.25	-.38
	Any other	-.774	.509	.724	-12.97	11.43
Diploma	G.C.E.(O/L) or less	-.127	.224	.993	-.78	.53
	G.C.E.(A/L)	-.116	.195	.991	-.69	.46
	Bachelor degree	-.341	.212	.598	-.96	.28
	Post graduate degree	-.929*	.205	.000	-1.53	-.33
	Any other	-.890	.528	.667	-10.02	8.24
Bachelor degree	G.C.E.(O/L) or less	.214	.192	.875	-.35	.77
	G.C.E.(A/L)	.224	.158	.715	-.23	.68
	Diploma	.341	.212	.598	-.28	.96
	Post graduate degree	-.588*	.170	.011	-1.08	-.09
	Any other	-.549	.516	.860	-11.48	10.38
Post graduate degree	G.C.E.(O/L) or less	.802*	.184	.001	.26	1.34
	G.C.E.(A/L)	.812*	.148	.000	.38	1.25
	Diploma	.929*	.205	.000	.33	1.53
	Bachelor degree	.588*	.170	.011	.09	1.08
	Any other	.038	.513	1.000	-11.40	11.48
Any other	G.C.E.(O/L) or less	.763	.520	.735	-9.42	10.95
	G.C.E.(A/L)	.774	.509	.724	-11.43	12.97
	Diploma	.890	.528	.667	-8.24	10.02
	Bachelor degree	.549	.516	.860	-10.38	11.48
	Post graduate degree	-.038	.513	1.000	-11.48	11.40

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

Source: Survey data

Games-Howell post hoc test of multiple comparisons revealed that the dividend paid factor of investors with post graduate degree were significantly different from investors with the educational qualification of G.C.E.O/L or Less, G.C.E.A/L and Diploma. The mean differences between the postgraduate degree holders and the educational groups of G.C.E.O/L or Less, G.C.E.A/L and Diploma are .623, 1.077, .827 and .601 respectively. Also investors with the G.C.E.(O/L) was significantly different with the bachelor degree holders with the mean difference was .623. Therefore, it could be concluded that there was a significance difference in the dividend paid factor of individual investors on their educational qualifications. Further, results illustrated that the expected earnings of investors with G.C.E.(A/L) was significantly different with the bachelor degree (mean difference = .566) and Postgraduate degree (mean difference = .662). Finally, the expected dividend factor of investor with the postgraduate degree was significantly different from investors with the G.C.E.(O/L), G.C.E.(A/L), Diploma and bachelor degree. 5% level of significant mean differences were .802, .812, .929 and .588 respectively.

#### 4.2.5 Monthly Income and Factors Influencing on Investors Decision Making

Table 16: Impact of different income groups on Factors influencing investors decision making



	Sum of Squares	df	Mean Square	F	Sig.
Past performance of the firm	2.866	4	.717	1.070	.372
Company stability	9.321	4	2.330	4.271	.002
Firm goodwill	5.375	4	1.344	2.537	.040
Dividend paid	8.647	4	2.162	2.515	.042
Firm reputation in industry	1.306	4	.326	.586	.673
Expected earning	4.962	4	1.240	1.350	.252
Expected dividend	11.458	4	2.865	2.950	.021
Maximizing profit/returns	2.889	4	.722	.982	.418

Source: Survey data

As results of the ANOVA shown in table 16, there was a statistically significant difference between different income groups and four influencing factors out of eight most influencing factors (company stability ( $F(04, 267) = 4.271, p = 0.002$ ); firm goodwill ( $F(04, 267) = 2.537, p = 0.040$ ); dividend paid ( $F(04, 267) = 2.515, p = 0.042$ ); and expected dividend ( $F(04, 267) = 2.950, p = 0.021$ ). It explained that different income groups are significantly related to company stability, firm goodwill, dividend paid and expected dividend. Further, it was revealed that there was no significant difference between different income groups and other four influencing factors on investment decision making (past performance of the firm ( $F(04, 267) = 1.070, p = 0.372$ ); firm reputation in the industry ( $F(04, 267) = .586, p = 0.673$ ); expected earnings ( $F(04, 267) = 1.350, p = 0.252$ ) and maximizing profit/returns ( $F(04, 266) = .982, p > 0.418$ ).

The homogeneity of variance of the different income groups for the significant factors in the ANOVA were performed and results are presented in table 17.

Table 17: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Company stability	.476	4	267	.754
Firm goodwill	.468	4	267	.759
Dividend paid	1.525	4	267	.195
Expected dividend	2.472	4	267	.045

Source: Survey data

Levene's test for homogeneity of variances tests whether the variance in scores is the same for each income groups. As per the results presented in table 17, expected dividend has violated the assumption of homogeneity of variances as it has significant value ( $p < 0.05$ ) for Levene statistics. However, company stability ( $p = .754$ ), firm goodwill ( $p = .759$ ), and dividend paid ( $p = 0.195$ ) have not violated the assumption. It was further performed the Robust Test of Equality of Means (Welch test) and results are presented in table 18.

Table 18: Robust Tests of Equality of Means

		Statistic <sup>a</sup>	df1	df2	Sig.
Company stability	Welch	5.551	4	33.199	.002
Firm goodwill	Welch	2.363	4	32.780	.043
Dividend paid	Welch	3.138	4	32.597	.027
Expected dividend	Welch	5.284	4	34.738	.002

a. Asymptotically F distributed.

Welch test have been found to be significant for all variables in table 18. Therefore, Games-Howell post hoc test is performed for multiple comparison.

Games-Howell post hoc test of multiple comparisons exposed that the company stability factor of investors with monthly income of LKR 50,000 or less were significantly different from

investors with the monthly income 75,000-100,000 and 125000 - 150,000. The mean differences between the monthly income group of LKR 50,000 or less and the income group of 75,000-100,000 and 125000-150000 are .407 and .815 respectively. Firm goodwill and dividend paid factors did not show any differences between the income group of investors. However, expected dividend factor of investor with the income of LKR 50,000 or less were significantly different with the monthly income 75,000-100,000 and 125000 - 150,000. The mean differences between the monthly income group of LKR 50,000 or less and the income group of 75,000-100,000 and 125000-150000 are .513 and .824 respectively.

Results of the study was supported with the hypothesis of the study that socio economic characteristics of individual investors (gender, age, marital status, educational qualification and monthly income) have significant influence on individual investors investment decision making.

### **Conclusion**

Aims of the study were to identify factors that influence on investment decisions of individual investors and to look at how these factors are connected to the investors' socio-economic characteristics in the Sri Lankan Stock Market. The study covers individual investors from all five districts belong to the Northern Province of Sri Lanka and data were marshalled from 272 individual investors with a self-administrated questionnaire using a convenient sampling technique. The collected data were then analysed with a number of statistical techniques including Independent t- test, Analysis of variance (ANOVA) and relevant post hoc tests. The study identified eight most influential factors on investment decisions: past performance of the company's stock, company stability, firm's goodwill, firm's reputation in the industry, dividend paid, expected corporate earnings and expected dividend. Further results highlighted seven least influencing factors on investment decisions: opinions of firm's majority stockholders, easy to obtaining borrowing funds, diversification needs, friends/co-workers' opinions, forms governing body and social status. The study disclosed that the socio-economic characteristics of investors (age, gender, marital status, educational qualifications and monthly income) have a statistically significant impact on the investment decisions of individual investors. The study has made a theoretical contribution and proffers many useful practical implications to the investors, practitioners and policy makers.

Investors have got awareness on the most influencing factors in order to achieve their ultimate objective of maximizing wealth. Policy makers and administrators of the companies have identified which factors are focusing by investors to make their investment decisions. Therefore, current study identified eight most important factors and seven least important factors to influence their investment decisions. Also then it was identified how these most important factors related to socio economic factors of investors.

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