

**A STUDY OF THE INFLUENCE OF INFORMATION USE
ON INVESTOR BEHAVIOR
AT COLOMBO STOCK EXCHANGE**

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Degree of the Master of Business Administration

Department of Computer Science & Engineering

University of Moratuwa

Sri Lanka

June 2016

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Thesis/Dissertation submitted in partial fulfilment of the requirements for the degree
Master of Business Administration in Information Technology

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Declaration

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Abstract

Sri Lanka is rapidly moving towards a culture of utilizing information technology and telecommunication. The country's overall computer literacy in the year 2015 is around 26.8% and the highest literacy rate is 40.3% in the urban sector. The Colombo Stock Exchange (CSE) is one of the sectors which use information technology immensely. There are multiple systems and procedures in the Stock Exchange which allows prospective investors to seamlessly carryout their business.

This research has attempted to identify the behavior of the individual investor in the CSE and how they make use of their computer literacy for trading activities and use it in adopting a new pattern of investment behavior in making more effective trading decisions. This thesis has also taken into account two other main factors, (1) the correlation between the behaviour and investment decisions and (2) The correlation between the information sources and investment decisions.

This study has revealed that most of the investors in CSE do not carefully study the market and analyze the performance and the trends of the organisation prior to choosing the share companies in which they make their investments. Instead they mainly depend on the opinions of their friends, colleagues or stock brokers. The best method would be for the investor to become aware of the available information sources and be sure of their reliability before making their investment decisions. This study has identified the prevailing information sources and other important factors that affect the share price. This will enable the investors to make their investment decisions without having to depend on unreliable sources so that they can minimize the risk of investment and maximize the level of profit share.

This study has also revealed that the investors do not make a discernible attempt in buying Initial Public Offers (IPOs) and trading in the Secondary Market. It has been found that the individual investors do not spend time on evaluating and analyzing the best share and the correct time for trading. On the contrary, their main focus lies on the immediate short-term share price only and not on other factors that affect the share market in the long run. Undoubtedly, the logical behaviour constitutes the most successful factor in decision making which ensures the profitability and the risk reduction in share trading. The investors who used this methodology have been able to make substantial profits and continue to remain in the CSE. However, most of those who have failed to adopt this practice have sustained considerable losses and were compelled to leave the market and eventually lose their initial investment as well.

The main object of this thesis is to formulate a specific guideline for CSE investors in order to assist them in making their investing decisions on a rational basis by carefully analyzing information sources rather than resting on unreliable factors such as stock brokers, friends etc.

The sample target group of this study constitutes the shareholders who have already invested in CSE and work in the industrial sectors such as banking, brokerage, insurance, finance, a few pensioners and self-employed personnel. These categories of people have good computer literacy and around 70% of them have more than one-year experience in the CSE.

Keywords: Colombo Stock Exchange, Individual Investors, logical behavior, decision making, computer literacy

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List of Abbreviation

Abbreviation		Description
CSE	-	Colombo Stock Exchange
ASPI	-	All Share Price Index
MPI	-	Milanka Price Index
ROI	-	Return on Investment
IPO	-	Initial Public Offer
SAD	-	Seasonal Affective Disorder
WOM	-	Word of Mouth
CEO	-	Chief Executive Officer
MD	-	Managing Director
SEC	-	Security Exchange Commission
EMH	-	Efficient Market Hypothesis
P/E	-	Price Earning
IT	-	Information Technology
CDS	-	Central Depository System
EPS	-	Earnings Per Share
CAC	-	Cronbach's Alpha Coefficient

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1. Introduction

1.1 Background

Who is an intelligent investor? “The kind of intelligence is a trait more of the character than the brain” (Benjamin Graham, 2006). It simply means being patient, disciplined, eager to learn and the investor must also be able to harness his emotions and think about himself.

Contemporary studies have found that not only the large organisation but every individual person is also able to use the available information to make their investment decision. Information has become an essential requirement in every organisation in the business today. According to the existing competitive market, every organisation has to make quick decisions to survive or to build in the existing market. There are various factors which affect decision making, for an example existing source of information, market pattern, investor behaviour etc. (Sara & Lee, 1992).

This research mainly focuses on individual decision making on stock market investments. When considering individual investors, there are two main factors to consider; first point is his/her behaviour and second point is how they behave when they invest. There are various factors affecting their behaviour, for an example, Gender “boys will be boys” (Barber & Odean, 2001). According to the previous research they have identified men take more risk in investment than women. Some investors may practice herd behaviour (David & Jeremy, 1990) in their investment and make decisions without analysing available information in an efficient manner.

When considering the individual investor, they are able to use IT to carry out analysis prior to making his own decision. To analyze about organisation or market they should be able to access the data in a particular period and there are different information options available. Based on the individual behaviour most of the investors always depend on other person’s opinion to make their investment decision. However, they do not know of the completeness, accuracy, integrity, confidentiality, etc. of the information. This study mainly focuses on the availability of information on investment in the emerging Sri

Lankan stock markets. When we consider the stock market there are two main types of investors (Barber & Odean, 2001), the non-informed investors and the highly informed investors.

Non-informed investors do not consider taking effort to gather historical information and analyse them with fundamental values of the stocks; but informed investors analyse the historical prices and returns by analysing the historical price patterns and exhibits and relate it to price changes of the stocks. When we consider investing in the CSE, it is a similar experience that can be seen. Most of the individual investors take their investment decisions without analysing available information in an efficient manner. According to this they depend on another person in every decision they make. This research study is intended to identify the factors for earning benefits by analysing available information sources in their investment in CSE.

1.2 Problem Statement

“Understand the power of information to influence investment behavior at Colombo Stock Exchange.”

Stock exchange is one of the institutes in the capital market to do the buying and selling of shares. Any individual or company who at one time or another lent money or bought shares through the Stock Exchange can also sell back the relevant shares or stocks through the stock exchange at any time. The stock exchange has its rules and regulations which govern it (Rafael, Florencio, Andrei & Robert, 1999). These rules and regulations are designed to protect all market participants, including the individual who puts up some funds to invest.

In 1896, Colombo Share Brokers Association established an organization for share trading in Sri Lanka to carry out the share trading in limited liability companies (CSE.lk). This was primarily used to collect the money invested in the plantation industry in Sri Lanka. This Colombo Brokers Association was taken over by the CSE in 1985. According to the previous research of factors which motivate the Stock analyst (M.M Fonseka and GAO, 2011), CSE was one of the best rapidly growing stock markets in south Asia. In this research, they clearly explain the progress of CSE within a short period

of time. In 1989, daily transaction volume was around \$10,000 and next year it had grown up to \$500,000.

CSE is the first computerised stock market in the Indian sub-continent and due to this computerised operation, daily transaction volume had increased up to \$3.2 million in 1994. During the financial crisis in Asian region, CSE emerged as one of the best Stock markets in Asia. According to the CSE, there are 294 companies listed in the CSE which represents 20 sectors with a market capitalization of Rs.3005.69 Bn. There are three main indexes in CSE,

- All Share Price Index (ASPI)
- Milanka Price Index (MPI)
- S & P Sri Lanka 20 (S&P SL20)

All the above-mentioned information is published in CSE website and any investor is able to view this information. An individual investor can request for a login ID from CSE for a monthly fee in order to get all relevant information of each and every share. There are different types of investors in this market and their behaviours also differs. However, only few people are willing to analyze and do their investment and most of the others may depend on other people, mainly stock brokers. What would be the reason for them to depend on the other party without analysing existing information sources and making sustainable benefits on their investment?

1.3 Research Question & Objective

According to the current trend in the world everything should depend on information but most people do not have proper knowledge or awareness regarding the same. There are many sources of information regarding the CSE but are not properly used. Based on that the author has identified a few gaps to be analyzed,

Research Question 1 - What are the information sources available for CSE?

Research Question 2 –How can information influence the investor behavior?

In this study, we observe individual investor ability to analyse the market trends, future share price and be able to predict future market patterns. Based on such information,

investors can select the correct number of shares to invest and in return will be able to maximise the ROI and protect their investment. This would be a positive impact to prevent market from unnecessary fluctuations.

Objective 1 - To identify available information sources to get information to make investment decision.

Objective 2 - Identify what are the factors relatively important in SMI.

Objective 3 – Investor behavior and available information sources that will be a successful factor to make investment decision.

The Aim of the Research

In this study, the author intends to educate the non-informed investors to choose their investments in an effective manner by analysing market trends and patterns using available information. There are different types of analytical methods, data types to analyse, and also how they depend on the information sources in Colombo stock market which has been described in this stock market analysis.

1.4 Expected Result

There are number of results expected from the study which in particular for the benefit of investors in the CSE, for the betterment of investment and finally sustainable benefits on their investment. From the analysis of the study, the author expects to come up with a framework or guidance to direct individual investors to do the analysis of available information sources and identify the correct share in the market. The outcome should acquire and provide the base knowledge of required factors relatively important to invest in IPO and secondary market.

Furthermore, it can be used as a risk mitigation action in investment process from preventing some biased stock brokers. There are some brokers who give special favours to large investors and misguide small investors. In addition, this study will contribute towards protecting markets from manipulation. The market manipulation has a correlation between large investors, they exaggeratedly increase share price by

purchasing shares in higher price and when price become higher they sell their shares and make a profit. Investors who analyses the market will be able to protect their investment from unnecessary fluctuation and make some profit. Most of the investors in CSE are men, there are few women who investment in the CSE due to risk, and this study will encourage them to invest in CSE.

1.5 Scope of the Study

This study is mainly focused on how IT influences investor behavior at CSE. Most of the investors always depend on stock brokers and few of them do their own analysis to make their own decisions. Special players who are investing on stock market carryout thorough analysis with available information and focus to identify and gain those factors that require analysing. In addition, identifying available information sources are useful to analyse markets and to make an investment decision. The nature of the research question requires prior experience of the people either as investor or adviser, to study their practical experience and concerns. Hence, the sample selection would require individuals from the following categories.

- Investors in stock market
- Stockbrokers
- Consultant and advisors
- People who are engaged in margin trading

1.6 Structure of the Thesis

Chapter 1 - Provides an introduction with rationale for the study, context of the problem, research questions, objectives, aims and expected results from the analysis, and the scope of the study. The remaining chapters of the thesis structured as follows.

Chapter 2 - Literature Review

Contains literature of previous studies and finding of those studies related this, describes about investment, investor behaviour, individual investor behaviour in stock market, available information sources.

Chapter 3 - Research Design & Methodology

Contains how the research strategy has formed, by explaining the research philosophy, methodology, data gathering techniques and method of analysis.

Chapter 4 - Data Collection & Analysis

Contains the process of data collection and analysis done.

Chapter 5 - Evaluation of Results & Recommendation

Contains the evaluation of findings of data analysis while comparing previous studies results and also conclusion and recommendation of this study.

2. Literature Review

2.1 What is Investment?

When considering investment, there are different types of investment options available. According to one's personal choice anyone can select one or more options such as T-bills, Savings/ Fixed account, real estate, government savings bond and stock market and so on. There are three key factors in every investment; that is return, risk and liquidity (Financial Consumer agency of Canada, 2015).

Return is the profit that an investor makes on investment and it has two different forms. First one is income; it is money you receive while you own the investment, such as, interest, dividends and rent. Interest: what you received at a certain percentage for the amount of investment, such as bank account, bonds, T-bills etc. This income is guaranteed income, the rate of interest is often set in advance for a certain period and the investor knows what they are actually getting. Dividends: This is not a guaranteed income, part of a company profit that it may pay to each shareholder. This gives shareholders regular income like interest, but it is based on the company profile. Rent: money you receive for the use of property that belongs to an investor. To get this income people need to have to invest their money in properties or building. The second return method is increased value, income or profit can gain when the investor is able to sell investment for more than what they paid for, which is called capital gain. Investor may face capital loss if no one will pay more than the investment cost. This income is also an unpredictable income as it depends on how easy it is to sell your investment and how much others are able to pay for it.

The second characteristic of investment is risk, every investment not able to make money or that may lose some or all the money they have invested. Simply said, the amounts of uncertainty about what you get back from the investment. Some investors adverse the risk, they do not like to take risk in their investment and they select simple investment such as term deposits and government savings bond.

There are some risk takers, with the risky investment they may lose the money invested but on the other extreme, they may take huge return on such investments. Best example

for this investment is the stock market. Some investors became billionaires within certain period of time by investing correctly on shares in the market.

The third characteristic of investment is Liquidity; it is the ability of cash or sells an investment quickly. Investment like stock market and government bonds are highly liquid because they can sell them at any time for loss or profit. When considering home or property is very low liquidity.

2.2 Investor Behavior

Most of the financial decisions are made under situations with high degree of uncertainty and complexity. The investor has to choose many alternatives with many possible uncertain outcomes and probabilities. When considering the investment, saving is the most important part of the country or individual. Why would you need an investment; one reason may be to earn return on unutilized resources and generate specific amount of money to spend on day to day life and make a provision for an uncertain future (Investopedia, 2014). The other factor would be inflation; which is the increase in cost of living. Due to inflation, the value of money will lose and will not be able to buy the same amount of goods and services in the future. According to these characteristics, people move more towards an investment and investor behaviour need to be discussed.

When considering the investor behaviour, one needs to consider the theory known as behavioural finance and it has been described as the behaviour of investors and managers. According to this theory there are two types of investors such as normal investors and rational investors. This has been elaborated by the article of “Understanding how the mind can help or hinder investment success” (Alistair Byrne and Stephen P Utkus, 2013). There are people who make their investment decisions on an emotional basis and it will be affected in the change of their decision; their greed, fear and bias.

Other than the above three characteristics described in this article, there is one important behavioural factor known as overconfidence. Overconfident investors overestimate their ability to identify winning investments and they do too much of trading in the share market with negative effect on their returns. But on some instances due to this overconfidence, the investor gets positive outcome by following his decision and will

view that outcome as a reflection of their ability and skill. However, when faced with a negative outcome, the investor will view it as bad luck or misfortune. Further, this is also described as investor behaviour of overconfidence and human sentiment.

Due to this overconfidence, investors become a victim of some form of investment fraud. The theoretical models based on the observation of these investors and overconfidence is defined as follows.

1. Over estimation of one's actual performance
2. Over placement of one's performance relative to others
3. Excessive precision in one's belief

This overconfidence can explain the relatively high turnover rates and poor performance of individual investors (Barber & Odean, 2001). When compared with gender, men are more disposed to be overconfident than women, trade more and perform worse than women. Investor behaviour by gender; there is a systematic difference between men and women in their response to risk. When considering investment behaviour by gender, women are more sensitive than men (Catherine & Philip, 2004). This sensitive behaviour of women will be reflected in areas of their decision making, including investment, choice of profession and shopping activities.

Based on the previous research about overconfidence (Seth L. Elan, 2010), the author has identified behavior among individual investor. In this research, the author has described different reactions for overconfident behavior. An investor who is overconfident is the primary psychological culprit and most of the time they are responsible for the financial fraud.

There is another characteristic described in the previous article, which is loss aversion. This will describe the behaviour in risk and reward. According to the behavioural finance emphasis investors are more sensitive to loss than risk and return.

Generally, investors with losing positions show a strong desire to get back to break even. This means the investor shows highly risk adverse behaviour when facing a profit and more risk tolerant or risk seeking behaviour when facing a loss. This is known as Prospect theory. Based on the research done in USA about their investor's behaviour (Seth L. Elan, 2010) and elaborate this Prospect theory. This has been developed by Professor Daniel

Kahneman and Amos Tversky. According to this theory, investors are more concerned in avoiding losses than to achieving gain.

They feel embarrassed when they lose and they pay too much attention to incremental gains and losses. The other behaviour factor is human sentiment; people are more emotional in investing, especially in stock market. According to Doctor Ildiko Mohacsy and Heidi Lefer, the stock market is a collection of human sentiment mainly hope, fear and greed.

Further, this behaviour characteristic is problem of inertia (Alistair Byrne and Stephen P Utkus, 2013). This means people have second thoughts. They fail to take action or decisions about what they want to do because of their second thoughts. Investors are in this category unable to make steady decisions.

2.3 Individual Investor Behavior in Stock

When a person invests in the stock market they have different type of characteristics. According to successful investors like Warren Buffet, Peter Lynch or George Soros, they use these special characteristics to achieve their current position (Investor Guide, 2014). According to this article there are 15 characteristics described as follows. The first characteristic is that they are proactive learners; they read magazines, articles and attend seminars to improve themselves. Second characteristic is that they invest with a planned exit strategy and the third one is they are very patient in investment, they take advantage of short period and also plan to hold for long periods to make future profit. Warren Buffet described it as, never attempt to make money on the stock market in short term and buy on assumption; the stock market could close the next day and not reopen for five years.

The fourth characteristic is that they have strong emotional control. Market increase and decline mainly depends on two emotional factors that are fear and greed. According to this emotional factor, investors have a neutral reaction to either winning or losing and they do not depend on financial advisers to change their decisions.

The fifth characteristic is that investor needs to have well-defined investing strategy. Most of the successful investors do the portfolio diversification strategy. "Diversification is the protection against ignorance. It makes very little sense to those who know what

they are doing”- Warren Buffet. The sixth characteristic is that they are focused. According to this characteristic investor should focus or stick to one type of investment and then he is able to monitor it well.

The next one is use trend to their investment in the stock market. It means market fluctuation can be used to make a profit, due to political instability company’s crisis, share prices lower and that may then be the best price to purchase shares. Warren Buffet explains it like this. “The rich invest in time; the poor invest in money”. The eighth characteristic is persistent, investors stick to one strategy without looking for next hot tip because most of investors give up just when they about to make a profit. The next characteristic is thriving on risk; every investment has a risk and probability of success or failure. Based on this, characteristic investors are able to mitigate risk knowing what they are doing, but not knowing what they are doing is a great risk. The tenth characteristic is discipline; investor needs to have his own rules and principles. Warren Buffet describes his rules as “My two rules of investing: Rule one - never lose money. Rule two - never forget rule one”

According to this article the next characteristic is use leverage, this means use others money for your investment and simply says investor can use bank loan for their investment not his money for consumption. The twelfth characteristic is the most important one; that is learn quickly from their mistakes. All the leading investors make mistakes and they do not discourage and they take it as a process of better investment. The Thirteenth characteristic is that investor needs to have good team or network; among the team they share information, calculation and brainstorm on investing challenges.

The final characteristic mentioned in this article is strong financial background and passion about the game of investing. Based on this article, it also emphasises that investor behaviour is a very important variable to become a successful investor.

There are different types of investors in stock market (Dr. Kapil Arora, 2014). They are bull investors, bear investors, savers, speculators and specialist. Bull investors are who expects that the market will grow and share prices to rise and will purchase now for resale later. Bear investors expect prices will fall and will sell his existing shares now in order to buy at a lower price, make a profit when the market rises. When considering the next category “Savers”, this type of investors carries out non-correlated investment and always try to protect their investment. The next type is speculators; they also do diversified

investment and try to achieve much higher return of targeted investments. The final type according the article is specialist; these investors select single investing area, and become experts in that area. These types of investors are successful investors and they use education and experience for their investment.

The SAD (Seasonal Affective Disorder) stated there are four seasons and winter months affect a person's mind the most due to reduced daylight hours. The number of hours of daylight affects peoples' moods and hence also possibly market returns (Berk and DeMarzo). This has described the differences in the seasonal variation of daylight across countries effects to human sentiment, risk tolerance, and hence stock returns. For example: sunshine has a positive effect on mood, stock returns tend to be higher when it is sunny day at the location of stock exchange in New York City. The market return on perfectly sunny day is approximately 24.8% per year against 8.7% per year on perfectly cloudy day.

The behavioural aspects of investment decision have been described in behavioural finance under three major elements; these are prospect theory, regret aversion and self-control. There are some theories of investor behaviour (Ambrose & Vincent, 2014) pointed as follows.

1. Regret Theory:

This is also an emotional fact, people experience once they realised they have made wrong decision. They have purchased stock in higher price but unable to sell those in purchased price and avoid selling it as a way to avoid the regret of having made a bad investment, as well as embarrassment of reporting a loss.

It is human nature to hope that one will at least get back the purchase price, but sometimes it won't happen or it would take so long that the opportunity cost is more. Some investors purchase only stocks that everyone else is purchasing to avoid the feeling of regret.

2. Theory of Mental Accounting:

When the market performs well and investments have some gain, yet some investors may be hesitant to sell their investments. When the Market performs well they do not like to

sell their shares at the smaller profit margin and create mental accounting for the gain they once had, and wait for the return of that gainful period.

3. Prospect/Loss Aversion theory:

The prospect theory describes why investor holds losing stock, because they are more stressed by losses. Because of that investors willingly remain in a risky stock position, hoping the price will raise back. According to the book of Corporate Finance (Berk and DeMarzo) this is explained as a tendency to hang on to losers and sell winners. Investors tend to hold on to stocks that have lost value (purchase price is high) and sell the stocks that have increased in value since the time of purchase. The effect of holding the loss may increase the loss day by day and to avoid that they have to admit the mistake and continue to hold profitable investment.

4. Over/Under Reacting theory:

Some investors get optimistic when the market is performing well and continue their investment but the investor becomes extremely pessimistic when market is down.

5. Theory of overconfidence:

Investors have overestimated their knowledge and experiences compared to others and do more trade. According to theory, overconfident men will trade more excessively than women (Barber & Odean, 2001). In this research, they have analysed the common stock investments of women and men from 1991 to 1997 and identified that men trade 45 percent more than women. The explanation given for high levels of trading on financial market is overconfidence. Human beings are overconfident about their ability, their knowledge, and their future prospects. This theory elaborates under the research “who chooses annuities”: women are more risk averse and less financially literate than men, and role of gender in an increasingly important to financial decisions.

When a person is married that too affects their investment decision. Married couples may influence each other’s investment decisions. In some cases, the husband or wife will make an investment decision but may not be the person who originally opened an account.

According to research based on Japanese individual investors who invested in the share market (Hisashi Kaneko, 2004) there are two main behaviours.

1. Irrational Selling behaviour:

Most of the investors are rational, they can make logical decisions but they do not have special ability to make decisions concerning the share market and take irrational decisions. Where the value of share purchased equals the value of shares sold or the value of share purchase will increase and the value of redeem will be decrease, then investors are unable to gain expected results or return.

2. Irrational Purchasing behaviour:

The rational investor is likely to refer the past activity and performance of the share and make comparison before deciding which shares he is going to buy. Since between one and three years of results are necessary to analyse the past performance and most of the time rational investors do not purchase shares without analysing one to three years of data. But irrational investors do not consider the past data to do their purchasing, some shares will be better if it performed but some may not.

There are some individual investors who makes similar mistake when they do trading in the stock market. They actively try to follow each other, and imitating each other's actions. This is known as herd behaviour (David & Jeremy, 1990). The reason why traders might follow others' portfolio choice, because they believe others have superior information, that they can take advantage of by doing the same trade. Due to this, investors ignore their own information, hoping to profit from the information of others. Most of the time investors in this category have followed the large investors who perform best in the stock market.

The other important behaviour of investors in the stock market is in diversification and portfolio biases. According to the book of Corporate Finance (Berk and DeMarzo), diversification and risk has correlation. Investor diversify their portfolios, they can reduce risk without reducing their expected return.

It is described in the book as "diversification is a free lunch that all investors should take advantage of it". Moreover, this diversification needs to concentrate in stock of companies that are in the same industry or geographically, because due to some reasons entire industry may be affected. For example, farming, due to some disease the entire industry may collapse. When considering the geographical area that may affect to natural disaster or may be other reason, as example tsunami, leakage of nuclear plants.

Concerning the portfolio biases, some investors have invested in familiar shares in the market. They have selected some companies and invest only on these companies and care most about the performance of this portfolio.

2.4 Information Availability for Investment

Information is main the requirement to make the investment decision for any type of investment. It can affect behaviour, a decision, or an outcome. According to the previous research (Seongmin, 2004), there are two different types of information sources such as interpersonal and impersonal. Interpersonal information received from both informal (family & friends) and formal (websites, publications etc.) sources. Organizations mainly base on formal information to make their investment decision. There are some examples for information sources such as websites, investor advisors, other investors, word of mouth etc. There are two main types of available information reference to the stock market (Corporate Finance, Berk and DeMarzo).

First one is public, easily interpretable information, that is available to all investors publish information in news reports, financial statement, and corporate press release or in any other public data sources. Based on this information all investors can determine the effect of this information on the stock value. There are few lucky investors who might be able to trade shares before the price will adjust based on the information. But most investors would find the stock price that already reflected the new information before they were able to trade.

The second type is private or difficult to interpret information; investor might spend time and effort to gather information from employee, competitors, suppliers or anything related to the firm's future cash flow, then this information not available to others who do not have devoted similar effort to gather this information. This type of information may relatively be available for a small number of investors and they may be able to make profit by trading on their information. And also, the profitable opportunities from having this type of information are large.

Today's world websites are more useful and powerful information source for investors. There are financial websites that help investors to stay top on the market. According to the make use of website they have to identify relevant websites that matches with their investment. Stock market websites provide online updates and that will make their

investment easier. But investors have to identify the reliable websites to make their decisions because some websites contain incorrect information.

According to the previous research (Marco, Vittorio, Laura & Nathan, 2014), Investor advisers or financial advisers make real world portfolio decisions and non-expert retail investor's trust their advisers a lot. Share market advisers provide information to their investors to make their decisions. Other investors are also another information route for investors. This is also known as word of mouth, and this method is most important and powerful information source in all types of industry. Information communicates from person to person by oral communication, which could be simple as storytelling. In marketing, WOM involves the passing of information between customers, and concerning a brand, a product, or a service. But this method is basically depending on understanding and trust between each other. According to the research Electronic word of mouth in hospitality and tourism management, describe online interpersonal influence of WOM becomes digital, then analysing, interpreting and managing will happen very fast. Earlier, people required meeting together to communicate but using social media and other application (e.g., websites, social networks, instant messages, news feeds) information is available within a few seconds. Publication is also another information source. When considering the publications there are two categories of publications such as magazines and newspapers. Many successful CEO's, entrepreneurs, get the most benefit out of the most financial magazines and they select two or three and read them on a regular basis.

By reading, a person is able to develop a solid understanding of which the way markets are moving and provide information that can be used to shore up their financial situation. According to the "investor-junkie" website there are seven top financial magazines that are best for smart investors to consider reading. They are Kiplinger's, Barron's, Investor's Business Daily, Bloomberg Business week, The Economist, Forbes and Money. Other important publications are company annual reports and daily newspapers. These annual reports are intended to give shareholders and other interested people, information about the company performance and trend throughout the preceding year.

2.5 CSE Specific Information Sources

When we consider investor, who invest in capital market in Sri Lanka, the best website is the CSE website. It has important details such as company information, history of each share price, number of shares, upcoming listing, daily summary, online share price etc.

Some example of information provided are daily stock watch that include price indices, market statistic, major gainers & losers, largest turnover, indexes etc. weekly report, company's financials (Figure 2.1), key performance indicators etc. Other than this information they will provide you inside information and emphasis investors to make their investment. According to the market change some share prices may increase during the day and investors able to make profit due to that, these type of information or tips will provide by the investor advisors but advisors may not be guaranteed about this given information.

Figure 2.1: Quarterly Financial Released
Source: Capital Trust Research Document on 8th Feb 2016.

Quarterly Financial Results Released on 8-Feb-16

Company Name	Symbol	Price (Rs.)	Profit for the Quarter (Mn)			EPS (Rs.) For the Period	EPS (Rs.) Annualized	PE (X) Annualized Earnings	PE (X) 4QT	NAV (Rs.)	PBV (X)	Recommendation
			30-Sep-15	31-Dec-15	QoQ (%)							
AMAYA LEISURE PLC	CONN.N0000	61.20	112	65	-42%	2.99	3.98	15.4	12.1	64.41	1.0	BUY
LANKA TILES PLC	TILE.N0000	106.00	275	533	94%	18.94	25.25	4.2	4.3	91.12	1.2	BUY
LANKA WALLTILE PLC	LWL.N0000	97.50	306	608	99%	20.03	26.71	3.7	3.6	134.92	0.7	BUY
RENUKA AGRI FOODS PLC	RAL.N0000	3.70	108	65	-40%	0.37	0.50	7.4	9.5	4.44	0.8	HOLD
RENUKA HOLDINGS PLC	RHL.N0000	25.30	130	18	-86%	2.09	2.79	9.1	9.5	45.44	0.6	HOLD
RENUKA HOLDINGS PLC (X)	RHLX0000	20.90	-	-	-	2.09	2.79	7.5	7.8	45.44	0.5	HOLD
RENUKA SHAW[NON VOTING]	COCO.X0000	20.10	-	-	-	2.13	2.85	7.1	8.1	24.18	0.8	BUY
RENUKA SHAW[NORMAL (ORDINARY)]	COCO.N0000	25.50	142	70	-51%	2.13	2.85	9.0	10.3	24.18	1.1	BUY
SIERRA CABLES PLC	SIRA.N0000	3.70	91	63	-30%	0.41	0.54	6.8	12.5	3.11	1.2	HOLD
SWISSTEK (CEYLON) PLC	PARQ.N0000	60.70	66	117	79%	7.67	10.22	5.9	5.6	46.01	1.3	BUY

Annual report has been a Security Exchange Commission (SEC) requirement for business registered as public listed company. This document has important details that are essential for investors, mainly general description of the business, audit statement of income, financial position and cash flow, management (MD/CEO) discussion and analysis of the business condition, various business segment, company's stock and dividends paid.

2.6 Purpose of Available Information

The importance of information is to identify the cash flow of current earning and the ability to predict the future earning (Richard G. Sloan, 1996). According to this previous research, some investors do not correctly use available information when predicting future earnings performance. The Efficient Market Hypothesis (EMH) maintains that all

stocks are perfectly priced according to their assets (Wikipedia, 2015). These assets and liability value is mandatory to publish for each and every listed liability companies, and it is known as the balance sheet or statement of financial position (Corporate Finance, Berk and DeMarzo).

The prediction methodologies fall into three categories; they are fundamental analysis, technical analysis and technological methods. This fundamental analysis used by the investors for assessing the value of share price and they performance analysis ratio such as P/E (Price Earning) ratio.

$$\text{P/E Ratio} = \frac{\text{Market Capitalization}}{\text{Net Income}} = \frac{\text{Share Price}}{\text{Earning per share}}$$

The P/E ratio is a simple method that is used to assess whether a stock is over or undervalued by proportional to the level of earning generated from the share. There is some limitation in this ratio by only assessing the market value and there are some ratios which compare the value of business to its sales, operating profit and cash flow. The technical analysis determines the future price of a stock based on potential trends of past price, is also known as horizontal or trend analysis. This has been done by studying the financial statement items over several accounting periods. This trend analysis is mainly concerned about few factors such as turnover, profit, current assets and earning per share (Table 2.1).

Table 2.1: Tokyo Cement Company Annual Turnover 2008-2012

Year	2008-07	2009-08	2010-09	2011-10	2012-11
Turnover	4,464,605,774	6,045,332,950	6,125,479,102	6,636,109,528	8,533,037,198

Source: Analyses of Annual Report

When considering the income statement during last five years, there is a significant growth displayed in company turnover. During the last five years period turnover has increased by 91.13 % closer to double the figure (Figure 2.2).

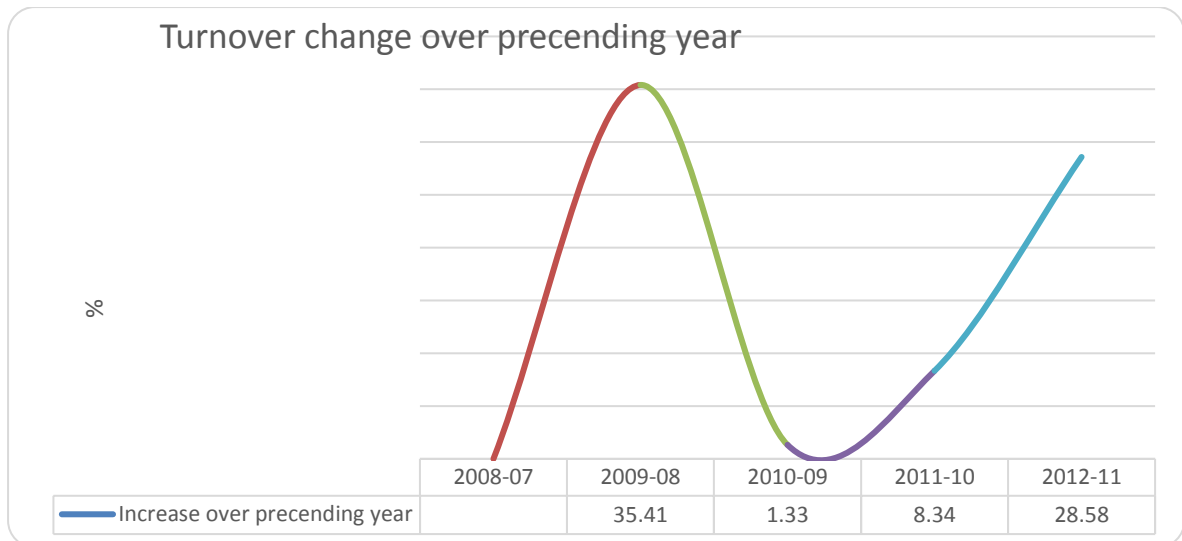


Figure 2.2: Turnover change over preceding year
Source: Analyses of Annual Reports

The year 2008 is the base year of this analysis and describe how this organisation performed during the period of five years. According to these figures, the investor is able to identify the trend of this organisation and have a confidence of their investment. There is some fluctuation shown in the above diagram and the reasons for these fluctuations explain in the company annual statement.

According to the previous year company gross profit has increased by 171 million and other income increased by 117 million but company profit has reduced by 59 million (Table 2.2). What is the actual reason for that, simply says company expenses should be increased.

Table 2.2 Tokyo Cement Company Annual Profit 2008-2012

Year	2008-07	2009-08	2010-09	2011-10	2012-11
Profit (Million)	279,204,332	142,899,477	1,461,353,026	707,362,455	649,761,819

Source: Analyses of Annual Reports

There is an aggressive improvement in gross profit and this indicates the sustainability growth of turnover of the company. Further the cost of sales increased during the period but there's no huge impact to gross profit of the company. According to the profit trend

gross profit and profit before tax has a growth but that improvement not highlighted in the net profit.

These figures might deceive the investor who has not studied the company properly. This company has made a profit of 650 million in 2012 but compared to previous year it has reduced by 59 million but considering the profit during last five years period it has improved (Figure 2.3).

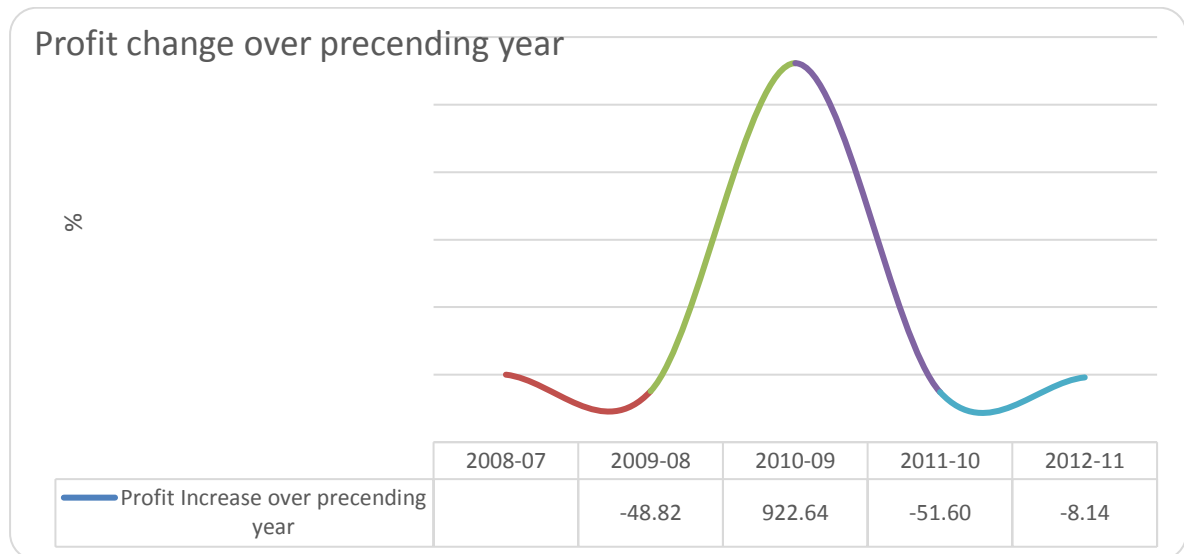


Figure 2.3: Net Profit of Tokyo Cement Company
Source: Analyses of Annual Reports

There are other analysis methods used to identify the factors which influence the forecast decision on shares of the company (M.M Fonseca & Gao-Liang Tian, 2010). The liquidity ratio, current ratio, price earnings ratio, dividend yield, return on equity and rate of retained profit are the financial indicators which are affected on experts advice. This study presented the conceptual framework and identified what are the company's

financial, market risk and stock market trading information, which can motivate stock analyst forecast on company share in CSE (Figure 2.4).

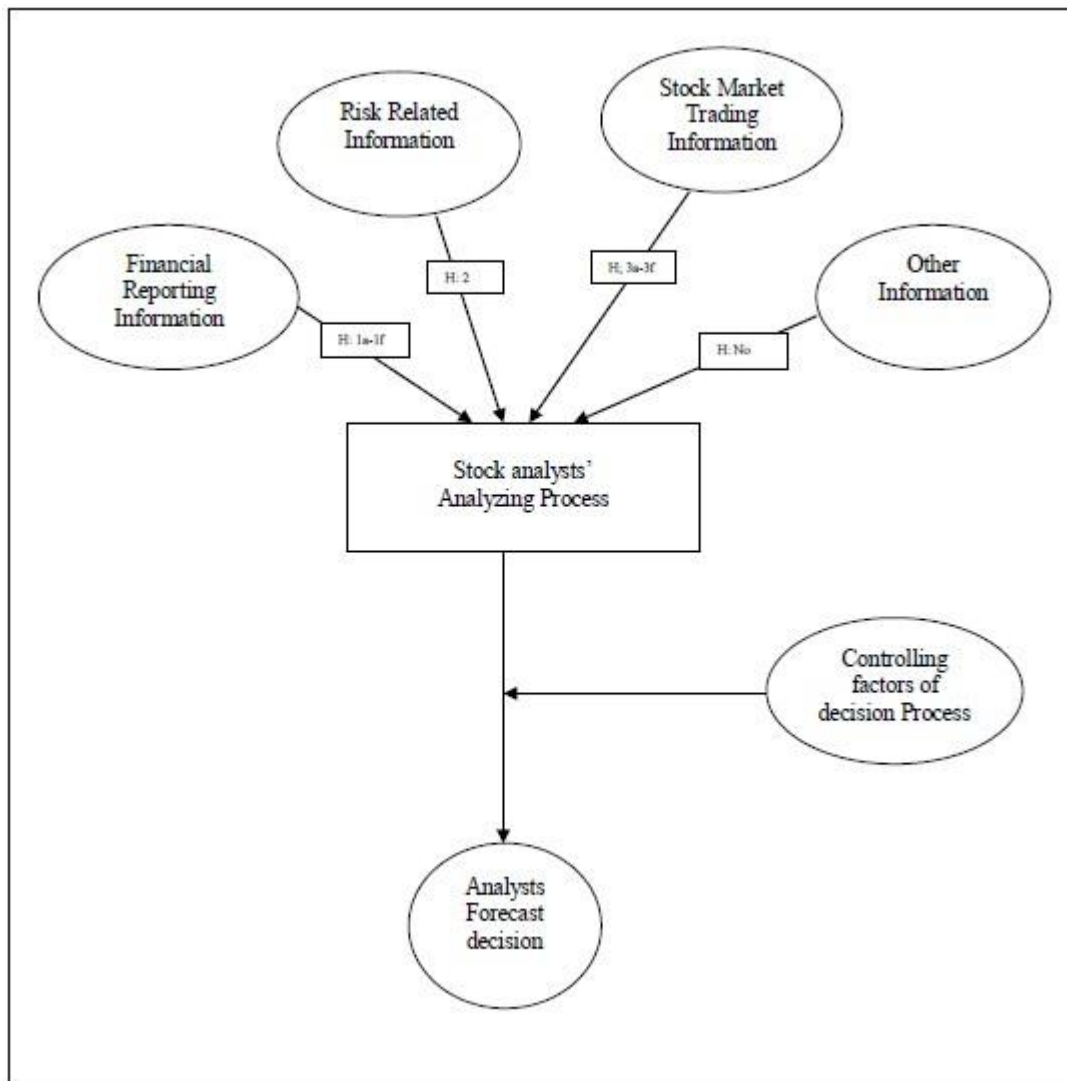


Figure 2.4: Conceptual Model for Stock Analyst Forecasting Decision in the Emerging CSE

Supply and demand is one of the most fundamental concepts, at price equilibrium the supply curve intersects with demand curve, the seller and buyer agree on a price and a transaction can occur (Jan Ivar Larsen, 2010). Investors need to concern themselves with two classes of tools to decide what stocks to trade, there are fundamental analysis and technical analysis. The fundamental analysis is based on factors such as revenue and expenses, market position, annual growth rates. This technical analysis only concerns the price and date volume, and this analysis ideally suited for short term swing trades. When trading with technical analysis one needs to analyse the price pattern which

predicts the direction of price in future (Figure 2.5).

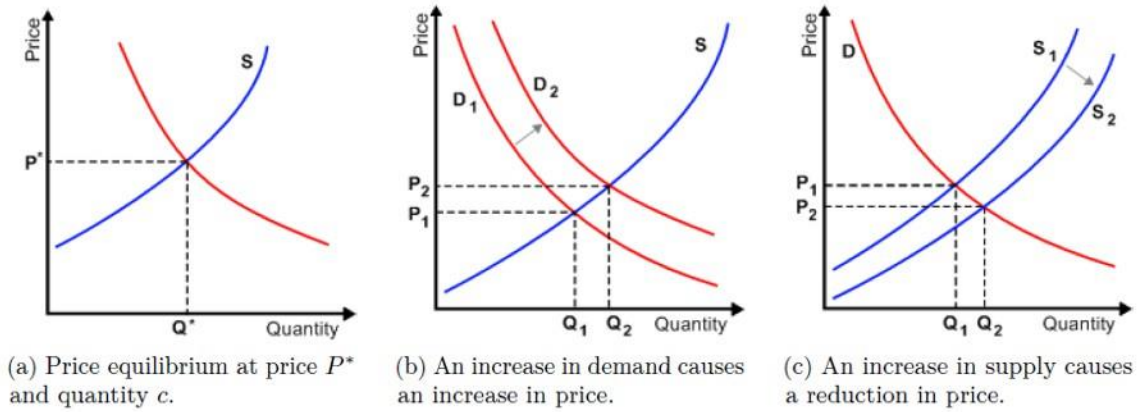


Figure 2.5: Price Change According to Demand and Supply

The previous researches have proven that based on previous data and analytic tools, investors are able to predict the future value of stocks. In this research I plan to analyse the Sri Lankan point of view; do investors have enough data sources to do the analysis?, accuracy of these data and how do they make decisions. Furthermore, the author also plans to encourage local investors to carry out the analysis before trading in the market to protect their investment.

3. Research Design and Methodology

3.1 Introduction

This chapter describes the framework of the research work out. This chapter mainly discusses about the research philosophy, methodology, and techniques with related literature in order to explore an appropriate result for the current study. This also elaborates how the data collection process was conducted using questionnaire survey without using other method of data collection. The chapter further discusses the scope of data collection, data collection resources and how it is relevant to the study. It subsequently illustrates type of data analysis method and techniques base on collected data.

3.2 Research Methodology

Research philosophy will influence to decide the correct methodology that can be used for the research and also guide to identify uncomplicated style and innocent way of questioning to achieve the research objective. There are two main types of research methodology such as qualitative and quantitative. According to the previous research (Franck Crossan, 2003); he argues that the distinctions between quantitative and qualitative methods are overstated and advice to understand the strengths and weaknesses of each approach before selecting the method. With reference to previous research we understand the philosophical path is necessary to identify the appropriate research methodology for the current study.

In this research study, the author intends to identify the individual investor who invests in CSE and his behaviour, available information sources and investment decision. And also consider two correlations between investor behaviour and investment decision, Information sources and investment decision (Figure 3.1). The investors use which method to trade the stocks in the market from qualitative or quantitative. This would be the best factor when making investment decisions. According to the two viewpoints of famous investors in stock market industry and their thought of investment has analysed

(John Huber, 2013). First person is Ben Graham, a quantitative analyst, he based his research on publicly available information to make his investment decisions such as:

- Analysing income statement, balance sheet, cash flow
- Comparing current value with historical valuation
- Study about the stock details, not about company details
- Only depend on publicly available information
- Does not rely on macroeconomic trends

On the other thought given by Warren Buffet, a qualitative analyst is to follow the factors such as:

- Talking to management
- Talking with company's competitors, vendors and distributors
- Analysing the depth the company's product or services
- Making judgement on sustainable growth

Quantitative research uses a structured questionnaire with mostly closed questions and respondent select their answers from the given list and this will allow ranking of the answers. There are different types of quantitative research classified as survey research, correlational research, experimental research and casual comparative research (Suphat, 1998). In this study, the author relies on correlation analysis and intends to identify,

- Available information sources
- User of information for decision making – Behavioral aspect
- Investment decision in CSE

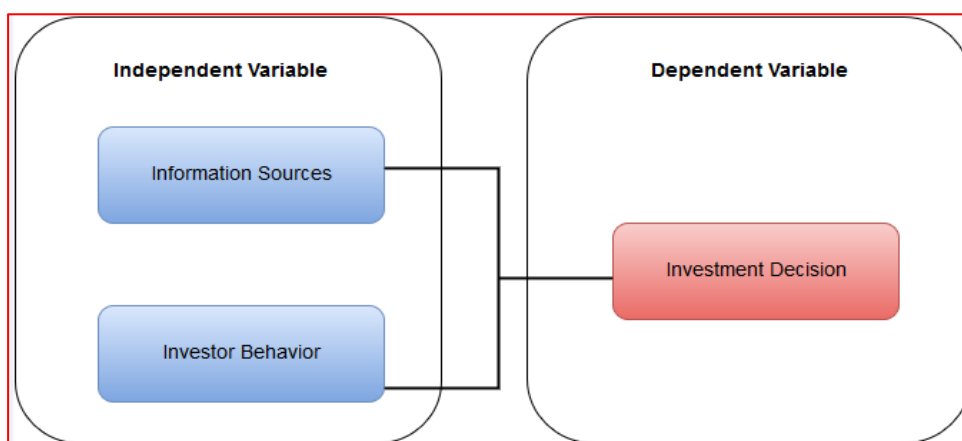


Figure 3.1: Theoretical Model of the Research

3.3 Data Gathering Techniques

In this study, the author will identify individual investors' behaviour in CSE, available information sources and investment decisions. The finding of such information would ideally start with questionnaires. This questionnaire is categorised based on four factors as follows.

Demographics – This section is used to identify the investors who participate to this study. For example, gender, age, employment, computer literacy, stock market experience (Table 3.1).

Table 3.1: Questions Related Personal & Stock Market Experience

Category	Factors	Question No(s)
Personal details	Participant categorized by gender, age group and employment	Q1, Q2, Q3
	Computer literacy	Q4
Stock market	Stock market experience Continuation of investment Reasons for leaving the market Important factors for decision making Sources of information	Q5, Q6, Q7, Q8, Q14, Q15

Behaviour – These questions mainly focus to identify how investors behavioral aspect in the CSE (Table 3.2).

Table 3.2: Question Related to Behavior Aspect

Category	Factors	Question No(s)
Behavioral aspect	Trade by gender Invest in IPOs Invest in secondary market	Q9, Q10, Q11, Q13

Information sources – This area mainly consider the available information sources, relevancy and accuracy of that information (Table 3.3).

Table 3.3: Questions Related to Information Sources

Category	Factors	Question No(s)
Information Sources	About past information Available information sources Accuracy and confidence about existing information sources Adequacy of information sources	Q16, Q17, Q18, Q19

Investment outcome – Based on the investor behaviour and available information sources what was the return they achieved by investing CSE (Table 3.4).

Table 3.4: Questions Related to Investment Decision

Category	Factors	Question No(s)
Investment decision	Does not have time to analyses Investor capability do the analysis Depend on stock brokers Stock broker behavior Investment satisfaction	Q12, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27

The questions in the questionnaire are designed in a scale of one to five starting from “Strongly Agree” to “Strongly Disagree” and “Always” to “Never”. The value translation under each rating was designed in a method mentioned in Table3.5.

Table 3.5: Level of Response Scale

Response Scale					
Scale	5	4	3	2	1
Related Value	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Related Value	Always	Frequently	Sometimes	Rarely	Never

3.4 Method of Analysis

Analyzing the trading process in IPO and secondary market investment and how investor has identified the correct price. Which trading method is the best, more profitable and suitable for long term stock trading? This entire information is based on the responses given to the questionnaire by the selected sample group. Questionnaire for this research was a web based one and mainly focused on people who work in the bank, insurance companies, telecom, IT, finance companies and investment advisory/broker companies. But some investors who were not working in the above industry like pensioners and self-employees were also selected to participate. The invitation was sent by e-mail to participate in the survey through personal contacts and also requested to distribute among others.

In this study, most of the information gathered was of quantitative nature and some of this will contribute to addressing specific research questions while the other parts provide a general understanding of individual investor's behaviour and relevant information sources. The current study is intended to develop a theory by using comparison of related individual behaviour, information sources and investment decisions, to emphasise the importance of analyzing for investor behaviour, information sources and decision making.

The following hypotheses have been derived based on the conceptual frame work. These hypotheses will be tested using data collected from the above identified sample.

- 1 There is a relationship between investor behavior and investment decision in CSE investment.

H1o: There is no relationship between behavioral aspect and investment decision in CSE investment.

$$H1o: \beta = 0$$

$$H1a: \beta \neq 0$$

- 2 There is a relationship between information and investment decision in CSE by the investor.

H1o: There is no relationship between information and investment decision in CSE by the investor

$$H1o: \beta = 0$$

$$H1a: \beta \neq 0$$

4. Data Collection and Analysis

4.1 Introduction

The intention of this chapter is describing the collection of data and how to analyze those data in order to identify the behaviour of individual investors in CSE. Since the study conducted in CSE, this chapter will identify the categories of investors and how they perform stock trading. This chapter also highlights information sources available to make informed decisions, accuracy of information and the relevancy of information to make investment decision. The main motivation of this study is to encourage investors to make their decisions by analysing company, market situation without depending on stock brokers. There are four main types of analysis that has been described in this chapter such as descriptive, reliability, correlational and inferential analysis.

4.2 Descriptive Analysis

There are some data that have not been directly considered for the analysis but, this type of data was obtained from various perspective and need to transform to understand and interpret by rearranging the ordering to generate descriptive information. The collected data figures are appropriate as they can be read quickly in a presentable manner.

4.2.1 Gender

Investment in stock market is riskier than the other investment, such as deposit, T-bills, bonds and properties. The decision to invest in stock market means willingness to take risk in their investment. When considering the stock market investment by gender, women are more sensitive to take risks than men. According to Catherine C Eckel, women are more sensitive than men in decisions making, and it reflects in all aspects of their decision making.

Among the 105 responses, 84 males and 21 females participated to this research, and participation of female is only 20%. This difference emphasizes the female involvement percentage in CSE (Table 4.1).

Table 4.1: Participation by Gender

Male	84	80%
Female	21	20%

Another factor that was identified about gender is 46 out of 84 males still continue their investment in stock market but only 6 out of 21 females continue their investment CSE, which in percentage is 54.76% of males and 28.57% females still continue their investment (Figure 4.1).

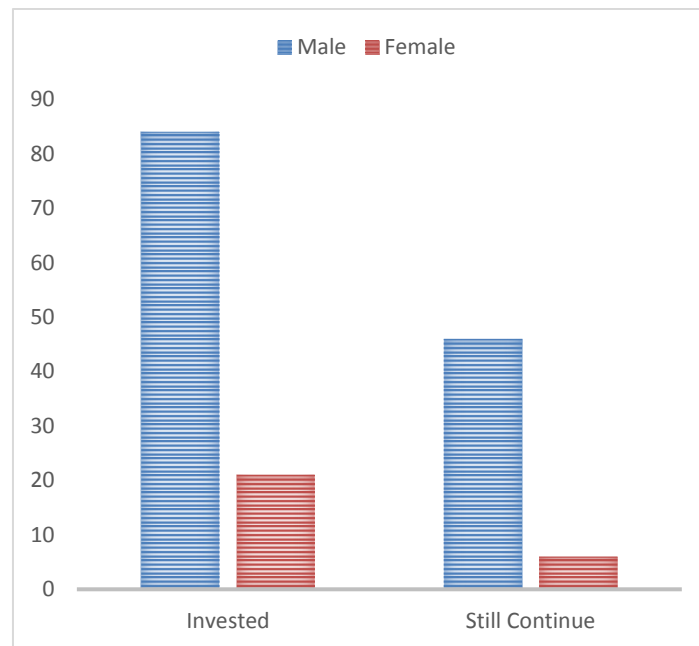


Figure 4.1: Continuation in CSE by Gender

4.2.2 Age

Based on the participants in the survey, the investors have been categorized in to five groups as shown in figure 4.2, which could be interpreted as an indirect measure of their maturity, experience and knowledge.

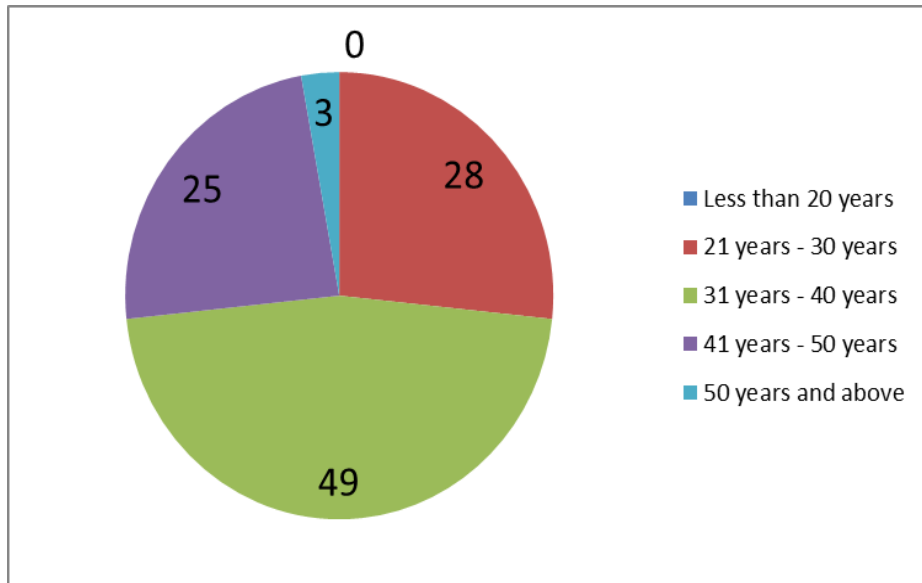


Figure 4.2: Investors Participation by Age Group

There is some distinction between age and experience in investment behaviour. According to this data we can clearly identify people who are in age group of 31 to 40 are the highest participants in CSE. Person who reaches the age limit of 18 can start their investment in CSE but there is no single participation for this research. This is because of the focus group and also in Sri Lankan culture this category might continue their studies and most of them are still dependent (Figure 4.2).

Based on the above data, from age 21 they are willing to take risk and start to invest in CSE. With maturity and experience investment percentage has increased between age limit of 31-40 it is nearly half amount of our focused group.

When people get old they slowly leave the stock market and who remains there has more experience and best performers as well. Based on this we can assume when they get older they feel more secure and they have a fix income method than taking high risk and also, they might have other commitments.

When considering the relational comparison with gender and age, women’s participation is visible only in age group between 21to 30 and 31 to 40 (Figure 4.3).

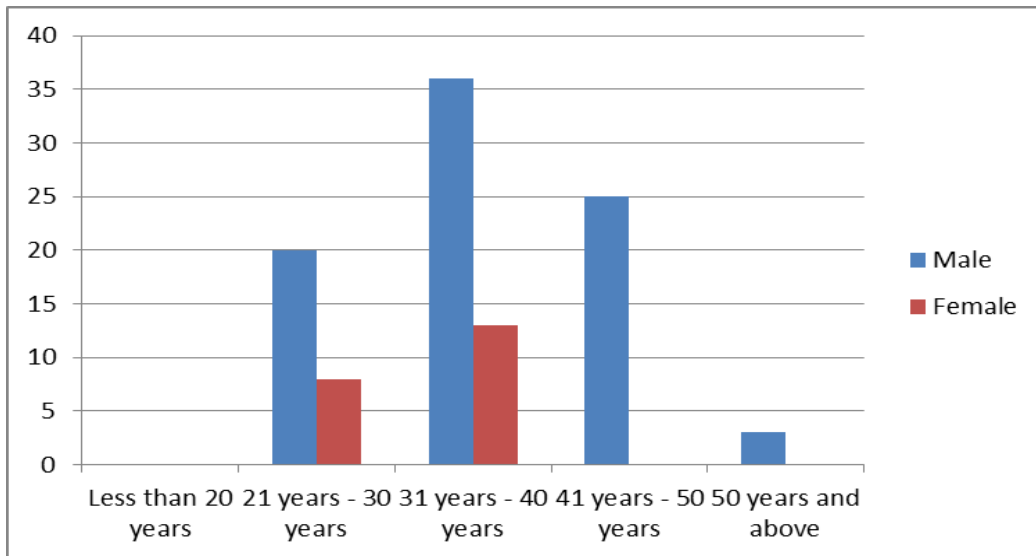


Figure 4.3: Women Participation by Age

4.2.3 Employment

When considering the professional background of the participants, most of them are employees of different organisations. According to the previous research (Harrison, Jeffrey & Jeremy, 2004) people who are interacting with other professionals are more likely to invest in the stock market. The impact of sociability is much stronger in those states where stock market participation rates are higher. People who are involved in this research are also more social and most of them work at banks, insurance companies, and IT and broker companies. Based on collected data, 91.43% are employees and all the other participants are only 8.57% as table below (Table 4.2)

Table 4.2: Participation by Employment

Employee	96	91.43%
Self-Employee	8	7.62%
Retired	1	0.95%

There was a total of 105 valid responses for the question about employment. Among them 96 are employees, 8 are self-employed and only one retired person participated for this study.

4.2.4 Computer Literacy

When considering the computer literacy from a Sri Lankan perspective, in 2015 it was 26.8% among which a highest literacy rate of 40.3% was shown in urban sector (statistics.gov.lk, 2016). Among the employed population, computer literacy was around 52.7% and the positions such as senior managers and managers was around 71.3%, professionals 85% and higher computer literacy shown by clerical support workers 88.2%.

The investors in the stock market need to be computer literate to find out digital information to make their investment decision. When focusing on the CSE, it is the first computerised stock market in Indian sub-continent and most of the investors do their trading by using online application provided by stock brokers. But some investors contact with their brokers and request them to trade for them. Based on the responses in this study around 40.95% investors have good computer literacy rate and 32.38% have very good rate (Table 4.3).

Table 4.3: Computer Literacy of Investors

Very Poor	1	0.95%
Poor	3	2.86%
Average	24	22.86%
Good	43	40.95%
Very Good	34	32.38%

Among 105 responses, there are only 4 investors who fell below the average level, and there are 77 responses in the above average range. This has indicated the computer literacy rate and how it is important for investment planning. Most of the investors do their trading online by using application given by their stock brokers. But some of them communicate with brokers and request them to trade.

4.2.5 Stock Market Experience

Based on the experience of participant's in the survey, the investors have been categorized in to five groups as shown in figure (Figure 4.4). Among the 105 respondents 32 investors had less than one-year trading experience in CSE which as a percentage is 30.48% and majority of participants have between 1 to 5 years' experience in investing and as percentage it ranges to 44.76%.

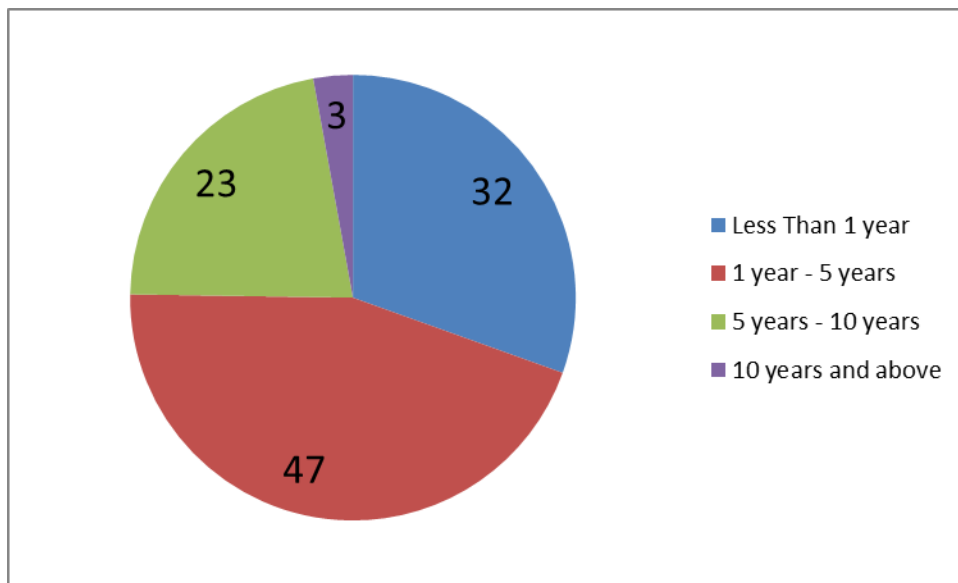


Figure 4.4: Categorised Participant by Experience

Based on the participants in the survey, only 3 participants among 105 investors have more than 10 years of experience in the market and there are 23 investors who had 5 to 10 years of experience in the market (Figure 4.4). Investors in both experienced and non-experienced categories faced differently during the market fluctuation. Investors who have less than one-year experience entered the market during the peak and investors who has more than 10 years left the market by selling their shares with huge profit.

4.2.6 Continuation of Investment

Based on the participants in the survey, there are 53 investors among 105, still continuing their investment in CSE, as a percentage it is 50.48%. The rest left the stock market due to various reasons and there are 52 investors fallen in to this category (Table 4.4).

Table 4.4: Investors who continue Their Investment in CSE

Yes	53	50.48%
No	52	49.52%

Considering this continuation with market experience, there was not a single investor in the category of less than 1-year experience (Figure 4.5). Investors who had experience in the market from 1 to 5 years have reduced the continuation of CSE investment from 47 to 30 and from 23 to 22 have reduced in the category of experience between 5 to 10 years.

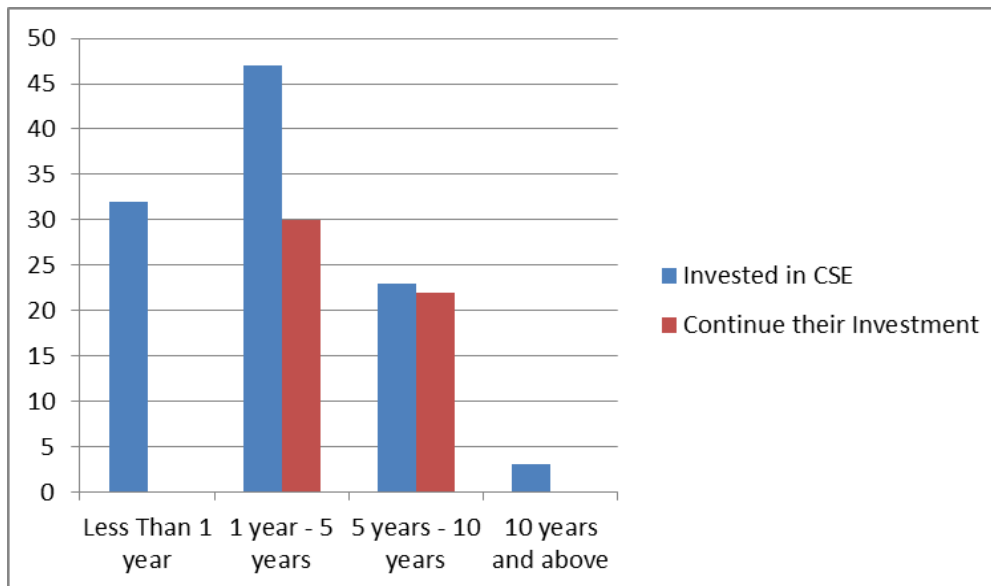


Figure 4.5: Continuation of Investment Compare to Experience

Investors who were in the experience category less than 1 year and also investors who were in the category of experience above 10 years discontinued their investment.

4.3 Qualitative Analysis

4.3.1 Why Investors Leave CSE

The investors who have left the market have given some reason, these reasons are categorized as follows.

- Margin Rate Change
- Market Performance
- Due to Loss
- Depend on Advisors
- Other

According to the given reasons, due to loss is the main impact and the root cause for investors to leave the market. There were 10 investors who withdrew their investments due to the current performance of the market (Figure 4.6). All the given reasons range as below.

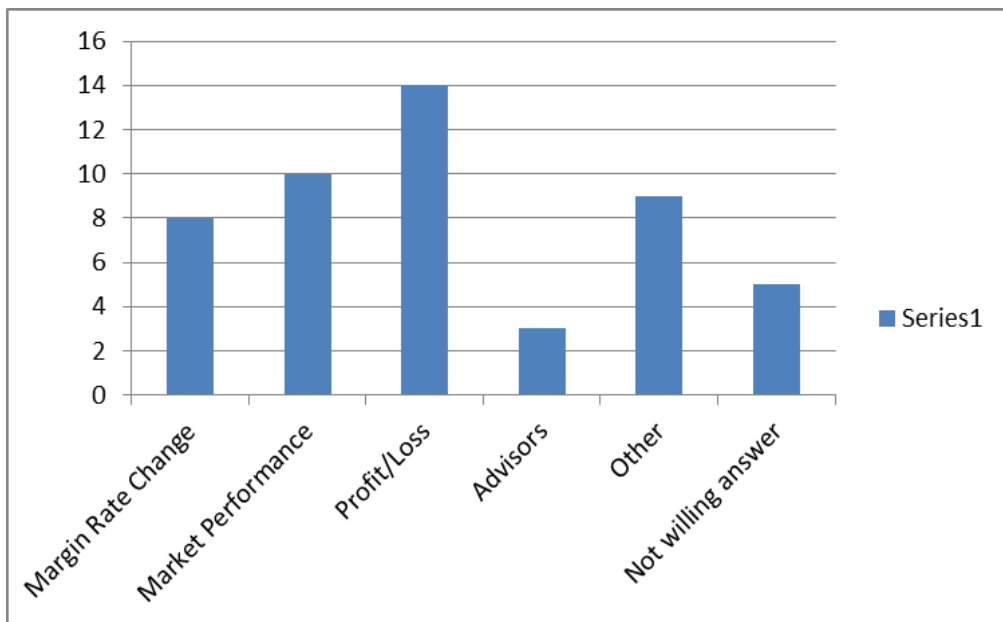


Figure 4.6: Reasons to Leave the Market

4.3.1.1 Margin Rate Change

The CDS is the wholly owned subsidiary of CSE and has the authority to act as a depository in respect of security trade on the CSE. In addition, it facilitates the settlement of securities that has been traded. During the year of 2011 they have amended the margin requirement rule to streamline short term credit facilities given by the stock brokers. According to those changes brokers are not allowed to handle margin accounts need to transfer to margin account maintain in the bank, if brokers provide credit facility it has to settle T+3 days and should not allow to exceed the margin rate of 50%. Due to that some investors who already exceeded the credit limit had to settle by depositing money to their account or sell some of their shares to fulfill the margin requirement. But due to force sale market falling day by day and again margin requirement rose. Result in investors leaving the market with huge losses because they did not take necessary action due to their greed and fear of loss. There are some reasons given below (Table 4.5) by the investors who left the market due to margin. Based on the given answers most of the investors were unable to manage their margin percentage according to new changes.

Table 4.5: Reasons given as Margin Rate Change

Reason	Description
Margin rate and settlement date change	<ul style="list-style-type: none"> • Due to Margin percentage reduction, forcefully sold my shares to recover margin • Forcefully sold, due to margin • Due to margin rate change I lost my investment, brokers force sold my shares to recover the credit • Broker has advised to deposit money to cover the margin amount but I was unable to do it • Time to time government changed their policies, those changes has affected my investment • Experienced margin rate changed

Based on the answers given by the investors, they have criticized the government for this margin change. In the early days investors were able to use this margin rate at around 75% but some broker companies facilitated it up to 100%. CDS advised to stop this broker

credit facility and by reducing margin rate up to 50%, it affected customers who purchased shares for credit. Investors who analyzed the circumstance of this change have sold their shares and purchased beyond the margin limit and also for an unrealistic price. Some investors point their finger to stock broker companies' due to force sale, but they had no option. If not, the investors had absorbed the losses by themselves.

When further analyzing, this seems to have happened after end of the 30 years of war, the market went up from 2030 points a peak at 7823 in 2011(CSE.lk). There were many investors who were actively trading in the market looking only at the very short-term perspective due to factors such as high price volatility which gave people the opportunity of making huge returns in few days or weeks. Due to people making quick gains on the short term they were encouraging to buy shares on credit which led to a very high credit and some investors had purchased shares without considering the realistic value of shares which led the people to buy shares at a very unrealistic high price.

This emphasizes that most of our investors who invested in the stock market did not do the analyses. They only think about short term profit and do the trading without analyzing the shares and pays unrealistic prices. When market becomes unstable the shares with unrealistic price will get reduced drastically and the investors will have to bear a huge loss.

4.3.1.2 Market Performance

There are some investors who withdrew their investment due to market performances. When the market does not perform well the investors are unable to make short term profit. According to the expertise; market down time is the best way to invest for a long-term investment. As discussed previously margin rate change also affects the market performance, due to this reason investors have a doubt of getting in to the market as they lack confidence. Analyzing the above given reasons, they mainly highlighted that the market was down and they left the market. Some investors indicated that they have earned short term profit during the time the market was performing well but it is not possible according to current situation (Table 4.6).

Table 4.6: Reasons given as Market Performance

Reason	Description
Market performance	<ul style="list-style-type: none"> • Unable to make a short-term profit according to the current market situation. • Expected growth with government change has not happened • Market not perform well • Waiting for bull market • Early days we were able to make a daily profit but it's really difficult now • Market down • Get rid of market until perform it.

When analyzing the given reason, these investors are not studying or analyzing the market before making the investment. The valuation of the company share prices are becoming ridiculously low and it might go lower than the realistic value. This would be the best time to consider share in a particular company, but some investors leave the market until it performs well.

According to this particular investors' behavior, they have traded during the period of 2010 to 2011 in CSE. That was the peak time of CSE after the long 30 years' war in the country (Figure 4.7).

During the period of 2010 to 2011 investors started trading to make a daily profit. But with margin rate change and market down turn they were not able to make a profit compared to that period of time. Although the IPO also drastically improved during this period, investors were waiting to request for shares from the IPOs in order to make huge profits by selling in the secondary market within few days (Figure 4.8). According to the chart 13 IPOs have issued the highest value of IPOs in year 2011 and this was the highest

in the history of CSE within a year. A total fund of approximately 19.1 billion Sri Lankan rupees was raised.

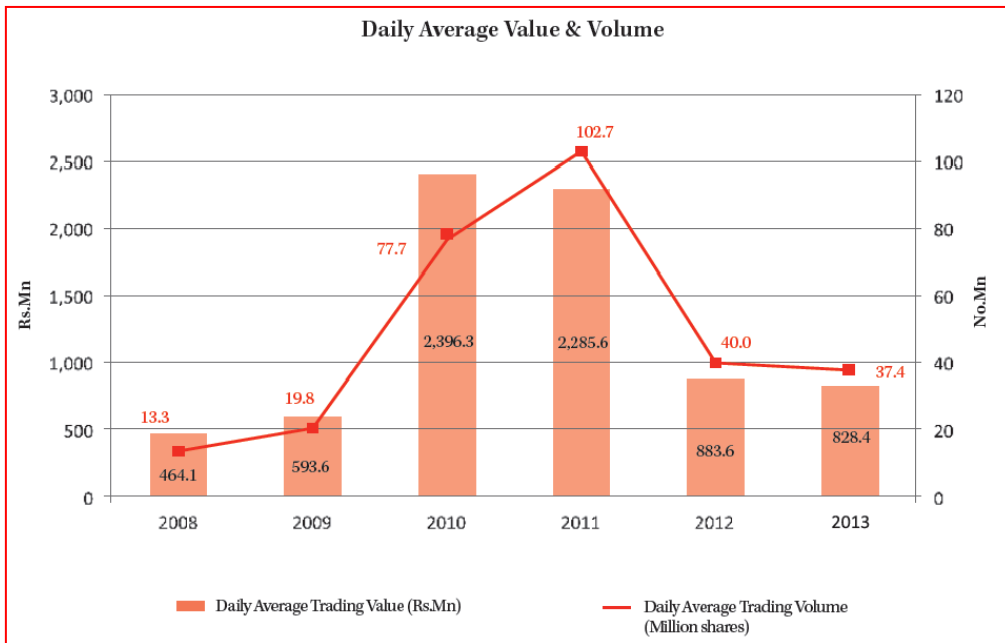
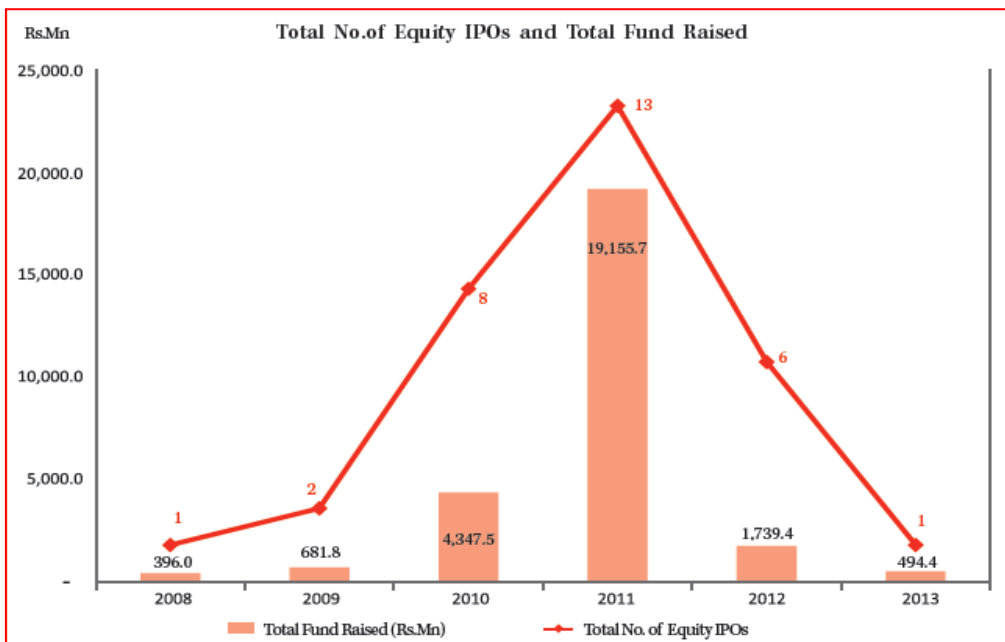


Figure 4.7: Daily Average Trade Volume

Source: CSE Investment Guide



4.8: Total number of IPOs and Total Fund Raised

Source: CSE Investment Guide

Figure

4.3.1.3 Due to Loss

This is the most common reason given by the investors; there were 14 investors who left the stock market investment after facing a massive loss. Most of the answers were similar and summarized answers are listed in the below Table (Table 4.7)

According to their responses most of them lost their initial investment that may be due to lack of knowledge or experience about the market. Some investors had depended on the stock brokers advices and they blame the brokers for their losses. The most interested and pitiful scenario is some of them invested others money and they were not able to recover the investment. Few investors have identified their mistakes like not willing to sell shares (Greedy/ Love) or the last of time do in-depth analysis.

Table 4.7: Reason given as Due to Loss

Reason	Description
Profit / Loss	<ul style="list-style-type: none"> • No time to actively involved, and also difficult to make a profit • I am not able to make an expected profit I lost my investment also No return on investment • I learned how to do the trade after I lost my investment, useless advisors • I was too greedy, too much love my shares, ultimately broker sold my lovers • Loss my whole investment, • Invested my wife money, I can tolerate my loss not others.

Among these responses, these investors had invested in the stock market without doing the proper analysis. Otherwise they should be able to protect their initial investment other than the previously earned profit. Some may not have a proper idea why brokers forced to sell their shares, and try to keep the shares until their portfolio exceeds the margin limit. This investment is not easy like depositing money in the bank FD account to get

interest or rent receiving from their land or property. Any investment has a certain degree of risk and some investors are known as risk takers and others are averse to risks. In order to earn profit from the investment, we need to think about the personal objective or goal then, the time limit for achieving them and amount of money needed to attain the level of risk prepared to take. Especially in the share investment, investors have to be prepared to do the homework on the companies in which they are going to invest. This means investor needs to have an understanding about the current situation about the country, industry and all other factors that may affect your investment. And also need the basic skill of analyzing a company's annual report, accounts and other statements in order to study the company and how it will perform in the future and how its share price may move.

4.3.1.4 Depend on Advisors

Some investors do their trade in the stock market based on the advice given by the stock brokers. The investor's knowledge and experience they might consider stock broker advice or make their own decisions. There are is no proper mechanism to consider which method is the best but if they make their own decision that has self-satisfaction and confidence. Among the responses there were few investors who have criticized their advisor for not giving correct information to protect their investment. Most of these investors had less than one-year experience in the stock market but experienced investors take moderate level of risk and do their analysis about the companies that has recommended by the advisors.

Table 4.8: Reason given as Due to Advisor Decision

Reason	Description
Due to advisors	<ul style="list-style-type: none"> • Followed brokers advices but he was unable to protect us • Not received correct information from my advisor • Depend on my friends, we all lose our money

The reasons given by the investors, who left the market due to investor’s advice, totally trusted their investors and depends 100 percent on them. The stock brokers and their company made profit base on the transaction volume and not for the quality of work they do. There are some investors have depended on the advices given by their friends also lose their money (Table 4.8).

4.3.1.5 Other Factors

Among the given reasons, there are few reasons which have been categorized as other factors. Most of these reasons are personal reasons (Table 4.9). Some investors have changed the investment method due to complexity and they compare it with bank fixed deposit and other deposit. These types of deposit are known as guaranteed deposit and investors are able get fixed income during the month of end of the investment period. According to given reasons some investors leave the market due to family commitments, especially for their children’s higher education. There are some investors who left the market due to current market situation, these types of investors invest when the market performs well and plan to make short term profit. And there are few investors not willing give their reason and assume those reasons are personal.

Table 4.9: Reasons Categorized as Other Factors

Reason	Description
Other reasons	<ul style="list-style-type: none"> • Change investment • This is not easy to compare with interest on deposit • No guaranteed income • Moved to fix income method • Changed to complex method to simple plan • Plan to invest in Future • Sold my shares, hope to invest in future • Need money for my child education • Personal - Not willing answer

4.3.2 Relatively Important Factors for Decision Making

There are few important factors that need to be considered when trading the shares in the stock market, especially purchasing shares. Most of the investors get the latest market information about shares that they intend to buy or sell. What share to buy is a decision that needs to be made by the investors based on the factors such as company income, net profit, EPS, share price, dividends etc. The investors who participated in this research have prioritized these factors and according to them the most important factor is share price (Table 4.10). 94 investors have selected share price as first priority and rest of others selected it as second priority. Among them only 88 investors had considered second priority factor to make their decision, that means 17 investors did not have second priority factor to make their decision.

Table 4.10: Investors Main Concern Factors for Decision Making

Factors	P1	P2	P3	P4	P5	P6	P7	P8	Total
Director Board	2	14	25						41
Income	3	8	18	16					45
Net Profit	2	13	9	24	6	12			66
EPS – Earning per share	2	29							31
Share Price	94	11							105
Trend/Growth	2	1	4	9	5	14	4	9	48
Assets		3	5	6	19	4	9		46
Dividends		9	12	8	12				41
News					1				1
Total	105	88	73	63	43	30	13	9	

According to the given answers, all investors consider share price to do the share trade but any other factor except net profit, half of investors not consider those factors as priority.

4.3.3 Relatively Importance of Information Sources

Based on the use of information used by participants in the survey, most of the investor's main information source is company web site (Table 4.11) and second highest information sources is CSE website. Other 32 investors considered their main information source as a stock brokers and friends.

Table 4.11: Information Sources Prioritized by Investors

Information Sources	P1	P2	P3	P4	Total
Company Web Site	44				44
CSE Web Site	14	38			52
Friends	24	30	6	9	69
Stock Broker	23	17	32		72
IPO related documents			2		2
Total	105	85	38	9	

According to the given source of information only two people consider the IPO related documents as an information source (Prospectus). When the company becomes listed as a liability company they have to prepare Prospectus. Any investor has authority to request Prospectus from the company before they buy shares from the IPO. This document may contain the details of company financial status, number of shares issued, issue price, director board, company profile etc. In total, all the priorities highest number of importance information source is stock broker and only 85 investors have second priority.

4.3.4 Profit Made in IPOs

There are two categories of companies, one is private companies and other is public companies. The private companies want to expand; they can generate capital from the initial public offer and became a public company. The company has decided the number of shares issued to public and sometimes investor may not get any share or might get less than number of shares request base on the demand (Colombo stock guide, 2016). Because of this demand investors can make a profit by selling it in the secondary market. According to the feedback given by the investors, they have confidence about IPOs to generate a profit. Only 2 investors never had a chance to make a profit and 14 investors rarely made a profit (Figure 4.9)



Figure 4.9: Feedback about Investment in IPO

The investors need to get the idea about performance of the company who try to enter the CSE before investing in IPOs. Since there are no details available to the public, investors need to get company prospectus from stock brokers or from bank mentioned by the company. But according to the feedback given by the investors, most of them never use prospectus as an information source (Table 4.13).

4.3.5 Investment Period

When considering the period of investment by each user most of them have invested in the period of 2010 to 2012. After the end of the 30-year long war the market went up to a peak due to this massive demand. Among the 105 investors only 14 investors were involved in trade during the period of 2006 to 2008 but it has increased up to 71 in the next period (Table 4.12). The war ended during period of 2008 to 2010 and the author can assume most of them might have joined after May 2009. And this post war scenario has proven by the period of 2010 to 2012, among the 105 investors, all of them are involved in trade during that period.

Table 4.12: Investment Period

Experience in CSE	Invested period				
	2006 - 2008	2008 - 2010	2010 - 2012	2012 - 2014	2014 – To date
Less than 1 year			32		
1 year - 5 years	5	45	47	39	30
5 years - 10 years	6	23	23	22	22
10 years and above	3	3	3	2	0
Total	14	71	105	63	52

4.4 Reliability Analysis

4.4.1 Reliability Analysis for Investment Behavior

The Cronbach's Alpha Coefficient (CAC) calculated for the variable investment behavior is 0.64. The normal practice is to accept a CAC value of 0.7 and above as indicating a high internal consistency for the measurements and therefore to consider the measurement device, that is the questionnaire, to be reliable. Similarly, when the CAC value is below 0.5, the normal practice is to consider it as an indication of low internal consistency for the measurements and therefore the measurement device or the questionnaire to be unreliable. Within the range of 0.5 and 0.7 for the CAC value, it is possible for the researcher to argue on the validity of the measurement instrument based on the descriptive analysis of the respondents and the nature of the measurement being taken.

As the data collection for this research was from a sample that represented a population consisting of investors at the CSE, it can be argued that the responders are highly aware of the concepts being measured. For example, in this instance the measurement on investment behavior is from respondents with considerable experience at the CSE trading floor with over 70% having more than 1 year of experience (see figure 4.4). Therefore, based on the foregoing reasoning, the researcher intends to accept the CAC value of 0.64 as adequate to consider the questionnaire as reliable for the measurement of Investment Behavior (Table 4.13).

Table 4.13: Investor Behavior:
Cronbach's Alpha for 3 items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.639	.659	3

Table 4.14: Investor Behavior:

Item Statistics			
	Mean	Std. Deviation	N
Q10	3.4667	.69430	105
Q11	3.0286	.57941	105
Q13	3.5714	.92878	105

Table 4.15: Investor Behavior:

Inter-Item Correlation Matrix			
	Q10	Q11	Q13
Q10	1.000	.492	.552
Q11	.492	1.000	.130
Q13	.552	.130	1.000

Table 4.16: Investor Behavior:

Inter-Item Covariance Matrix			
	Q10	Q11	Q13
Q10	.482	.198	.356
Q11	.198	.336	.070
Q13	.356	.070	.863

Table 4.17: Investor Behavior:

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.356	3.029	3.571	.543	1.179	.083	3

Table 4.18: Investor Behavior:

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
10.0667	2.928	1.71120	3

The Cronbach's Alpha Coefficient is 0.58 when we consider Q9, Q10, Q11 and Q13 (Table 4.19). This is a weak indicator; hence it can be considered as investor behavior questions used to measure the investor behavior in CSE were not valid. Then CAC can be carried out separately for different combination and run without Q9 (Table 4.13).

Table 4.19: Investor Behavior:
Cronbach's Alpha for 4 Items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.581	.572	4

4.4.2 Reliability Analysis for Information Sources

The CAC value calculated for the variable information sources is 0.69. As the data collection for this research was from a sample that represented a population consisting of investors at the CSE, it can be argued that the responders have readily available access to trading related information through online means. For example, in this instance the measurement on information sources is from respondents with considerable computer literacy with over 75% having considerably high knowledge and only less than 5% having poor computer literacy abilities (see Table 4.3). Therefore, based on the foregoing reasoning, the researcher intends to accept the CAC value of 0.69 as adequate to consider the questionnaire as reliable for the measurement of Information Sources (Table 4.20).

Table 4.20: Information Sources:
Cronbach's Alpha for 3 Items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.693	.697	3

Table 4.21: Information Sources

Item Statistics			
	Mean	Std. Deviation	N
Q17	3.7810	.66479	105
Q18	3.7619	.58051	105
Q19	3.6667	.51266	105

Table 4.22: Information Sources

Inter-Item Correlation Matrix			
	Q17	Q18	Q19
Q17	1.000	.462	.433
Q18	.462	1.000	.409
Q19	.433	.409	1.000

Table 4.23: Information Sources

Inter-Item Covariance Matrix2			
	Q17	Q18	Q19
Q17	.442	.178	.147
Q18	.178	.337	.122
Q19	.147	.122	.263

Table 4.24: Information Sources

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.737	3.667	3.781	.114	1.031	.004	3
Item Variances	.347	.263	.442	.179	1.682	.008	3

Table 4.25: Information Sources

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
11.2095	1.936	1.39156	3

The Cronbach's Alpha Coefficient is 0.59 when we consider all questions (Q16, Q17, Q18 and Q19) related to information sources (Table 4.26). This is a weak indicator; hence it can be considered as information related questions used to measure the Information sources in CSE which were not valid. Subsequently CAC was carried out separately for different combination and run without Q16 (Table 4.20).

Table 4.26: Information Sources:
Cronbach's Alpha for 4 Items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.592	.683	4

4.4.3 Reliability Analysis for Investment Decision Making

The CAC value calculated for the variable Information Sources is 0.60 (Table 4.27). As the data collection for this research was from a sample that represented a population consisting of investors at the Colombo Stock Exchange, it can be argued that the responders have made investment decision and already started their trading. For example, in this instance the measurement on reliability of information sources, with over 70 % base on available information sources for their decision making and around 30% depend on Stock brokers and their friends (Table 4.11). Therefore, based on the foregoing reasoning, the researcher intends to accept the CAC value of 0.60 as adequate to consider the questionnaire as reliable for the measurement of Information Sources.

Table 4.27: Investment Decision:
Cronbach's Alpha for 7 Questions

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.605	.609	7

Table 4.28: Investment Decision:

Item Statistics			
	Mean	Std. Deviation	N
Q20	2.2952	.85399	105
Q21	3.0095	.94559	105
Q22	2.4381	.88713	105
Q23	2.4952	.85624	105
Q24	3.3143	.93350	105
Q26	2.1714	.75265	105
Q27	2.7619	.98570	105

Table 4.29: Investment Decision:

Inter-Item Correlation Matrix							
	Q20	Q21	Q22	Q23	Q24	Q26	Q27
Q20	1.000	.413	.120	.127	-.238	.160	.473
Q21	.413	1.000	.270	.065	-.134	.444	.384
Q22	.120	.270	1.000	.256	.099	.203	.373
Q23	.127	.065	.256	1.000	.369	.255	.027
Q24	-.238	-.134	.099	.369	1.000	-.146	-.075
Q26	.160	.444	.203	.255	-.146	1.000	.380
Q27	.473	.384	.373	.027	-.075	.380	1.000

Table 4.30: Investment Decision:

Inter-Item Covariance Matrix							
	Q20	Q21	Q22	Q23	Q24	Q26	Q27
Q20	.729	.334	.091	.093	-.190	.103	.398
Q21	.334	.894	.227	.053	-.118	.316	.358
Q22	.091	.227	.787	.194	.082	.136	.326
Q23	.093	.053	.194	.733	.295	.164	.023
Q24	-.190	-.118	.082	.295	.871	-.102	-.069
Q26	.103	.316	.136	.164	-.102	.566	.282
Q27	.398	.358	.326	.023	-.069	.282	.972

Table 4.31: Investment Decision:

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.641	2.171	3.314	1.143	1.526	.168	7
Item Variances	.793	.566	.972	.405	1.715	.018	7
Inter-Item Correlations	.182	-.238	.473	.711	-1.985	.043	7

Table 4.32: Investment Decision:

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q20	16.1905	9.156	.320	.405	.568
Q21	15.4762	8.310	.429	.355	.527
Q22	16.0476	8.642	.405	.238	.538
Q23	15.9905	9.163	.317	.347	.569
Q24	15.1714	10.874	-.033	.286	.683
Q26	16.3143	9.179	.394	.377	.548
Q27	15.7238	7.933	.475	.432	.507

Table 4.33: Investment Decision:

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
18.4857	11.541	3.39715	7

The Cronbach's Alpha Coefficient is 0.47 when we consider all eight questions (and Q20 to Q27) related to decision making (Table 4.34). This is a weak indicator; hence it can be considered as investment decision questions used to measure the investment decision in CSE were not valid. Then CAC carried out separately for different combination and run without Q25 (Table 4.27).

Table 4.34: Investment Decision:
Cronbach's Alpha for 8 Questions

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.446	.371	8

4.5 Correlational Analysis

4.5.1 Correlation analysis of Behavior Aspect and Investment Decision

Table 4.35: Correlation between Investor Behavior and Investment Decision

		Correlations	
		Investment Decision	Behavior
Investment Decision	Pearson Correlation	1	-.049
	Sig. (2-tailed)		.618
	N	105	105
Behavior	Pearson Correlation	-.049	1
	Sig. (2-tailed)	.618	
	N	105	105

The Pearson Correlation value between investor behavior and investment decision is -0.49 (Table 4.35). This means that there is very weak correlation or there is no correlation in the investment decision against investor behavior. This has negative correlation, this means when one variable increase in value then the second variable decreases in value. However, as the significance is not less than 0.05, the correlational analysis does not provide any reliable inferential information.

4.5.2 Correlation Analysis of Information Sources and Investment Decision

Table 4.36: Correlation between Information Sources and Investment Decision

		Correlations	
		Investment Decision	Information Sources
Investment Decision	Pearson Correlation	1	.165
	Sig. (2-tailed)		.093
	N	105	105
Information Sources	Pearson Correlation	.165	1
	Sig. (2-tailed)	.093	
	N	105	105

The Pearson Correlation value between investor information sources and investment decision is .165 (Table 4.36). This means that there is very weak correlation or there is no correlation in the investment decision against information sources. The change in one variable is not correlated with the changes in the second variable. However, as the significance is not less than 0.05, the correlational analysis does not provide any reliable inferential information.

4.6 Hypothesis Testing

H1o: There is no relationship between investor behavior and investment decision in CSE investment.

$$H1o: \beta = 0$$

$$H1a: \beta \neq 0$$

A one ANOVA was conducted to explore the impact of a behavior on investment decision. Since the exact significant level (.171) provided in SPSS output is greater than alpha (0.05) the results are not statistically significant (Table 4.37). Therefore, the null hypothesis H1o is substantial and alternative hypothesis is rejected. Hence investor behavior was not a success factor for investment decision

Table 4.37: One-way ANOVA – Behavior is a Success Factor of Investment Decision

ANOVA

Investment Decision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.703	8	.338	1.491	.171
Within Groups	21.757	96	.227		
Total	24.460	104			

Table 4.38: One-way ANOVA – Behavior is a Success Factor of Investment Decision

Descriptive

Investment Decision

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
2.00	3	2.3833	.90644	.52333	.1316	4.6351	1.86	3.43
2.33	3	2.5733	.79475	.45885	.5991	4.5476	1.86	3.43
2.67	13	2.6362	.37538	.10411	2.4093	2.8630	2.00	3.14
3.00	23	2.7143	.44510	.09281	2.5219	2.9068	1.86	3.43
3.33	16	2.9025	.35707	.08927	2.7122	3.0928	2.43	3.43
3.67	25	2.4512	.47620	.09524	2.2546	2.6478	1.43	3.14
4.00	15	2.7240	.44011	.11364	2.4803	2.9677	2.14	3.43
4.33	6	2.4317	.73944	.30188	1.6557	3.2077	1.86	3.43
4.67	1	2.5700	2.57	2.57
Total	105	2.6410	.48496	.04733	2.5472	2.7349	1.43	3.43

H1o: There is no relationship between information sources and investment decision in CSE investment.

$$H1o: \beta = 0$$

$$H1a: \beta \neq 0$$

A one-way ANOVA was conducted to explore the impact of information sources on investment decision. Since the exact significant level (.076) provided in SPSS output is greater than alpha (0.05) the results are not statistically significant (Table 4.39). Therefore, the null hypothesis H1o is substantial and alternative hypothesis is rejected. Hence, available information sources were not a success factor for investment decision.

Table 4.39: One-way ANOVA – Information sources is a success factor of Investment Decision

ANOVA

Investment Decision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.313	5	.463	2.068	.076
Within Groups	22.147	99	.224		
Total	24.460	104			

Table 4.40: One-way ANOVA – Information Sources is a Success Factor of Investment Decision

Descriptive

Investment Decision

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
3.00	16	2.6613	.33148	.08287	2.4846	2.8379	2.29	3.14
3.33	17	2.5053	.44861	.10880	2.2746	2.7359	1.86	3.29
3.67	23	2.4409	.45820	.09554	2.2427	2.6390	1.43	3.14
4.00	32	2.7856	.44679	.07898	2.6245	2.9467	1.57	3.43
4.33	12	2.6908	.63780	.18412	2.2856	3.0961	2.00	3.43
4.67	5	2.9140	.70656	.31598	2.0367	3.7913	2.14	3.43
Total	105	2.6410	.48496	.04733	2.5472	2.7349	1.43	3.43

Two-way ANOVA

There is a relationship between information sources and investor behavior with investment decision.

Table 4.41: Two-way ANOVA: Information Sources and Customer Behavior is a Success Factor of Investment Decision

Tests of Between-Subjects Effects

Dependent Variable: Investment Decision

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	744.082 ^a	35	21.259	116.566	.000
Behavior	1.700	8	.212	1.165	.333
Information Sources	2.506	5	.501	2.748	.025
Behavior * Information Sources	7.170	21	.341	1.872	.027
Error	12.767	70	.182		
Total	756.849	105			

a. R Squared = .983 (Adjusted R Squared = .975)

This two-way ANOVA was conducted to explore the impact of information sources and investor behavior on investment decision. When considering only the behavior with investment decision that exact significant level generated in SPSS output is 0.333, which is greater than alpha (0.05); the results are not statistically significant (Table 4.41).

However, impact of information sources and investor behavior both together has a significant level of output is .027 which is less than alpha (0.05); then the correlational analysis has reliable inferential information. Hence, available information sources and investor behavior both together were a successful factor for the investment decision. When considering the information sources as an individual variable with investment decision in SPSS generated significant level output of 0.25 which has more reliable than both together.

5. Conclusions and Recommendation

5.1 Introduction

This chapter focuses on drawing out the conclusions from the findings of the study. The first section of this chapter presents the fulfillment of the research objectives followed by contributions of the research findings. Finally, this chapter describes the limitations of this thesis and provides directions for future research.

5.2 Discussion

The main objective of this research is to formulate appropriate guidelines for non-informed investors to help them choose their investments in an effective manner by analysing market trends and patterns using available information. The second objective was to identify the investor behavior in this sphere and the available sources of information about CSE, which serves as a crucial factor in making successful business decisions. The necessary data for the research was gathered through a questionnaire prepared exclusively for this study by the author. The questionnaire was intended to obtain answers from investors who invested in CSE.

The said questionnaire sought to obtain the important factors that had been used by the respondents in making their investment decisions. According to the answers given by them, the following aspects have emerged as being the main factors in effecting their decisions. These factors have been outlined below in their sequential order that was based on the importance attached to them by the respondents themselves. (Vide Table 4.10)

1. Share price
2. Earnings per share
3. Dividends
4. Trend/Growth
5. Income
6. Net Profit
7. Assets
8. Constitution of director board

The main issue is that, most of the investors are inclined to consider share price only as evident from the Table 4.10. Most of the investors do not pay considerable attention to the other factors listed above in making their decisions. Obviously, this may be the reason why that most of the investors tend to purchase shares at highly unrealistic prices, totally disregarding the future trends in the market.

Company website, CSE website, friends, stock brokers and IPO related documents are the main source of information indicated by the respondents, of which the company web site constitutes the main information source for most of the investors as shown in the Table 4.11. Evidently, it is only a very few investors (1.9%) do their homework in studying and evaluating the IPO related information prior to reaching their decision on trading in CSE.

The stock brokers make comprehensive studies and generate informative research materials regularly and circulate them among the investors. They serve as a reliable source of information providing a good understanding of the company's activities and business situation before doing the investment. Yet, there is no proper use is made of this information and a considerable segment of investors are prone to be dependent on the opinion of their friends and colleagues than the stock brokers. Thus, the word of mouth by friends has become an important source of information for many. That can be either effective or misleading.

The hypothesis analysis and Pearson correlation of the findings has identified a weak correlation between investor behavior and the investment decision. Similarly, the correlation between information sources and investment decision also reflects a weak position. Vide Table 4.19 and 4.20.

It is important to note that the hypothesis testing does not indicate a significant correlation between behavior and investment decision as a null hypothesis H_{10} is reflected in the calculation which is due to inconsistencies and the contradictions in the answers given by the respondents. Therefore, the investor behavior in this study cannot be considered a successful factor for investment decision.

This “Null” result is reflected in the Table 4.21 and Table 4.22 for factors between; behavior and investment decision, information sources and investment decision. Therefore, the null hypothesis H₁₀ is accepted and information sources, investor behavior are not a successful factor for investment decision.

However, when two-way ANOVA was conducted applying both variables together, as shown in Table 4.23, it generates a success impact of information sources and investor behavior. Thus, both available information sources and investor behavior taken together will provide a success factor for investment decision. The information sources as an individual variable with investment decision has accepted level of success factor for investment decision.

The analysis of above results, reflect that most of the investors have been involved in trading during the period of 2010 to 2012. During this period, the price of stocks remained at a level which was far above the realistic price levels. This was mainly due to post war economic conditions prevailed in the country. Most of the investors were only concerned a very short-term perspective due to factors such as the high price volatility which allowed investors to make huge returns in a short period. According to this situation the share market shot up from points 2030 on the 18th May 2009 to a peak of 7823 points on the February 2011. During this period, the comparison of shares of some non-performing companies with that of the S&P SL index of 20 largest and most liquid company shares has revealed that the share prices of the former have increased more than some of the best performing company’s shares. During this period, most of the newspapers gave prominence for share market performance highlighting its spectacular growth in their lead stories which encourage the people to invest more on share trading. In view of the above, it is understandable that the correlation between investment decisions and information sources and investor behavior has been proved negative during the time period referred to above, in which the investors participated in trading in the CSE. Perhaps, this scenario might be the origin of the collapse of the current market situation.

5.3 Recommendation

The investor's behavior and information sources do not have a strong relationship with investment decision in CSE. It is important that the investor needs to have a clear idea about the investment that he makes, and its potential and the ability to grow the initial capital. The analysis of the feedback from the respondents, it is evident that most of them have not earned any profit whatsoever, from their investment in CSE. Some have even lost their capital. About 70% of respondents of this study were involved in trading activities during the period of 2010 to 2012, the recorded highest performance period in the history of CSE. This market situation rendered it difficult to predict the market prices and identify the best shares in the market. Another factor that, had contributed to this situation was the scenario of some investors making huge profits from shares of the company's which were not performing well during that period; some were even not in operation. The investors who were able to make quick gains within a short period, were encouraging themselves to buy more shares on credit (margin trading) which eventually led to creates a very high credit exposure in the market. This situation led most of the investors to purchase more shares without considering their realistic value. Accordingly, they bought shares at highly artificial and unrealistic prices. The Investors did not consider the other important factors which are usually used in making wise decisions. Consequently, the word of mouth among them remained the main information source.

To handle this situation, the CDS had taken action to regulate the credit transaction by controlling the margin rate. That has affected most of the investors and they were left with only two options. The first option was to sell their shares and settle the credit; the other was to deposit money to achieve the margin percentage. The ultimate scenario was that the brokers forcefully sold the shares of the investors and recovered the credit limit, which marked a major turning point in the market.

This study is of the view that when the investors make an investment during the best performance period, it is desirable that they should aim to achieve the capital growth over a short period, and set their own benchmark to measure the performance of their portfolio. The investor behavior is yet another important factor that can affect the non-rational decisions. Investors always tend to be worried about what they lose rather than being judicious about preserving the shares which have a greater future profit potential.

Sometimes, the investors make wrong decisions and incur losses by hurrying into wrong decisions. For example, in an event when the price of non-performing shares is dropping and that of the performing shares has a good potential for further growth, they try to manage the situation by selling the profitable shares rather than retaining the non-performing shares to compensate and absorb the loss incurred by the latter.

The situation outlined above has had a serious impact on the confidence of the investors. The damage caused was immense. There are many stocks, the basic price of which is ridiculously low in the market now. Yet, the reentry of investors back into the market is slow. They have serious doubts in getting into the market currently. Most of the investors including those who were heavily involved in it do not consider the stock market as a reliable investment option. According to the Warren Buffet, the third richest person who had made his fortunes in the share market the best time to invest in is the time when the market is down, to quote him “The rich invest in time, the poor invest in money”. The pioneer investors of the caliber of Warren Buffet make their decisions by analyzing the company trends and investing on the right time; they do not attempt to profit on the stock market within a short term. Nor do they trade stocks on the assumption that the stock market will be closed down on the next day and not reopen for five years. Because every stock market has its fluctuations and periods of down times which might be the best time to invest for longer period. The investors can make the best use of information sources and important factors highlighted throughout this research to analyze and identify the best shares in CSE.

5.4 Research Limitation

This research approached the investors, who work in the banking, financial companies, broker companies, IT and a few who are self-employed. Most of the respondents were of the age group of 50 and below. Although, there is a considerable segment of investors in the age group of 50>, there cooperation was found to be somewhat lacking. Comparatively only a less amount of this age group was willing to respond.

5.5 Future Research Direction

Since the financial information constitute the most important factor to obtain a realistic understanding of the company, it is important that a comprehensive study is made on the financial factors to ascertain the impact that it may make on investment decision.

The government policy changes is another important factor. This research identified the impact of the margin trading rate change on credit limit. Most of the investors and the entire CSE were seriously affected by that. This may be an important point to take notice of and conduct a research on its impact on CSE and the individual investors as well.

According to certain comments made by several investors, there were some unrealistic transactions that had taken place during the best performance period that had contributed to the loss of confidence and trust of the investors of the CSE. There were serious doubts as to why investors commit their money in financially unstable companies and are prepared to pay very unrealistic values. Perhaps, this may be due to situation exaggeratedly created by the leading investors adopting manipulative market practices to implicitly persuade the unsuspecting investors to follow the suit. In this backdrop, the author recommends doing research on market manipulations in CSE to enlighten the prospective investors and restore the confidence lost by the investors who were active during the peak time.

5.6 Conclusion

This study explores the different types of investment behavior among the investors such as, overestimation, emotional factors viz. human sentiment: regret, hope, fear and greed, finally irrational buying and selling behavior and how it is correlated with investment decision making. Further, the available information sources which influence the investment decisions in CSE and factors needed to be considered, the retrieval of data from above sources are also highlighted. The market manipulation is found to be an important factor by this research; due to this manipulation, some investors' have lost their investment by resorting to unreliable sources in making their decisions. This study, we hope will enlighten and encourage investors to make wise decisions and protect their initial capital by analyzing available information and be able to make profit by investing on at the right time.

References

Ambrose Jagongo & Vincent.S (2014), A Survey of the Factors Influencing Investment Decisions. The Case of Individual Investors at the NSE. 4 (1), 93-100.

Alistair Byrne & Stephen P Utkus. (2013). Behavioral finance. Understanding how the mind can help or hinder investment success, 3-20.

About Investments (2015). Investment Characteristics. [ONLINE] Available at: <http://www.fcac-acfc.gc.ca/Eng/resources/educationalPrograms/ft-of/Pages/invest-2-3.aspx>. [Accessed 04 December 2015].

Alistair Byrne & Stephen P Utkus, (2013), Understanding how the mind can help or hinder investment success, [ONLINE] Available at: Understanding how the mind can help or hinder investment success [Accessed 14 December 2015]

Benjamin Graham, (2006). The Intelligent Investor: The Definitive Book on Value Investing. A Book of Practical Counsel (Revised Edition) (Collins Business Essentials). Rev Sub Edition. Harper Business. Pp 18-20

Brad Barber & Terrance Odean (2001). Boys Will Be Boys: Gender, Overconfidence and Common Stock Investment. Quarterly Journal of Economics, 116(1), 261-292

Ben Graham (2016). Base Hit Investing. [ONLINE] Available at: <http://basehitinvesting.com/superinvestors/ben-graham/>. [Accessed 04 May 2016].

Brad Barber & Terrance Odean (2000), Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors, the Journal of Finance.2

Brad Barber & Terrance Odean (2015), the Behavior of Individual Investors by: SSRN. 2015. [ONLINE] Available at: <http://ssrn.com/abstract=1872211>. [Accessed 21 June 2015]

Catherine Fuss & Philip Vermeulen (2004), Men, Women and Risk Aversion: Experimental Evidence. Risk Aversion. 2-16.

Catherine Fuss & Philip Vermeulen (1990), the American Economic Review. Herd Behavior and Investment. 80 (3), 2-7.

CSE. (2015). About CSE [ONLINE] Available at: <http://www.cse.lk/aboutus.do>. [Accessed 01 March 2015].

CSE. (2014). CSE Publications [ONLINE] Available at: <http://www.cse.lk/publications> of the cse.do. [Accessed 07 December 2014]

Colombo Stock Exchange (2016), Investing in Shares, CSE investment guide, A Basic Guide. 3, Available at: https://cse.lk/pdf/CSE_Guide/_Book_English.pdf [Accessed 01 April 2016].

Central Depository Systems Rules (2014), CDS Rules 2014 [ONLINE] Available at: https://www.cse.lk/pdf/CDS_Rules_July_2014.pdf [Accessed 12 May 2016]

Colombo stock guide (2015), initial public offer ipo at Colombo stock market [ONLINE] Available at: [https:// http://www.colombostockguide.com /2015/02/25/ initial-public-offer-ipo-at-colombo-stock-market/](https://http://www.colombostockguide.com/2015/02/25/initial-public-offer-ipo-at-colombo-stock-market/) ,[Accessed 20 May 2016]

David Scharfstein & Jeremy Stein (1990), Herd Behavior and Investment, The American Economic Review, 80(3),465-47

Department of Census and Statistics-Sri Lanka (2016), Computer Literacy - 2015 (First Six Months). [ONLINE] Available at: <http://www.statistics.gov.lk/>. [Accessed 01 June 2016].

Franck Crossan (2003), Research philosophy: towards an understanding, 11(1):46-55

Hisashi Kaneko. (2004). Individual Investor Behavior. The Irrational Nature of Buying and Selling Behavior. 1 (1), 2-3.

Investor Guide Staff (2014). 15 Characteristics of Highly Successful Investors – Investor Guide.com. [ONLINE] Available at: [http://www.investorguide.com /article /6679/15-characteristics-of-highly-successful-investors/](http://www.investorguide.com/article/6679/15-characteristics-of-highly-successful-investors/). [Accessed 24 April 2014]

Jonathan Berkm & Peter DeMarzo (2015). Grundlagen der Finanzwirtschaft: Analyze, Entscheidung und Umsetzung, [ONLINE] Available at:<https://books.google.lk/books>

Jan Ivar Larsen. (2010). Norwegian University of Science and Technology. Predicting Stock Prices Using Technical Analysis and Machine Learning. 2 (1), 2-64.

Jonathan Berk (2013). Corporate Finance (3rd Edition) (Pearson Series in Finance). 3 Edition. Pearson.

John Huber (2013), Quantitative vs Qualitative Methods for Stock Analysis [ONLINE] Available at: <http://basehitinvesting.com/quantitative-vs-qualitative-methods-for-stock-analysis/>. [Accessed 04 May 2016].

M.M Fonseka & Gao Liang Tian (2010), What factors motivate the Stock Analyst Forecast on listed companies in Colombo Stock Exchange?, [ONLINE] Available at : <http://ssrn.com/abstract=1746502> [Accessed 20 June 2015]

Marco Monti, Vittorio Pelligra, Laura Martignon & Nathan Berg (2014), Retail investors and financial advisors: New evidence on trust and advice taking heuristics, *Journal of Business Research* 67 (2014) 1749–1757

Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer & Robert Vishny.(1999), *Journal of Financial Economics*, Investor protection and corporate governance, 3-27

Richard Sloan, (1996), Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings? (Digest Summary), *Accounting Review*, Vol. 71, No. 3: 289-315

Seth L. Elan. (2010), Behavioral Patterns and Pitfalls of U.S. Investors. Over confidence. 1 (1), 3-5

Suphat Sukamolson (1998), Fundamentals of quantitative research. What is quantitative research? 2 (1), 1-20

Sara Kiesler & Lee Sproull (1992), *Organizational Behavior, Group Decision Making and Communication Technology*. Carnegie Mellon University. 52. Pp 96-123

Seongmin Hahn (2004), Personal Versus Impersonal Information Search, [ONLINE] Available at: [www.ibrarian.net/.../ Personal_Versus_ Impersonal_ Information_Search](http://www.ibrarian.net/.../Personal_Versus_Impersonal_Information_Search), [Accessed 25 December 2015]

The Behavior of Individual Investors (2016). Chapter 22 - The Behavior of Individual Investors . [ONLINE] Available at: <http://dx.doi.org/10.1016/B978-0-44-459406-8.00022-6>. [Accessed 21 April 2014].

Wikipedia (2015), Efficient-market hypothesis - Wikipedia, the free encyclopedia. [ONLINE] Available at: https://en.wikipedia.org/wiki/Efficient-market_hypothesis. [Accessed 27 December 2015].

Appendix

Appendix A – Questionnaire

Questionnaire on “Investor Behavior in CSE” MBA-IT Research, 2012 Batch at University of Moratuwa

As part of my MBA studies, I am conducting a research on Investor Behavior in Colombo Stock Exchange (CSE). I mainly focus on individual investors in CSE. You are kindly requested to participate in this survey and assist in the research.

All responses to this questionnaire will be held and treated in strict confidence and used only for the stated research purposes. In no case will the names of individuals or organizations be disclosed.

Thank you very much for taking time to complete the questionnaire, your effort is greatly appreciated.

Thanking you,

Yours Sincerely

Rasika Ellawala

(Student Reg No – 129055L)

- Dec** - Descriptive Analyses
Qu - Qualitative Analyses
IV1 - Independent Variable 1
IV2 - Independent Variable 2
DV - Dependent Variable

Section A – Personal Information

Des Q1. Please indicate your Gender

- Male
- Female

Des Q2. Please indicate your Age

- Less than 20 years
- 21 years – 30 years
- 31 years – 40 years
- 41 years – 50 years
- 50 years and above

Des Q3. Type of Employment

- Employee
- Self-Employee
- Retired

Des Q4. How do you rate your Computer Literacy?

- Very Poor
- Poor
- Average
- Good
- Very Good

Des Q5. Have you been an investor in Colombo Stock Market Previously?

- Yes
- No

Des Q6. Do you still continue your investment in Colombo Stock Market?

- Yes
- No

Des Q7. If No, Please give your reasons

Des Q8. How many years do you actively involved in the share market

- Less Than 1 year
- 1 year - 5 years
- 5 years - 10 years
- 10 years and above

Section B – How do you make investment decisions?

IV2 Q9. Men trade more than women in the stock market, and they take more risk than women

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

IV2 Q10. Primary Market (IPO) is the most attractive investment in share market

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

IV2 Q11. Secondary Market is the most attractive investment in share market, compare to IPO

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

Qu Q12. Have you made profits in every IPO?

- Always
- Frequently
- Sometimes
- Rarely
- Never

IV2 Q13. Do you do a company analysis before you invest in IPO?

- Always
- Frequently
- Sometimes
- Rarely
- Never

Qu Q14. If yes, indicate the relative importance of the following factors

- Share Price
- Earnings per share
- Dividends
- Trend/Growth
- Income
- Net Profit
- Assets
- Director Board
- Others

Qu Q15. Indicate the relative importance of following sources of information for you to get information to analyze before making investment decisions

- Company Website
- CSE Website
- Friends
- Stock Brokers
- IPO related documents
- Others

IV1 Q16. Do you analyze past information (price, EPS, yield etc.) and make your own decision to invest in shares?

- Always
- Frequently
- Sometimes
- Rarely
- Never

IV1 Q17. Relevant information sources are available to make your own decisions

- Always
- Frequently
- Sometimes
- Rarely
- Never

IV1 Q18. Available information is adequate to make your investment decision

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

IV1 Q19. Available information is accurate to make your investment decision

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q20. Decision making are time consuming and most of the investors does not have time to do the data analysis

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q21. Every investor has a capability to analyze this information

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q22. Some investors always depend on Stock brokers because they are not capable to do the analysis

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q23. Some investors are capable to do the analysis but they always depend on the Stock brokers because they have more information about share & company

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q24. Investors can depend on the Stock brokers because they always identify the correct share to make a profit

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q25. Stock brokers are given Special favor to large investors and misguide small investors

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q26. Due to market manipulation, large customers make huge profit

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

DV Q27. No point in analyzing information to do the investment due to market manipulation

- Strongly Agree
- Agree
- Moderate
- Disagree
- Strongly Disagree

Qu Q28. Please select your investment period in CSE

- 2006 - 2008
- 2008 - 2010
- 2010 - 2012
- 2012 - 2014
- 2014 - To date

Section B – S&P SL 20 Companies

- Access Engineering PLC
- Aitken Spence PLC
- Asiri Hospital Holdings PLC
- Cargills (Ceylon) PLC
- Ceylinco Insurance PLC
- Ceylon Cold Stores PLC
- Ceylon Tobacco Company PLC
- Chevron Lubricants Lanka PLC
- Commercial Bank of Ceylon PLC
- DFCC Bank PLC
- Dialog Axiata PLC
- Distilleries Company of Sri Lanka PLC
- Hatton National Bank PLC
- Hemas Holdings PLC
- John Keells Holdings PLC
- Lanka Orix Leasing Company PLC
- National Development Bank PLC
- Nestle Lanka PLC
- People's Leasing & Finance PLC
- Sympathy Bank PLC