STOCK MARKET IMAGE- INVESTORS' OVERALL PERCEPTION TOWARDS CAPITAL MARKET:
EVIDENCE FROM THE COLOMBO STOCK EXCHANGE (CSE)

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Abstract

If a strong and dynamic stock market to be sustained, it has to be positively perceived by the investing public. With that backdrop, the main drive of this research was set to examine how the retail investors perceive the Colombo Stock Exchange (CSE) as an investment vehicle. The research identifies the overall perception of investors towards the stock market as the 'stock market image'. A quantitative research approach was adopted in this study and cross-sectional survey was conducted to collect empirical data from 173 retail investors by utilizing structured self-administered questionnaire. The factor analysis produced a model with eight dimensions to measure the stock market image viz., Wealth Creating Capacity, Immorality, Fast Money, Market Regulators, Economic Bellwether, Tilted Playing Ground, Monitoring and Enforcement and Market Facilitators. According to the analysis the retail investors are in a firm notion that the CSE favors the large, sophisticated investors at the expense of small investors and they are more likely to perceive the CSE as an unethical, corrupted and gambling like venue. However, the retail investors are somewhat positive about the stock market facilitators and the CSE's ability to support wealth creation. A segmentation of retail investors was carried out using stock market image dimensions by implementing the cluster analysis. These clusters were found to be significantly distinct to each other, revealing the fact that retail investors have a widely heterogeneous perception on the CSE ranging from positive to negative. Further, the analysis discloses that the stock market image is not significantly influenced by the investor characteristics, gender, education level, investment experience, age and financial literacy.

Key words: Stock Market Image, Investors' perception, Retail investors, Stock market participation

Introduction

Sri Lanka being an emerging economy in South Asia, the role played by the Colombo Stock Exchange (CSE) considered to be vital for the smooth functioning of the country's economy. According to the MSCI security market classification 2017, the CSE is classified as a frontier market. One of the main challenges faced by the CSE as a frontier market is the lack of liquidity. The lacklustre local retail participation in the market activities is one of the key reasons for the low liquidity (Hargis, 2000). As pointed out by Nizam (2015), CSE has one of the lowest participation rate of local retail investors, as it has lost a considerable number of retail investors, largely due to a lack of investor confidence and trust in Sri Lanka's capital market.

An investor base with different investment horizons and perspectives is always vital to the development of any stock market. Thus, increasing the investor base is a crucial goal for stock market regulators, exchanges and issuers (Peterhoff et al.,2016).

As Dobni and Racine (2015) pointed out, when the individual investors are pessimistic about the stock market, it is very challenging to achieve the most important purpose of a stock market that is to bring businesses with masses of investors together. When the stock exchange fails to achieve its key purpose, it will not perform as intended and will not contribute to the economy as expected. Therefore, investors' perceptions towards the stock exchange as an investment vehicle can be considered as a critical factor that determines the performance of the stock market

Given the context, it is a matter of how retail investors grasp the stock market as a whole and whether the investors are pessimistic or optimistic about the stock market. Thus, it is sensible to study how retail investors perceive the stock market as an investment vehicle. Generally, perception is a process of interpreting something that people see or hear in their mind and use it later to judge and give a verdict on a situation, person, group or organization (Robbins and Judge, 2013). When it comes to investors, it is a process of acquiring and interpreting information coming from various sources in the investment environment. According to Lovric, Kaymak and Spronk, (2008), perception is a crucial factor that describes how investors interact with the investment environment.

As suggested by Dobni and Racine (2015), the overall perception or impression of individual investors can crystallize an "image" for the stock market and guide individual investors towards employing deliberative investment strategies. In other words, investors' overall perception towards the stock market is indispensable as it influences the investors' potential behaviors, expectations, beliefs, and experiences including the choice to avoid or participate in the stock markets. Further, stock market image can be used to position the stock exchange as a sound place for people that invest regularly to create wealth and maintain stock holding that strengthen the free enterprises (Traflet, 2012; Bravo, Montaner and Pina, 2012). In fact, stock market regulators and facilitators should take necessary actions to upsurge the liquidity, improve the efficiency, and ensure the fairness of trading in the market in order to make investors more optimistic about the stock market and attract and retain more and more retail investors towards the market (Peterhoff et al., 2016). Thus, the concept of "image" is very relevant and applicable to the stock markets as it is to any other institution.

Literature Review

During last few decades, several researchers have attempted to recognize and establish the significance of subjective impressions of retail investors in the context of stock markets. MacGregor et al. (2000) conducted a research to investigate the influence of corporate image and industry on individual investor decision making behavior, and further MacGregor (2002) revealed that the behavior of the lay investors is strongly influenced by their impressions towards the company and industry. Brown (2004) conducted a survey among the investors in order to identify their perceptions towards the stock market. In the survey, it was revealed that

there is a huge concern among the investors regarding the ethical platform, dishonesty in the securities industry, consumer protection and accountability when it comes to building confidence towards the stock market.

In 2006, Keller and Siegrist observed the perception of investors towards stock market as a profit making, unethical, or casino like place and attempted to predict the behaviors related to having investment portfolios and security trading. This study identifies segments of individual investors based on their attitudes towards money; financial security and financial matters, investments in stocks, immorality of the stock market, gambling and savings. Guiso, Sapienza and Zingales (2008) observed that there is an impact of general lack of trust on stock market participation. In deciding whether to buy stocks, investors are influenced by the perceived risk of being cheated. In other words, investors not having much trust are less likely to buy stock.

Dobni and Racine (2015) introduced the concept of stock market image and defined it as the overall perception of the retail investors towards the stock market. He further extended the knowledge on investor perception by introducing six dimensions model on stock market image. Further the finding of the research discloses that retail investors have widely heterogeneous perceptions towards the stock market ranging from highly positive to highly negative. In 2016, Dobni and Racine attempted to study the antecedents and consequences of stock market image, and the stock market image is defined as the sum of impressions about the stock market. They attempted to comprehend how various personality-oriented, cognition-based, and demographic variables affect investors' images of the stock market and how these images influence investing behaviors and outcomes. Verma (2008) also provided evidences to support the fact that the investors' perception is influenced by the gender, age, income, education, occupation and personality types of the investor.

However, while reviewing the literature pertinent to the study, it was uncovered that lack of studies conducted to examine the investors' perception towards the stock market in different contexts. When it comes to the studies that had been conducted in relation to the CSE, the attention given to the perceptions of retail investors in the stock market had been considerably inadequate. Thus, it was quite apparent that there is a gap of knowledge in this particular area which needs to be addressed by conducting more researches. Thus, it is sensible to focus on how investors perceive the stock market as an investment vehicle. Hence, the purpose of this research was to study the overall perception of retail investors towards the Colombo Stock Exchange.

Research Objectives

1. To identify the dimensions of the overall perception of retail investors towards the Colombo Stock Exchange (CSE).
2. To measure the overall perception of the retail investors towards the Colombo Stock Exchange (CSE).
3. To examine the influence of investor characteristics on the overall perception of investors towards the Colombo Stock Exchange (CSE).

Research Methodology

The quantitative research approach was adopted in this study and survey method was utilized as the main research strategy, as it allows the researcher to identify attributes of a large population from a small group of individuals (Fowler, 2013). Cross-sectional surveys are often conducted to assess the frequency with which people perform certain behaviors or the number of people who hold a particular perception, attitude or belief (Reis and Judd, 2014). Therefore, the current research which is based on studying the overall perception of retail investors towards the CSE employs the cross-sectional survey method.

The cross-sectional survey was conducted utilizing online structured self-administered questionnaire. The questionnaire was designed primarily based on the 5-point Likert scale. It contains three sections. The first section is comprised of seven (07) questions to gather demographic data of the retail investors. The second section includes forty two (42) statements adopted from Dobni and Racine (2015, 2016), Brown (2004), Keller and Siegrist (2006), Guiso, Sapienza and Zingales (2008), Qureshi et al., (2014) in order to assess the overall perception of investors towards the CSE. The third section of the questionnaire was designed to measure the financial literacy of the retail investors with eight (08) financial literacy questions which are adopted from Lusardi and Mitchell (2007). A pilot test was undertaken with the purpose of testing the questionnaire for internal consistency reliability with a sample of thirty-two (32) investors. Initially all forty-two (42) stock market image statements were tested for Cronbach's alpha and the modifications were done accordingly. As a result, four (04) image statements were removed from the questionnaire which reduced the number of items down to thirty-eight (38).

Non-probability sampling method was adopted in the absence of a proper sample frame. Even though a list of investors registered in the CSE is maintained by the Central Depository System (CDS), the relevant information is confidential and not publicly available. The type of non-probability sampling used in this study is judgmental sampling method. In this case, people having a proper knowledge about the particular issue are selected as sample elements (Hair et. al. 2007). In fact, the sample respondents of the study were expected to be knowledgeable current investors in the CSE. For this study, the sample has been drawn from the local retail investors at the CSE.

The quantitative data was analyzed utilizing statistical methods. The validity and the reliability of the measurement model were established by assessing the convergent validity, discriminant validity and internal consistency reliability. The Exploratory Factor Analysis (EFA) was implemented to identify the dimensions of stock market image. In order to examine the influence of key investor characteristics on the stock market image, independent sample t-test, one-way ANOVA and correlation analysis were employed. K-Means clustering process was applied to derive a typology of retail investors based on the stock market image. This is an iterative procedure that produces compact clusters by minimizing within-cluster variance and maximizing between-cluster differences (Punj and Stewart,1983). And SPSS 20.0 was utilized as the major analytical tool.

Data Analysis

Sample Profile

The sample consisted of 173 retail investors among whom the self-administrated questionnaires were distributed. And the response rate was 86.5% and was well above the acceptable level (Baruch and Holtom, 2008).

Table1: Sample Profile

Gender		Marital Status		Age		
Male	Female	Married	Single	20 - 30	31 - 40	41 -50
73%	27%	64%	36%	27%	48%	25%
Education Level						
A/L		Diploma		Degree		Master or above
12%		19%		52%		17%
Investment Experience						
1-4 Years		5-9 Years		10-14 Years	15-20 Years	>20 Years
45.1%		42.2%		19%	1.1%	0.6%
Portfolio Return (Rs.)						
> 300,000		300,000 – 600,000		600,000 – 900,000		900,000 – 1200,000
41%		34%		14%		12%

Source: Survey Data 2017

As demonstrated in Table 1 below, it is apparent that female investors are substantially lower in the CSE. Most of the respondents belong to the age group between 31 - 40 years which accounted for 48% of the sample. 88% of the respondents were educationally qualified at least up to diploma level. The majority, which is 82.1% of the sample, have realized an annual return between 12% - 20% and 55% of the sample respondents had investment experience of more than 05 years. These findings imply that the respondents were educated enough and possess enough experience in the stock market and therefore they are in a good position to understand and comment on the various statements in the questionnaire about CSE. Hence, the information obtained from the respondents can be considered factual and representative.

The Factor Analysis

An Exploratory Factor Analysis was preferred to be utilized, as it enables the researcher to identify several dimensions that determine overall perception of the retail investors towards the CSE. All thirty-eight (38) items were subjected to the factor analysis. According to the Table 2 the KMO value is 0.740. Hence, there is satisfactory evidence to indicate the multivariate normality among variables in the data and claim that the factor analysis is appropriate for these data (Kaiser, 1974). Further, as the Table 2 reports, the Bartlett's test is highly significant (P = 0.000). The factors extracted for the further analysis are shown in Table 2. There are eight (08) factors in the initial solution and have been referred as the stock market image dimension in the further analysis. Together, they account for 66.26% of the variability of the original construct.

As depicted in the Table 2, the first dimension is "Wealth Creating Capacity" and there are 05 items loaded together to create this dimension. All these indicators have one thing in common and that is the ability of accumulating reliable and rewarding financial assets that generate future income over a long period of time in the CSE. It measures how far the stock market is perceived by the retail investors as a better venue to build wealth. There are 05 items loaded together to form the second dimension which is "Immorality". All these items measure whether the stock market is corrupted or manipulated. The third dimension is "Fast Money" and there are 04 items loaded under this dimension which measure the ability of making quick money in CSE, in other words the ability of making profitable short-term trades in the stock market. The fourth dimension is "Stock market Regulators". It comprises 04 items which are centered to one common notion that stock market regulators do a decent job in safeguarding investor interests. It measures the effectiveness and trustworthiness of stock market regulators in CSE. The fifth dimension is "Economic Bellwether" and it consists of 04 indicators that measure whether the stock market plays a significant role in order to contribute to and foreshadow economic growth of the country. In fact, it specifies, to what extent the stock market is believed to be a leading indicator of the direction of the economy. There are all together 04 items loaded in to the sixth dimension which is "Tilted Playing Field" and it specifies the extent to which the CSE is perceived as a venue that favors large investors at the expense of small lay investors. The seventh dimension encompassed 04 items which measure the perceived effectiveness and trustworthiness of monitoring and enforcement mechanisms of the CSE. Therefore, this factor is labeled as "Monitoring and Enforcement". The eighth dimension is "Market Facilitators" and there are 03 items loaded together under this dimension which show the investors' perceived competency, effectiveness and trustworthiness of stock market facilitators at CSE.

Table 2: Factor Loadings *(N =173)*

Dimensions	Items	Factor Loadings
Wealth Creating Capacity (WCC)	CSE is sound for long-term investments	0.905
	CSE is one of the safest investment options available for investors.	0.801
	Investors are exposed to greater financial risk out of the stock market rather than being in it.	0.787
	If someone is serious on building wealth, CSE is a better investment vehicle.	0.731
	Chances in CSE are in favor of the investors willing to build wealth.	0.538
Immorality (IMO)	Trading at the CSE is rigged	0.828
	Insider dealing is common in the CSE.	0.757
	Investing at the CSE is gamble like.	0.743
	The Colombo Stock Exchange (CSE) is corrupted	0.673
	Losses and gains at CSE are matter of chance / luck.	0.600
Fast Money (FMN)	CSE is a better place to go for short-term trades.	0.875
	CSE is a better venue for making quick gains	0.871

	It is easy to pick individual stocks that will have a better return than the average return of CSE.	0.753
	The key to successful stock market investing is hot tips.	0.619
Market Regulators (MRG)	Market Regulators in CSE are trustworthy.	0.853
	Investors are sufficiently protected by anti-fraud & mandatory disclosure rules.	0.765
	Investors are adequately protected by rules and regulations at CSE.	0.687
	Stock market regulators do a good job in safeguarding investor interests.	0.644
Economic Bellwether (EBW)	CSE is a good measuring stick of the health of the economy.	0.840
	CSE is one of the vital components of the Sri Lankan economy	0.826
	CSE has little relevance to real economic activity (Recode)	0.605
	CSE plays an important role in supporting the growth of the country.	0.511
Tilted Playing Field (TPF)	Skilled, sophisticated investors can consistently make money in CSE.	0.792
	It is difficult for small investors to be successful in CSE.	0.766
	CSE is dominated by large (institutional) investors.	0.695
	Access to information at CSE is equitable for all investors (Recode)	0.626
Monitoring and Enforcement (MEN)	Effective mechanisms to address investor complaints and queries.	0.769
	In case of an abuse, there are adequate mechanisms to compensate the victims.	0.732
	Adequate measures to monitor and detect allegations / manipulations at CSE.	0.708
	Effective mechanisms to discourage investor abuse and to impose penalties.	0.705
Market Facilitators (MFT)	FSPs in CSE provide useful Information to make sound investment decisions.	0.875
	Financial Service Professionals (FSP) in CSE are trustworthy & honest.	0.815
	FSPs in CSE work for the best interest of investors.	0.700

Note: Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy:0.740,
Bartlett's Test of Sphericity: Chi-Square: 3253.717 (P = 0.000)
Source: Survey Data 2017

Reliability and Validity

When deploying measurement models, great consideration must be given to the rigor of the study (Sekaran and Bougie, 2010). In quantitative research this can be achieved by establishing acceptable levels of goodness-of–fit by finding specific evidence of validity and reliability. Here the approaches to convergent validity, discriminant validity and internal consistency reliability of the measurement model are discussed.

Table 3: Validity and Reliability Coefficients

Dimensions	No. Items	Construct Factor Loadings	Cronbach's alpha	AVE	Composite Reliability
WCC	5	0.752	0.859	0.581	0.871
IMO	5	0.720	0.817	0.525	0.845
FMN	4	0.737	0.839	0.619	0.864
MRG	4	0.737	0.785	0.55	0.828
EBW	4	0.696	0.777	0.504	0.796

TPF	4	0.720	0.761	0.522	0.813
MEN	4	0.729	0.723	0.531	0.819
MFT	3	0.797	0.791	0.640	0.819

Source: Survey Data 2017

Convergent validity can be established when each measurement item correlates strongly with its assumed theoretical construct (Sekaran and Bougie, 2010). The size of the Construct Factor Loadings and Average Variance Extracted (AVE) provides evidence of convergent validity. AVE could be defined as the amount of common variance among latent construct indicators (Hair et al., 1998). As seen in the Table 3, all AVE values and factor loadings are greater than 0.5 and ranging from 0.504 to 0.640 and for all the constructs, the above table displays high construct factor loadings (with a majority above 0.70), therefore demonstrating the convergent validity (Fornell and Larcker, 1981).

Composite reliability measures the overall reliability of a set of items loaded on a latent construct. It approximates the degree to which a set of indicators (items) connected to latent construct share their part in the measurement of the construct (Hair et al., 2007). Composite reliability ratios of all constructs are higher than 0.70, indicating the adequate reliability of the model (Fornell and Larcker, 1981). Cronbach's alpha is a measure of internal consistency of items in the measurement model. As per the Table 3 all the alphas of constructs have a value higher than 0.70, indicating adequate level of internal consistency reliability of measurement model (Sekaran and Bougie, 2010).

Discriminant validity is the extent to which a construct is truly distinct from other constructs in the model. The rule of thumb for assessing discriminant validity requires that the square root of AVE to be larger than the all correlations between constructs (Cooper and Zmud, 1990, Hair et al., 1998). A proof of discriminant validity is presented in Table 4. The diagonal items in the table represent the square root of AVE values which is a measure of variance between construct and the off-diagonal items represent the correlations between constructs.

Table 4: Factor Correlation Matrix and AVE

	WCC	IMO	FMN	MRG	EBW	TPF	MEN	MFT
WCC	**0.762**							
IMO	0.373	**0.724**						
FMN	0.317	0.270	**0.787**					
MRG	0.353	0.272	0.159	**0.742**				
EBW	0.304	0.315	0.448	0.355	**0.710**			
TPF	0.235	0.359	0.364	0.191	0.332	**0.723**		
MEN	-0.016	-0.127	-0.110	-0.051	-0.137	-0.082	**0.729**	
MFT	0.210	0.189	0.181	0.221	0.201	0.249	0.075	**0.800**

Note: Diagonal are square root of AVE
Source: Survey Data 2017

Descriptive Analysis of Stock Market Image Dimensions

One of the main objectives of the study is to measure the overall perception of the retail investors towards the CSE. The above discussion has already established the reliability and the validity of eight stock market image dimensions generated by the factor analysis. Therefore, those dimensions and indicators could be utilized as a model to measure the overall perception of the retail investors (stock market image) towards the CSE. The Table 5 below displays the overall score given by the retail investors for the stock market image dimensions.

According to the above table, the mean value of the WCC is 3.80, and it proves that the retail investors are somewhat positive about the CSE's ability to support long-term wealth creation. In other words, investors agree on the fact that the CSE is a dependable and a lucrative investment vehicle to build long term financial assets. IMO is accounted for a mean value of 3.83, and it indicates that the investors are more likely to perceive the CSE as an unethical, corrupted and gambling like place. In other words, investors are more concerned that the CSE is rigged, corrupted and lacks integrity. The recorded mean values for MRG and MFT are 3.07 and 3.65 respectively, and it confirms that the retail investors are more neutral about the market regulators and slightly positive about market facilitators at the CSE.

FMN records a mean score of 2.96 indicating that the investors have a more neutral notion about the CSE being a venue for making quick gains. Similarly, investors are neutral

Table 5: Descriptive Statistics of Stock Market Image Dimensions

	Minimum	Maximum	Mean	Std. Deviation
WCC	1.80	4.80	3.80	0.546
IMO	2.20	4.80	3.83	0.538
FMN	1.75	3.75	2.96	0.495
MRG	1.75	4.00	3.07	0.489
EBW	1.50	4.00	3.11	0.524
TPF	2.25	5.00	4.14	0.504
MEN	1.50	3.75	2.84	0.561
MFT	1.00	4.67	3.65	0.634

Source: Survey Data 2017

about CSE's role as an economic bellwether (EBW) and the mean value is 3.11. EBW measures the extent to which the stock market is perceived to contribute to and foreshadow the economic growth. However, relative to all other image dimensions, TPF is highly rated with a mean value of 4.14 and supported by the belief that the CSE favors large, sophisticated investors at the expense of small lay investors. The mean value recorded against MEN is 2.84, and it indicates that investors are more neutral about the monitoring and enforcement mechanisms of the CSE.

Investor Characteristics and the Stock Market Image

One of the main objectives of this study was to test the influence of investor characteristics on stock market image. Here the stock market image dimensions were tested against a number of investor characteristics, gender, age, education level, investment experience and financial literacy of the retail investors.

Table 6: Investors' Demographic Characteristics vs Stock Market Image

	Gender		Education Level		Investment Experience		Age	
	t-test		ANOVA		ANOVA		ANOVA	
	t - value	Sig.	F-value	Sig.	F-value	Sig.	F-value	Sig.
WCC	-0.756	0.45	0.788	0.50	0.53	0.71	1.086	0.34
IMO	0.136	0.89	0.068	0.97	1.200	0.31	1.265	0.29
FMN	-0.068	0.94	0.079	0.97	0.471	0.75	1.496	0.23
MRG	-0.194	0.84	1.118	0.34	0.699	0.59	0.795	0.45
EBW	0.341	0.73	0.327	0.80	0.912	0.45	0.941	0.39
TPF	0.692	0.49	0.063	0.97	0.44	0.78	1.075	0.34
MEN	1.397	0.16	2.13	0.09	0.956	0.43	0.441	0.64
MFT	-0.081	0.93	0.799	0.49	0.209	0.93	0.518	0.59

Source: Survey Data 2017

An independent sample t-test was carried out in order to determine whether there is a significant difference between males and females related to stock market image dimensions. The eight image dimensions (Wealth Creating Capacity, Immorality, Fast Money, Market Regulators, Economic Bellwether, Tilted Playing Field, Monitoring and Enforcement, Market Facilitators) were tested against gender. Table 6 presents the p-values of the test when equal variance is assumed. According to the finding of the Table 6, all the p-values are well above 0.05 which supports the null hypothesis of the test that is the means of male and female groups are equal. It confirms that there is no any statistically significant difference between gender groups related to stock market image dimensions.

The ANOVA test was utilized to determine whether there are significant differences among education levels in relation to the stock market image dimension. There are 4 levels of education, viz; A/L, Diploma, Degree and Master or above. According to the Table 6 above, the p-values are well above 0.05 for all stock market image dimensions. This implies that the null hypothesis is substantiated. That is, there are no any significant differences in the means of all stock market image dimensions against education levels of investors, Hence, it is evident that there is no any significant influence of education level on stock market image dimensions at the $p < 0.05$ level.

Table 6 above reports the result of the ANOVA test performed to determine whether there are significant differences in stock market image dimensions based on the investment experience of the retail investors. As shown in the Table 4.24 above, the p-values pertaining to all the eight

image dimensions are well above 0.05. Therefore, there is no evidence to prove that stock market image dimensions are significantly influenced by the investment experience at the $p < 0.05$ level.

Table 6 depicts the outcome of ANOVA carried out to test whether there are significant differences in stock market image dimensions in relation to the age of the investors. As revealed in the Table 4.25 above, the p-values related to all the image dimensions are higher than 0.05 level. It indicates that stock market image dimensions are not significantly influenced by the age of the retail investors.

Above results confirm that the investors, overall perception on stock market (stock market image) is homogeneous across all the demographic characteristics of the investors which were tested above. Thus, it can be concluded that the stock market image is not influenced by gender, age, education level, investment experience of the investor.

Investors' Financial Literacy and Stock Market Image

The financial literacy score of the retail investors are presented in the table 4.26. And it depicts that most respondents have given the correct answer for the all eight questions, showing that they have a relatively high level of knowledge about how the stock market operates and the riskiness of the different financial assets. They are also relatively less knowledgeable about mutual funds and the risk and returns of the mutual funds. But the most difficult question was the one that tested the relationship between bond prices and interest rates, for which only about 47.4% of the sample provided the correct answer.

Table 7: Results of Financial Literacy Questions

Financial Literacy Questions (indicators)		Correct		Incorrect	
		Frequency	Percentage	Frequency	Percentage
Q1	Main function of the stock market.	125	72.30%	48	27.70%
Q2	Knowledge of mutual fund.	116	67.10%	57	32.90%
Q3	Relationship between interest rate and bond prices	82	47.40%	91	52.60%
Q4	What is safer: company stock vs stock mutual fund	112	64.70%	61	35.30%
Q5	Which is riskier: stocks vs bonds	140	80.90%	33	19.10%
Q6	Highest return over long period: savings accounts, bonds or stocks	147	85.00%	26	15.00%
Q7	Highest fluctuations: savings accounts, bonds, stocks	143	82.70%	30	17.30%
Q8	Risk diversification	106	61.30%	67	38.70%

Source: Survey Data 2017.

Only 6.9% of respondents could answer all the financial literacy questions accurately and 1.7% of respondents answered only two questions accurately which is the lowest score recorded by a respondent. However about 78% of the sample investors have given correct answers for at least 05 questions out of 08. The mean value of the Financial Literacy Score is 5.61 while the

stranded deviation is 1.14. Based on above facts, it can be concluded that the investors in the sample have relatively high level of financial literacy (70%).

Table 8: Financial Literacy and Stock Market Image Dimensions

	WCC	IMO	FMN	MRG	EBW	TPF	MEN	MFT
Financial Literacy	-.052	-.065	-.049	-.031	-.027	.008	.094	-.095
Sig. (2-tailed)	.496	.397	.520	.684	.723	.921	.219	.216

Source: Survey Data 2017

Correlation analysis was utilized in order to test the relationship between Financial Literacy Score of retail investors and the stock market image dimensions. Table 8 does not provide enough statistical evidences to establish the relationship between each stock market image dimension and financial literacy score of the retail investors as none of the correlation coefficients are significant at 0.05 level ($p > 0.05$).

Cluster Analysis

In the study, the cluster analysis was utilized to validate the possible segmentations of data about the overall perception towards CSE of the groups of people who share some common characteristics.

Table 9: Cluster Centers for the Stock Market Image

	Cluster 1 n = 31 (17.9%)	Cluster 2 n = 76 (43.9%)	Cluster 3 n = 66 (38.2%)	(ANOVA) F Stat.	Significant (p < 0.05) Bonferroni Paired Comparisons
WCC	3.38	3.69	4.12	28.80*	3-2,2-1, 3-1
IMO	3.23	3.81	4.14	46.21*	3-2, 2-1, 3-1
FMN	2.66	2.80	3.30	35.51*	3-2, 3-1
MRG	2.74	2.95	3.35	25.94*	3-2, 3-1
EBW	2.55	2.99	3.52	75.37*	3-2, 2-1, 3-1
TPF	3.73	4.05	4.45	34.18*	3-2, 2-1, 3-1
MEN	2.76	3.05	2.63	11.98*	3-2, 2-1
MFT	3.03	3.71	3.88	24.66*	2-1, 3-1

Note: * $p < 0.05$
Source: Survey Data 2017.

The K-Means clustering process was employed in this study. Several cluster solutions were generated-ranging from two to six clusters. As the cluster solutions with four, five and six clusters produced very low cluster memberships; the cluster solution with three clusters was selected based on the criteria of interpretability, practicality, and communicability as suggested by Dobni and Racine (2015). The three-cluster solution provides a better contrast between the clusters. The final cluster centers are presented in Table 9 below and all the F values are statistically significant at 0.05 ($p < 0.05$) level. Thus, it can be confirmed that the clusters

significantly differ from each other in terms of stock market image dimensions. And the last column of the Table 9 below displays the significant pairs of clusters at 0.05 level (Post-Hoc tests).

Cluster 01

As shown in the Table 9 above, this cluster represents 17.9% of the sample and 31 retail investors in number. The members of the cluster 01 have pessimistic insights about the stock market's role as an economic bellwether. In other words, they just do not perceive the stock market as an important engine of economic growth of the country. They do not think that the stock market is a venue for making quick returns and are more neutral about the stock market's ability to support long-term wealth creation. They are little concerned about the fact that the stock exchange lacks integrity, and slightly agreed with the notions that the CSE is rigged, unethical or corrupted. Investors in this cluster rate the market regulators somewhat negatively and have a more neutral opinion towards the market facilitators. On the other hand, they are little concerned about the monitoring and enforcement mechanisms of the stock market. However, cluster members somewhat agree that know-how and size are key to success in the stock market and therefore see small lay investors as deprived segement.

Cluster 02

As Table 9 presents, the cluster 2 contains the largest portion (43.9%) of the sample which amounts to 76 in number. The members of this cluster have scored in the 'neutral range' on most stock market image dimensions. But when it comes to Immorality and Tilted Playing Field the scores are relatively high. Members of this cluster believe that that the stock exchange lacks integrity. Further, it is perceived as a gamble like place where the investors have to rely on luck and chance. Their view is that the stock market is tilted in favor of large, institutional, and savvy investors. They have no concerns about monitoring and enforcement mechanisms and stock market regulators. But members are slightly positive towards the market facilitators and they have neutral notions about the stock market's role as an economic bellwether. And they are not that concerned about the stock markets' ability to make quick returns.

Cluster 03

According to the table 9, this cluster consists of 38.2% of the total sample which amounts to 66 in number. The investors of this cluster have scored in the 'agreed range' on the most stock market image dimensions. In fact, this cluster reports the highest score across all the clusters on Immorality, Tilted Playing Field and Wealth Creating Capacity dimensions. Here the investors' impression is that the stock market is tilted towards the super-rich, sophisticated and powerful investors. On the other hand, they think that the stock market is rigged, corrupted and highly manipulative. However, they are neutral about stock market regulators and somewhat positive about stock market facilitators. The investors in this cluster have slightly positive notions regarding the stock market's role as an economic bellwether. They are more neutral about the stock markets' ability to make quick returns but think that the stock market lacks effective mechanisms to detect allegations/manipulations in transactions in order to impose penalties against responsible parties and then to compensate the victims. Yet, investors in this cluster are more positive about the stock market's ability to support long-term wealth creation.

Conclusion and Implications

In the this study an effort has been made to conceptualize the stock market image as a multidimensional construct that captures the overall perception of retail investors towards the CSE, distinct from the perception that they have about a particular stock or listed companies in the stock market. The study defines the term "Stock Market Image" as the overall perception of retail investors towards the stock market in line with Dobni and Racine (2015) and highlights the fact that the "image" is as relevant and highly applicable to the stock markets as it is to any organization

The study identified eight (08) stock market image dimensions in the Sri Lankan context viz., Wealth Creating Capacity, Immorality, Fast Money, Market Regulators, Economic Bellwether, Tilted Playing Ground, Monitoring and Enforcement and Market Facilitators. According to the findings, Tilted Playing Field was the highest rated dimension, and it shows that retail investors are in a firm notion that the CSE favors the large, sophisticated investors at the expense of small lay investors. Immorality was the second highest rated dimension, and it depicts that the retail investors are more concerned about the facts that, the CSE is rigged, corrupted and lacks integrity. However, the retail investors are somewhat positive about the CSE's ability to support long-term wealth creation, and they are slightly optimistic about Stock Market Facilitators. Nevertheless, retail investors have more neutral notions about other four stock market image dimensions viz; Fast Money, Market Regulators, Economic Bellwether, and Monitoring and Enforcement.

The study identified three (03) clusters of retail investors based on the stock market image, each cluster representing a diverse viewpoint on the stock market. It demonstrates that the retail investors have diverse perception on the stock market, encompassing both negative and positive impressions and reveals that retail investors have a heterogeneous perception towards the CSE.

More specifically, the study attempts to comprehend how several key personal factors of retail investors might influence images of the stock market. The findings of the study revealed that the stock market image is not significantly influenced by gender, age, education level, investment experience and financial literacy of the retail investors.

The findings of this study would be indispensable as it helps in many ways to promote wider stock holdings among local retail investors in Sri Lanka. Marketers could use the findings of the study to understand the diversity of beliefs that exist on the stock market, and work to create a positive image about the stock market in the minds of the investors. As Bravo, Montaner, and Pina (2012) pointed out understanding this "whole picture" of the stock market is important because of its potential influence on investor behavior, and the potential value as a strategic positioning tool. The market facilitators and regulatory bodies could focus on these stock market image dimensions when formulating the policies in order to attract and retain more investors towards the CSE, so that idle savings of the country could be channeled into useful investments and pave the way towards the economic expansion by creating a better platform for firms to raise equity capital conveniently at lower cost.

When it comes to the retail investors themselves, the findings of this study would become handy in making investment decisions. In fact, individuals are becoming responsible more than ever for their own financial security and their lifelong financial wellbeing (Lusardi and Mitchell, 2007). Therefore, retail investors could use the findings of this study in order to reflect on their own views about the stock market which would help them to decide whether the stock market is an appropriate investment vehicle for them.

Future Research and Limitations

This study produces a comprehensive set of stock market mage dimensions and indicators. Yet, future research could be carried out to further refine the scale in other contexts with more diverse and larger samples. The study employed cross-sectional surrey; therefore, it is not clear whether the resulting segments of the investors will be stable over the time.

Future research could be carried out employing the mixed method by combining both quantitative and qualitative methods. It will enable the researchers to collect detailed, comprehensive and rich set of data by allowing individual investors to describe their impressions and specific experiences with the stock market and the meanings that they attribute to the stock market as an investment vehicle. Further, research on the antecedents and consequences of stock market image could be done in order to study how behavioral and attitudinal factors of investors correlate with the stock market image.

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