# YANGON UNIVERSITY OF ECONOMICS DEPARTMENT OF COMMERCE MASTER OF BANKING AND FINANCE PROGRAMME

Investor Awareness, Perceived Risk Attitude on Investor Behaviour in Yangon Stock Exchange

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# Investor Awareness, Perceived Risk Attitude and Investor Behaviour in Yangon Stock Exchange

This thesis paper is submitted in partial fulfillment towards the requirements for the degree of Master of Banking and Finance (MBF)

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#### **ABSTRACT**

The objective study is to identify the present situation of stock trading in Yangon Stock Exchange. Moreover, this study analyze the effect of investor awareness and perceived risk attitudes on investor behaviour when trading in Yangon Stock Exchange. There are five companies, six securities and over 38000 investors however; only about 3,800 actively investors are trading stock in Yangon Stock Exchange. Primary data were collected by distributing questionnaire to directors of YSX, stock market reviewers, officials staff of six securities and 68% of individual investors who are trading shares of listed companies through six securities and the survey period was during August, 2019. Secondary data was collected from SECM annual report, YSX annual reports, securities companies reports were used. Descriptive method and Linear Regression method were used for analysis. The study found that awareness being a better determinant of stock market investor behaviour than the perceived risk attitudes, financial awareness was less significant determinant of stock market investor behavior .The study made recommendations that SECM, YSX and Securities Companies should provide more awareness Programs such as Seminar, workshops, roadshows, conference etc., both for issuers and for investors in which should evenly be disseminated to each and every districts of all states and divisions rather than major cities that will help in encouraging potential investors in investing on the securities market.

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#### LIST OF ABBREVIATION

AYA Trust Sc - AYA Trust Securities Co.,Ltd.

CBM - Central Bank of Myanmar

CBSc - Co-operative Bank Securities Ltd

DIR - Daiwa Institute of Research

FMI - First Myanmar Investment Public Company Ltd

FPB - First Private Bank

IOS - Operating System

IPO - Initial Public Offering

JPX - Japan Exchange Group

KBZSc - KBZ Stirling Coleman Securities Co., Ltd

KTZ<sup>Rh</sup>Sc - KTZ Ruby Hill Securities Co.,Ltd.

MCB - Myanmar Citizen Bank Ltd

MEB - Myanmar Economic Bank

MoPF - Ministry of Planning and Finance

MoU - Memorandum of Understanding

MSEC - Myanmar Securities and Exchange Centre Co., Ltd

MTSH - Myanmar Thilawa SEZ Holding Public Ltd

MYANPIX - Myanmar Stock Price Index

SECM - Securities and Exchange Commission of Myanmar

TMH - TMH Telecom Public Company Limited

UABSc - United Amara Bank Securities Co., Ltd.

YSX - Yangon Stock Exchange

#### **CHAPTER I**

#### INTRODUCTION

Stock market is an important source of long-term capital. It plays a vital role in economic development by transferring the funds from savers to investors. Stock market helps to channelize household savings to the corporate sector which in turn facilitates the development of industrial and service sectors. The liquidity that an exchange provides gives the investors the ability to quick and easy selling of securities. This is an attractive feature of the stock market investment.

Implementation and development stock market in Myanmar gain a couple of benefit to the country. The government and business which are seeking the capital can generate the funds themselves easier from the investors who want to invest their surplus funds by trading on stock market. To supervise and manage the stock market . Myanmar government established Securities and Exchange Commission of Myanmar (SECM) in August, 2014. The SECM has been taking necessary measures to regulate the securities market.

The SECM gave the permission to establish the Yangon Stock Exchange (YSX) which is the operator of the securities market where the securities are traded. Furthermore, the SECM issued securities business licenses to six securities companies in order to carry out the securities dealing business, securities brokerage business, securities underwriting business, also issued one investment advisory license and certificates for securities sales representatives license and granted the acknowledgement certificates to eleven Institutes to provide basic knowledge of securities business and securities investments and increasing public awareness to educational programs .Yangon Stock Exchange held the grand opening ceremony successfully on 9<sup>th</sup> December, 2015 and training Launched on 25<sup>th</sup> March, 2016 with the First Myanmar Investment Company Limited (FMI), After that ,Myanmar Thilawa SEZ Holding (MTSH), Myanmar Citizens Bank (MCB), First Private Bank (FPB) and TMH Telecom Public Company Limited were also listed on the YSX. Even nascent today, the Myanmar Capital Market is well structured. Aware investors follow to stock market information from many sources and they more obviously invest stocks and risky financial instruments. In order to enhance awareness of the capital markets in the communities, the YSX has put in place programs such as annual financial literacy weeks, issuing of annual reports and Quarterly bulletins among others.

Share price fluctuation of listed companies trading on YSX as of FMI went up kyat 41,000 per share significantly although the base price was kyat 26,000 per share. In the final week of 2016, FMI ended up with a lowest share price for the year after encountering a share price drop for three straight weeks, the last day closed price was kyat 10,000 on 28<sup>th</sup> December 2018. Vitality of the market greatly reduce due to Myanmar investors' lack of awareness of stock orders and lack of knowledge of the stock market However, share price is going as downward trend without stable indicated investor under reaction. Currently, FMI's closed share price kyat 8,700 in March, 2019. In addition, share price fluctuation of other four listed companies exhibited MTSH share price increased kyat 55,000 per share in spite of being kyat 40,000 per share as the base price in May 2016. In November 2016, its share price went down kyats 4,600 per share steadily because of share split, After that Share price of MTSH is fluctuation between kyat 2,950 and kyat 3,500 per share in present time. The other share price of MCB, FPB and TMH goes as downward trend currently.

#### 1.1 Rationale of the study

The Yangon Stock Exchange was officially launched on 9<sup>th</sup> December 2015, its trading started on March 25<sup>th</sup>, 2016. Twenty events were supported and/or organized by the SECM to maintain fair, secured liquid securities market, raising and protecting the investors and the national economy, (SECM Report, 2018). Although the YSX has held some successes through holding public awareness conferences, and workshops, seminars it is still faced with a challenge of public awareness. The market displays lack of awareness and limited appreciation of the role of capital markets with varying investor risk attitudes which has affected the making of proper investment option by irrational behaviour which may affect the trading volumes and prices of stock in the market for example, there were only three listed firms on the YSX in 2016, trading volume of 3 listed companies were 2.55 million shares and trading value also hiked up MMK70.74 billion in 2016 (YSX Annual Report, 2016).

In 2017, the number of listed firms rose to four, share of trading volume 2.71 million and trading value MMK 22.13 billion changed hands, and there were 1.6 million block trades worth MMK 7.22 billion(YSX Annual Report,2017) the barometer of share value progress mostly showed down trend. In 2018, the number of listed firms rose to five, but volume retreated slightly to trading volume 2.36 million and shares of trading value MMK11.5 billion and 680,000 block trading value MMK 2.51 billion and theirs market Capitalization was MMK 554.6 (YSX Annual Report,2018).

However, the newly stock exchange market isn't active and daily trading volume and Value remains quite small because of a limited number of listed companies, insufficient number of investors and lack of market practice or lack of knowledge of investors as to stock market. In the present time, in spite of having 38000 investors of listed companies from 2016 January to 2019 March, only over 1,100 investors are making stocking trading actively in Yangon Stock Exchange. In addition, although Yangon Stock Exchange launched its stock trades with high price of listed companies, day by day, theirs stock price and trading value are gradually decline.

The major purpose of the study is to examine how investor awareness and perceived risk attitudes on investor behaviour while trading stocks on the stock market (YSX). The study will provide information that will be useful to the YSX, government bodies, institutions, potential listing companies & individuals in our society. The findings will form an information base for YSX and policy makers on how to better performance of how investor awareness and perceived risk attitudes affect investor behaviour while trading stocks on the stock market (YSX).

#### 1.2 Objectives of the study

The objectives of the study are as follows:

- (1) To identify overview of stock trading in Yangon Stock Exchange.
- (2) To analyze the effect of investor awareness and perceived risk attitudes on investor behaviour in Yangon Stock Exchange.

#### 1.3 Scope and Methods of the Study

This study only focused overview of stock trading in Yangon Stock Exchange. The studyalso analyze investor awareness, perceived risk attitudes on investor behaviour in Yangon Stock Exchange. Investor awareness addressed aspects of financial awareness, social learning while investor behaviour was be measured basing on investors psychological and emotional /social aspects of behaviour. Perceived risk attitudes looked at investor's perception as driven by both affective and cognitive factors leading to risk averse, risk neutral or risk taking investors. In this study, descriptive method together with data analysis included. Both primary and secondary will be used.

For primary data were collected from holding interviews with the 30 officials and 120 investors from six securities firms and through structured questionnaires to the securities firms and investors on the YSX. The secondary data are mainly collected from SECM website, YSX website, Securities Companies, relevant books, previous research papers and other internet websites.

#### 1.4 Organization of the Study

Chapter one introduces the topic with rationale, and research objective of the study, scope and method of the study, organization of the study. Chapter two include Efficiency of Financial Markets, investor awareness, perceived risk attitude, investor behavior and behavioural biases, investor awareness, perceived risk attitude and investor behavior. In Chapter three presents Development of Securities Market in Myanmar, background of Yangon Stock Exchange, securities market participants in Myanmar, type of trading, stock trading current situation of Yangon Stock Exchange.

Chapter four includes research design, demographic characteristics of respondents and type of stocks trading, securities companies trading and frequency of respondents trading on the YSX, analysis on investor awareness and perceived risk attitudes in YSX, analysis on investor behavior, correlation analysis between investor awareness, perceived risk attitudes and investor behavior, regression analysis effect of investor awareness and perceived risk attitudes on investor behavior and finally chapter five captures the summary of Findings, suggestion, recommendations and need for further research are revealed.

#### **CHAPTER II**

#### THEORETICAL BACKGROUND

In this chapter presents a critical review of research work carried out by various scholars in the field of Efficiency of Financial Markets, investor awareness addressed aspects of financial awareness, social learning, perceived risk attitudes mention aspects of affect and cognition, individuals investor behavior and behavioral biases, the chapter is to review investor awareness, perceived risk attitudes and Investor behavior.

#### 2.1 Efficiency of Financial Markets

The efficiency of financial markets means that the price of a security (stock or bond) is determined according to all the available information about the economy, sectors and companies issuing that security. Financial markets are efficient if the prices of stocks and traded securities are determined correctly. The right price of a security, whether it was a stock or a bond, is the one that reflects all the available information during a timely manner this security.

Well-organized market, it must have several features. For instance, all the important information to judge a stock or bond and determine their right price should be available for all dealers. A good example of this, is the information about companies and their profitability, changes in management or the information about competitors, the contracts they made and other information affecting the buying and selling decisions.

Moreover, dealers should have the ability to get correct analyses of the received information to help in judging the right price for the stocks or bonds. Sellers and buyers should not have because of their high financial capacity - the ability to influence the right market prices upwards or downwards or impose limitations on the freedom of selling and buying for any dealer at anytime. (Capital Market Authority, Kingdom Of Saudi Arabia)

#### 2.2 Investor Awareness

Awareness refers to the consciousness. There are two elements of Awareness namely Social Learning and Financial Awareness. Investors who are classified by aware and unaware. Aware investors may know characteristics of a risky asset (bonds and stocks) and have the same information on the probability distribution of the stock return. The others are not aware of stocks. Hence they can only invest in bonds, regardless of the entry costs. The shadow cost of ignorance is the expected excess return. Zhen (2006), Identified In stock markets, information is usually transmitted from issuers to investors through several different channels mainly through mandatory public disclosure by issuers, voluntary public or private disclosure by issuers; and private acquisition by investors from sources other than the issuer, such as purchasing research reports from stock analysts, examining the firm's products or services, and consulting the firm's competitors among others.

According to Guiso and Jappelli (2005) observe awareness of investors can be through learning from, issuers and distributors of information, and others often learn about investment opportunities from peers who have been informed by financial intermediaries (Social learning). From the other aspect, awareness can be through financial awareness which is majorly determined by the investor's resources (income, financial wealth), age and education status.

#### 2.2.1 Social Learning

Guiso and Jappelli (2005) argue Social interaction helps many investors learn as it can be considered another path for disseminating stock market information. Nevertheless, relying on parameter values, severe social interaction may persuade asset supplier to depend on oral communication instead of direct information production, thus, saving on information dissemination costs. Increasing readership that boost the probability of stock awareness, mutual funds, and corporate bonds. It is strongly correlated with education, year of birth, wealth, long term bank relations, newspaper readership and the index of social learning.

Several studies have documented that "peer effects" can be pretty powerful determinants of portfolio choice. The education level of peers will matter for stock ownership. Those who have friends that have a college degree are more likely to own

stocks. Thus there may be news provision and learning via social interaction. Merton(2007) mentions that the school life may provide individuals expose to economic and have friends investing in the stock market.

#### 2.2.2 Financial Awareness

(Lusardi and Mitchell (2006, 2007) discuss Learning from financial intermediaries is another way people become aware of investment opportunities since

lack of financial knowledge is widespread and individuals lack knowledge of even themost basic economic principles. the implications household incomes and wealth, long-term bank relations and social interactions. They noticed that those who were exposed to financial education in high school or in the workplace save more.

Similarly, Lusardi and Mitchell (2006, 2007) show that those who display low literacy are less likely to plan for retirement as well as less likely to make investments and, as a result, accumulate much less wealth. Agarwal, Driscoll, Gabaix and Laibson (2007) continued doing effort that financial mistakes are prevalent among the young and elderly, who are those displaying the lowest amount of financial knowledge.

Education is strongly related to awareness. Education and wealth are also tend to be correlated with social learning, because the wealthy and better educated are more likely to interact and learn from others. Education and financial resources tend to be positively correlated, while wealth and income vary in ways of estimating with age, (Luigi and Tullio, 2005).

#### 2.3 Perceived Risk Attitude

Perceived risk attitude refers a person's judgment towards taking or avoiding risk when making decisions under uncertainly outcomes. Differences in willingness to take risk certainly affect the allocation of wealth between safety and risky assets. However, the decision of accepting a particular asset and the willingness for paying that asset completely depends on the investor's risk perception. The choice of accepting risk among the all alternatives of one investor varies from person to person depending on one's beliefs and reference point. The risk attitude of one investor is generally determined by either his emotions or his cognitive ability which makes it more subjective rather than objective to risky situation. At a very early stage,

emotional reactions are predominant and are more basic than cognitive evaluations. Therefore, investors are likely to depend on emotional, psychological or social factors to make decisions (Weber and Milliman, 1997).

#### **2.3.1** Affect

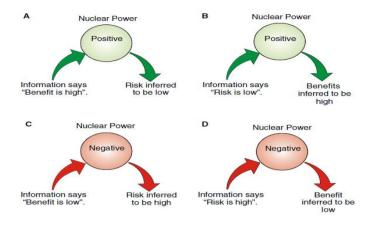
Affect often refers to individual's emotions/feelings. Elster (1994) defines emotion as a physiological state of stimulation generated by beliefs about something. it combines cognitive, physiological, social, and behavioral aspects of an individual. Though on the contrary, Frijda (2000), emotional are addressed as evaluative rather than cognitive judgments. Emotional assessment plays the most vital role in determining matters positive or negatives, unhappy or happy and pessimistic or optimistic (Bradley and Lang 2000).

A study by Alhakami and Slovic (1994) and Finucane et al., (2000) found that the inverse relationship between perceived risk and perceived benefit of an activity (e.g., using pesticides) was linked to the strength of positive or negative affect concerned with that activity. They found that if an activity for instance ,a specific stock was 'preferred', people tended to judge its risks as low and its benefits as high and where the activity was 'not preferred', the risk judgments were high and low benefit which leads to a negative relationship between risk and return.

Moreover, Finucane et al. (2000), continued doing effort to manipulate affect in such a way as to lead people to differentially perceive risks and were expected; if subjects were provided information that risk is high, they were expected to infer low benefit; if they were provided information that risk is low, they were expected to infer high benefit. And this makes perceived risk negatively correlated to self-esteem, rigidity and risk taking but positively correlated to anxiety.

Figure (2.1)

Providing information about ri sk should change the perception of benefit and risk



Source: *Journal of Behavioral Decision Making*, Vol 13, 1-17, Copyright © (2000) John Wiley & Sons, Ltd.

Model showing how information about benefit (A) or information about risk (B) could increase the overall affective evaluation of nuclear power and lead to inferences about risk and benefit that happening at the same time affectively with the information given. Similarly, information could decrease the overall affective evaluation of nuclear power as in C and D.

#### 2.3.2 Cognition

Cognition refers to one's belief towards an object. The beliefs can either be positive or negative depending on aspects like, knowledge, moral, intelligence, inspiration, dishonesty, and being weak among others (Lavine et al., 1998). At very early stage, emotional reactions or evaluations are predominant and are more basic than cognitive evaluations. Therefore, investors are likely to depend on emotional, psychological or social factors to make decisions.

In the stock market, it occurs that an investor is more associated with the financial risk and the opportunity risk than other risks. The financial risk is associated with the result that will offend the investor financially whereas the opportunity loss risk is the outcome that by buying stock A, the investor will lose out on buying stock B he would really prefer buying. When an investor makes an investment decision, the

investor's perception of these two risks can be a deciding factor. If the investor is risk avoiding (risk averse), he will take steps to minimize risk, for example, by diversifying his/her investment in various stocks; if he/she is risk-seeking, he/she will not tend to diversify his portfolio, for instance, he will invest in one stock, hoping to get a high return on investment. Therefore, investors with various aspect of perceived risk attitudes; perceived risk averse, perceived risk neutral or perceived risk takers will behave differently.

#### 2.4 Investor Behaviour and Behavioural Biases

People behaviour among others determines investors' decision making on the stock markets. According to Huang (2003), human behavior is not only cognitive, but also emotional moreover; cognition and emotion are interrelated which dominates investor behaviour when trading. Investor behaviour on the stock market is often found to be a factor of cognition, emotion and social influences. And the need to include psychology efforts to explain how perception of investors and their reaction to uncertainties affect the investment decision there by dominating price movements.

The stock market and the economy of a country are closely related. A booming stock market positively affects the growth and development of a country. Thus, investment decisions in the stock market play a vital role in the economy. Naveed et al., (2011) discuss that individual investor decision making on the stock market is driven by heuristics, prospect theory and regret aversion. This is seen to be based on psychology of investors as well as emotional and social influences. From the other aspect, investors are found to be generally irrational showing a number of predictable and financially destructive biases, often attributed to psychological factors- fear, greed, and other emotional responses to price fluctuations and dramatic changes in an investor's wealth (Andrew et al., 2005).

#### 2.4.1 Psychological biases

Within behavioral finance, it is assumed that characteristics of market individuals and information structure behavior of investor for explaining the reason why people sell and buy stocks derives from the psychological principals of the decision making. The main focus of behavioral finance is upon the ways methods people do interpret and act upon information for making investment decisions. Biases

can cause people to emphasize or discount information, or can lead to too strong an attachment to an idea or an inability recognize an opportunity. These biases can affect all kinds of decision-making, but have specific implications in relation to money and investing. The biases relate to how people process information to reach decisions and the preferences they have (Shefrin, 2000).

According to Hersh (2002), A bias as a driver of investor behaviour refers to a tendency or preference or belief that interferes with objectivity, a predisposition to a view that is endowed with objective thinking. Biases that can affect investment decisions can be cognitive/psychological, emotional and social biases. Investors exhibit many biases. Nonetheless, the following list represents some common biases facing investors but others may be equally important depending on the specific situation:

#### (a) Overconfidence

The Overconfidence One of the biases in which investors have unjustified belief (trust) on their cognitive abilities, assessment and knowledge (Pompian, 2011). Overconfidence is defined as a situation when an individual investors considers theirs skill, knowledge and/or ability to be greater than the actual performance. People become overconfident and invest without considering the risks associated (Odean, 1999). The overconfidence phenomenon has been studied by numerous researchers, including (Barber and Odean, 1999), Johnson and (Fowler, 2009) argue that overconfident investors either overestimate their abilities or under estimate other ability or difficulty of the task and either acquired information or ability to interpret these information, that causes the investors to trade too much in the stock market. Overconfident investors believe that they are smarter than other investors with regard to selecting the best time to buy shares at the best price.

Moreover, (Odean, 1998) found that overconfident investors trade more than rational investors and that doing so lowers their expected utility by trading too much when they receive information about the value of a security. Psychological research shows that while both men and women exhibit overconfidence, it is generally more prevalent in men (Lundeberg, Fox, and Puncochar [1994]). Indeed, (Barber and Odean, 2001), their findings reveal While trading, men are not only more overconfident about their investing abilities but also trade more often than women.

Compared to women, men also tend to sell their stocks at the untimely resulting in higher trading costs. Most of Women trade less and apply a "buy and hold" approach resulting in lower trading costs. In capital markets, overconfidence induces much more transactions and decreases returns for individual investors.

#### (b) Representativeness

According to (Shefrin, 2002), representativeness is a tendency to be more optimistic about investments that have performed strong recently and more pessimistic about investments that have performed weak. This representation then lets them neglect the statistical explanations at hand. When investors exhibit representativeness bias, they label an investment as good or bad based on its recent performance. As a result, they buy stocks after prices have went up expecting those increases to continue and ignore stocks when their prices are below their intrinsic values. Investors tend to think in terms of past experiences, arriving at results too quickly and with uncertain information. For instance, if a company announces strong quarterly earnings, an investor with this bias might be quick to assume the next earnings announcement will be strong as well. They may assume that a recent trend in price movements will definitely continue into the future. This may result in individual investors devoting too much attention to popular stocks that have recently been performing well.

#### (c) Anchoring

Anchoring defined as a cognitive bias that explains the ordinary human being's likely to depend greatly on the first piece of information while making decisions (Shin & Park, 2018). Recent observations of (Del Missier, 2007) It describes the common human tendency to rely too heavily, or "anchor' on one trait or piece of information when making decisions. When presented with new information, the investors tend to be slow to change or the value scale is fixed or anchored. When trading stock, People often made their decisions on the first source of information to which they are exposed (e.g., an initial purchase price of a stock) and not easy adjusting or changing their views to new information.

(Ricciardi, 2012) found, this results higher degree of worry, which can cause them to underweight equities in their portfolios because they are excessively risk and loss-averse. Moreover, (Kim and Nofsinger, 2008) investigate in bull market, anchoring arises when a value scale is fixed by recent observations. Investors always refer to the basic purchase price when selling or analyzing. Thus, today prices are often determined by those of the past performance.

#### (d) Framing

Uncertainty is a common phenomenon which is faced by almost every investor in the stock market. For several decades, expected utility dominated as the sole explanation for the behavior of people under uncertainty but after the work of (Kahneman and Tversky, 1979), a new dimension; framing of decisions evolved. (Petri, 2007) explore framing can be broader or narrower. An investor applying a broad framing could analyze profit and losses in total wealth level whereas the narrow framing is usually defined at level of one's securities. However, human beings tend to focus overwhelmingly on the behaviour of one's investments or securities .As a result, in reviewing portfolios investors are likely to worry over the poor performance of a particular asset class or security or mutual fund. These 'narrow' frames are likely to increase investor sensitivity to loss.

#### (e) Disposition effect

Investor behavior has been observed by previous researchers, and their findings emphasize the influence of psychological, economic, and social environments on decisions making. First detected by findings began with the discovery of prospect theory by (Kahneman and Tversky, 1979), and were further developed by (Shefrin and Statman, 1985) by producing the behavioral disposition effect in the real stock market setting. Furthermore, developed by (Odean, 1998) the disposition effect refers to the tendency of selling stocks that have appreciated in price since purchase ("winners") too early and holding on to losing stocks ("losers") too long. The realization of winning shares has stronger preference than that of losing shares. This can be explained by the theory of cognitive psychology. Cognitive psychology is associated with how knowledge can be represented in the mind.

#### (f) Loss Aversion

Loss aversion is concept of psychological which receives increasing attention in economic analysis. The investor is a risk-seeker when faced with the prospects of

enjoying gains. This phenomenon is called loss aversion. Loss aversion bias is developed by (Kahneman and Tversky, 1979) as a part of the original prospect theory is the tendency that people generally feel a stronger impulse to avoid losses than to acquire gains. Behavioral finance theory suggests that investors are more sensitive to loss than to risk and return. "Some predicts suggest people weigh losses more than twice as heavily as potential growth" (Montier, 2002). Loss aversion includes another idea that is investors try to avoid closing on loss, and prefer to close on profit (Barber and Odean, 1999).

#### 2.4.2 Social and Emotional influences

#### (a) Herding

Herding is a commonly observed phenomenon in the financial market. It is a common tendency of human nature to refer, many investors imitate other's behavior At the presence of herding, investors do not act rationally in their investment choices. They prefer to follow other investor's belief and opinions for taking their investment decision. During times of market distress such as market anomalies, price bubbles, rumors, presence of herding effect is more profound (Mertzanis & Allam, 2018). Hence when investors herd, they tend to restrain their decisions and follow others. In the security market, herding investors base their investment decisions on the crowd' decisions of buying or selling stocks. In contrast, informed and rational investors usually ignore following the flow of crowd, and this makes the market efficient.

Herding can lead to 'speculative bubbles' which historically have resulted in stock market crashes. Herding behaviour rapidly pushes stock prices go up, usually far above the earnings worth of these popular stocks. There are several elements that impact the herding behaviour of an investor, for example: overconfidence, volume of investment, and so on. In this case, fundamentals are forgotten and markets become intensively 'overbought' or 'oversold'.

#### (b) Over Reaction and Under Reaction

When news relating the listed companies trading on the securities market is issued, investors free to weigh the news in terms of importance leading them to either under react or over react. Investors could also display over reaction or under reaction tendencies while trading. The under reaction evidence studied by Cutler, (Poterba, and

Summers, 1991) indicates that over horizons of perhaps one to twelve months, security prices under react to news. As a consequence, news is incorporated only slowly into prices, which is likely to display positive autocorrelations over these horizons. The overreaction evidence studied by Lakonishok, Shleifer, and (Vishny, 1994), shows that over longer horizons of perhaps three to five years, security prices overreact to consistent patterns of news pointing in the same direction making securities that have had a long record of good news to become over-priced and have low average returns afterwards.

#### (c) Regret Aversion

Regret aversion is about peoples' emotional reaction to having made an error of judgment, whether buying a stock that has gone down or not buying one they considered and that has subsequently gone up. Investors avoid regret by refusing to sell decreasing shares and willing to sell increasing ones. They may also find it easier to follow the crowd and buy a popular stock: If it subsequently goes down, it can be rationalized as everyone else owned it (Thaler, 1993). In addition, (Yalama, 2007) argues that investors experience regret when they feel that their past judgment were wrong and try to avoid the pain arising out of the poor judgment.

#### 2.5 Investor Awareness, Perceived Risk Attitude and Investor Behaviour

There are two types of investors. Investors who are classified by aware and unaware. Aware investors may know characteristics of a risky asset (bonds and stocks) and have the same information on the probability distribution of the stock return. Guiso and Jappelli (2005) observed Social interaction helps many investors learn as it can be considered another path for disseminating stock market information. From the other aspect, awareness can be through financial awareness which is majorly determined by the investor's resources (income, financial wealth), age and education status. An individual who holds the information determines their risk perception. (Luigi and Tullio, 2005) Education and financial resources tend to be positively correlated, while wealth and income vary in ways of estimating with age.

Weber and Milliman (1997) who suggested that risk preference may be stable and that the effect of situational factors, such as stock market performance, may be caused by changes in perceptions of risk. They further found that influences on investment options simultaneously affected risk perceptions. It could be the case that attitude to perceived risk is constant, and that what changes is the perception of risk.. According to Huang (2003) people behavior is not only cognitive, but also emotional which dominates investor behaviour when stock buying and selling. And the need to include psychology attempts to explain how perception of investors and their reaction to uncertainties affect the investment decision there by influencing price movements of stocks. Biases that can affect investment decisions can be cognitive/psychological, emotional and social biases.

#### CHAPTER III

# OVERVIEW OF STOCK TRADING IN YANGON STOCK EXCHANGE

This chapter presents Development of Securities Market in Myanmar, Background of Yangon Stock Exchange, Securities Market participants in Myanmar, Type of trading, Stock Trading Current Situation of Yangon Stock Exchange.

#### 3.1 Development of Securities Market in Myanmar

The securities markets provide a regulated institutional framework for efficient flow of capital (equity and debt) from investors to business in the financial market system. It provides a channel for allocation of savings to investments. Savings are linked to investment by a variety of intermediaries through a range of complex financial instruments called securities. Securities are financial instruments issued by companies, financial instruments issued by companies financial institution or government to raise funds. These securities are purchase by investors who in turn convert their saving into financial assets.

Myanmar changed to a market-oriented economic system since 1989, developing the private sector became a priority and capital market development was included in the private sector's development agendas. In June 1996, the first action for capital mark development, the approval of the Myanmar Investment Commission by a Special Company Act. The MSEC was established as a joint venture company between the Myanmar Economic Bank (MEB), which is the largest state-owned bank, and the Japanese Daiwa Institute of Research (DIR). The mission of the MSEC is to mobilize the necessary capital for huge business through the capital market and establish a fair, efficient, liquid and transparent market. The modernization of the Myanmar Capital Market is the result of a long journey initiated in since 1990.

Myanmar government acted to revitalize the effort to start-up the Capital Market. Capital Market Development Committee was formed with the approval of Prime Minister's Office with eight members from the Ministry of Finance (MOF), the Ministry of Planning and Economic Department, Central Bank of Myanmar (CBM), The Ministry of Home Affairs, Auditor General Office and Office of Attorney General. As a result of those processes, the Ministry of Finance established the

roadmap for capital market development in Myanmar in 2008. According to the roadmap on 29<sup>th</sup> May 29, 2012, the Central Bank of Myanmar (under the Ministry of Finance and Revenue), Daiwa Institute of Research (DIR) and Japan Exchange Group Inc. (JPX) signed an MoU to provide technical assistance for the development of the capital market in Myanmar.

To systemize the capital market of Myanmar and regulate market participants, such as public companies, securities companies, and the stock exchange, the Securities Exchange Law was enacted 31<sup>rd</sup>July 2013. According to Chapter 3, Article 4 of this Law, the SECM was formed on 19<sup>th</sup> August, 2014. The SECM is chaired by the Deputy Minister of the Ministry of Planning and Finance (MOPF) and five members are tasked to steer the SECM's work.

. On 23<sup>rd</sup> December 2014, an MOU was signed between MEB, JPX, and Daiwa Institute of Research Ltd. Signing of the MOU was the first action taken to establish the YSX. In 2015, the SECM gave the Yangon Stock Exchange (YSX) the permit granted to establish the first Stock Exchange of Myanmar. The Yangon Stock Exchange was officially launched on 9<sup>th</sup> December 2015 and as of 31 December 2018, 5 companies were listed, and their market capitalization was MMK 554.6 billion.

#### 3.2 Background of Yangon Stock Exchange

The Yangon Stock Exchange Joint Venture Company Limited (YSX) with an initial capital of 32 million USD was incorporated on 22<sup>nd</sup> December 2014. In 2015, the YSX received a permit from SECM. The YSX was established as a limited Joint Venture Company with stake holdings by the MEB (51%), DIR (30.25%), and JPX (18.75%). The Yangon Stock Exchange was officially opened on 9<sup>th</sup> December, 2015, with a Grand Opening Ceremony, and a new era began for Myanmar's Capital Market. In April 2015, YSX was selected KBZ Bank Limited, the largest private commercial bank, as a fund settlement bank. The fund settlement bank is responsible for cash settlement on stock trading. In August 2015, listing criteria were announced by Yangon Stock Exchange. The first shares trading on the YSX started with First Myanmar Investment Public Company Ltd. (FMI) on March 25, 2016. Currently, shares of only five listed companies are trading on the YSX.

To further stimulate the stock market, the SECM allowed online trading in December 2017 with the purpose to expand the channel of trading and in March 2018, increased the matching times from 2 times to 4 times a day. In order to enhance convenience of investors, the SECM allowed mobile trading (placing orders via mobile applications of securities companies). Before the introduction of mobile trading, an investor had to come to the office of a securities company in person or had to call a salesperson of a securities company in order to place an order to trade shares.

The shares of the YSX were owned by the state-owned Myanmar Economic Bank (MEB) (51%), the DIR (30.25%), and the Japan Stock Exchange (18.75%). On December 9, 2015, the official opening ceremony of the YSX was held.

#### 3.3 Securities Market Participants in Myanmar

There are five Securities Market participants in Myanmar. These are Market Regulator, Yangon Stock Exchange, Issuers, investors and Intermediaries,

#### 3.3.1 Market Regulator

The Securities Exchange Law (2013) was enacted on 31<sup>st</sup> July, 2013 by the Pyidaungsu Hluttaw (Assembly of the Union), under which the SECM was formed on August 19, 2014, by the Union Government. Afterwards, the SECM issued Securities Exchange Rules on 27<sup>th</sup> July, 2015, various notifications and announcements for the Securities Companies, listed public companies and the YSX .By June 2018, the SECM had issued 15 announcements, six notifications, and 11 instructions. SECM is the primary regulator for the securities industry in Myanmar. The SECM gave the permission to establish the Yangon Stock Exchange (YSX) which is the operator of the securities market where the securities are traded. Furthermore, the SECM issued securities business licenses to six securities companies in order to carry out the securities dealing business, securities brokerage business, securities underwriting business, and securities investment advisory business as the intermediary of the market.

#### **3.3.2** Stock Exchange (Yangon Stock Exchange)

The Stock Exchange is an organized marketplace for issuing an trading securities by members of that exchange. Each exchange has its unique own rules and

regulations for companies seeking a listing and continuing obligations for those already listed. All stock exchange provide both a primary and a secondary market. The Yangon Stock Exchange was officially opened on 9 December, 2015.

#### **3.3.3** Issuers

The Securities Exchange Law specifies the issuers of a security as a government, any governmental organization or any public company. According to the Myanmar Company Law, only public companies are allowed public offering. Hence, Listed Companies in YSX are public companies. The first listed company at the YSX was First Myanmar Investment Public Co. Ltd., (FMI), whose shares were first traded on the YSX on 25<sup>th</sup> March, 2016. The second one is Myanmar Thilawa SEZ Holding Public Ltd. (MTSH), which started trading on the YSX on 20<sup>th</sup> May 2, 2016. After that, followed by Myanmar Citizen Bank Ltd. (MCB), on 26<sup>th</sup> August, 2016. Fourth was First Private Bank (FPB), on 20<sup>th</sup> January, 2017. The latest was TMH Telecom Public Company Limited (TMH), on 26<sup>th</sup> January, 2018. Among of five listed companies, TMH is the first company that successfully listed its shares on the YSX through an IPO. In the present time, Yangon Stock Exchange conducts the trade with shares of five listed companies which are shown in Table (3.1).

Table (3.1) Five listed companies in Yangon Stock Exchange

Listed Companies Name	Code	Listing Date
First Myanmar Investment Public Co., Ltd.	00001	March 25, 2016
Myanmar Thilawa SEZ Holding Public Ltd.	00002	May 20, 2016
Myanmar Citizen Bank Ltd.	00003	August 26, 2016
First Private Bank Ltd.	00004	January 20, 2017
TMH Telecom Public Co., Ltd.	00005	January 26, 2018

Source: Yangon Stock Exchange website (2015)

#### 3.3.4 Investors

Currently, there over 38,000 securities accounts have been opened .Many of the securities accounts are dormant; actual trading occurs in only 10% of the securities accounts. All the securities accounts belong to individual investors, and currently there is no institutional investor conducting business activities in the stock

market. Many of the individual investor maintain buy and hold strategies, anticipating stable income from dividends.

#### 3.3.5 Intermediaries

Since the opening of the YSX, in 2016, the SECM has the granted business licenses to six securities companies which are eligible trading participants of the YSX on 13<sup>th</sup> March, 2016 accordance with Section 42(a) of Myanmar Securities and Exchange Law and Section 4 of the Trading Participant Business Regulation YSX. These companies open securities accounts and settle transactions by electronic system for investors who wish to invest in the five listed companies currently trading on the YSX. Among them, three are local companies and three are joint venture companies Myanmar Securities and Exchange Centre Co. Ltd., (MSEC), KBZ Stirling Coleman Securities Co. Ltd., (KBZSC) and KTZ Ruby Hill Securities Co. Ltd., (KTZ<sup>Rh</sup> Sc Co. Ltd.). The current securities companies in Myanmar are shown in Table (3.2).

Table (3.2) Six securities companies in Yangon Stock Exchange

Securities Companies Name	License Date	License
Securities Companies Name	License Date	Number
KBZ Stirling Coleman Securities Co. Ltd.	February 26, 2016	No.001
Myanmar Securities Exchange Centre Co. Ltd.	February 26, 2016	No.002
AYA Trust Securities Co. Ltd.	March 1, 2016	No.003
CB Securities Co. Ltd.	March 1, 2016	No.004
KTZ Ruby Hill Securities Co. Ltd.	March 1, 2016	No.005
Amara Investment Securities Co. Ltd.	November 23, 2016	No.006

Source: Yangon Stock Exchange website (2015)

According to the Myanmar Securities and Exchange Law, the SECM may grant business license for the following categories:

- i. Securities dealing business license;
- ii. Securities brokerage business license;
- iii. Securities underwriting business license;
- iv. Securities investment advisory business license
- v. Securities company's representative business license;
- vi. Securities business license prescribed by notification issued by

the SECM.

A securities company only may apply to the SECM for the first three categories of the above six, and a company that obtains any category of the license may carry out the business of the fourth category without obtaining a separate business license. Advisory businesses, Brokerage businesses, Government bond trading businesses, and others.

#### 3.4 Type of Trading

This Section explain about type of trading for order placement, the SECM allowed by an investor had to come to the office of a securities company in person or had to call a salesperson, mobile trading ,on line trading.

To enhance convenience investors and stimulate growth, the Yangon Stock Exchange (YSX) introduced an online trading platform. On 26<sup>th</sup> December, 2017, the SECM granted approval for online trading to four of six securities companies which had passed online trading tests and demonstrated system readiness. The approved companies are the Myanmar Securities, and AYA Trust Securities. Investors are able to download online trading application forms on both Android and IOS from the Google Play Store and Apple App Store, or they can obtain the application forms from securities companies free of charge. Customers who wish to trade at the YSX using the online platform have to sign an agreement named the "Special Agreement of Online Trading" that recognizes securities companies rules and regulations.

Trading the markets of the Exchange is divided into call auction and block trading. Trading hours are from 9:30 am. to 1.00 pm., orders for call auction trading shall be accepted during these time and transaction is executed by way of at 10:00 am., 11:00 am., 12:00 noon and 1:00 pm. Moreover, orders for block trading shall be accepted from 10:30 am. to 1:30 pm. Trading participants who are willing to block trade with over 10,000 trading unit can send to the YSX by using facsimile.

Orders Types shall be classified into market and limit orders. Matching methods are used as Price Priority (the lowest sell and the highest buy orders shall have priority in terms of price over other buy and sell orders) and Time Priority (the earliest order placed shall have Priority among orders at the price). Trading participants will be allowed to cancel an existing order before any trade is executed based on such order. Trades are settled on third business day following the trade execution day (T+3; excluding non-business days).

#### 3.5 Stock Trading Current Situation of Yangon Stock Exchange

The Yangon Stock Exchange was officially opened on 9<sup>th</sup> December, 2015, and a new era began for Myanmar's Capital Market .Yangon Stock Exchange started the first trading and FMI Listed on 25 March,2016.Even after more than three years after the launch of YSX, it is facing some challenges to participate in the market more actively both potential public companies and investors .Currently five listed companies by equity trading but active traders and daily trading volume and value are significantly reduced. This Section presents about MYANPIX Trends, Trading Volume and Value of the YSX, Share Price Movement of Five Listed Companies.

#### **MYANPIX Trends**

MYANPIX is a market capitalization weighted index that represents the overall price fluctuation of the YSX. In 20<sup>th</sup> May, 2016 Yangon Stock Exchange announced the publication of new stock index named MYANPIX (Myanmar Stock Price Index) which registration number is 4/8680/2016 and 4/8681/2016 .It becomes basic tools to explain Myanmar's stock market for investors. The first trading date of YSX, MYANPIX started to be calculated from 25th March 2016. The MYANPIX index hit a high of over 1300 in the first week after FMI listed. Figure (3-1] illustrates that the MYANPIX Trends has fallen steadily in June, 2019. MYANPIX Calculation Method is as follow:

**MYANPIX** Index Trading Value 10,005,000,000 1.400.00 9,005,000,000 1,200.00 8,005,000,000 1,000.00 7,005,000,000 6,005,000,000 800.00 5,005,000,000 600.00 4,005,000,000 3.005.000.000 400.00 2.005.000.000 200.00 1,005,000,000 5.000.000 0.00 25.Nov.2016 25 Mar 2018 25May 2018 25,111,2028 25 Mar 2017 25.May 2017 25Mov2017 255802016 25:Jan 2017 25,141,2017 25,Nov.2018 255ep2017 25,1817,2018 255ep.2018 Total value 2 —— Index

Figure (3.1)
MYANPIX Trends

Source: Yangon Stock Exchange (2019)

**MYANPIX** Calculation methods

$$Index = \frac{CMV}{BMV} * Base Point$$

where:

CMV = Current market value

BMV = Base market value

Market value =  $\sum$  (No. of shares for each constituent \*Stock price for each constituent)

#### Trading Volume and Value of the YSX

Table (3.3) shows the trading activity of the YSX. Although the number of listed companies increased from three in 2016 and four in 2017 to five in 2018, the annual trading volume of the YSX has not increased and the annual trading value has instead decreased to one-third of its initial level. The daily trading volume decreased to 8,111 in 2019 and 9,911 shares in 2018 compared with 11.239 shares in 2017 and 13,665 shares in 2016. Furthermore, the daily trading value drastically decreased from 91 million MMK in 2017 and 378 million MMK in 2016 to 48 million MMK in 2018 to 41 million MMK in 2019.

Table (3.3) Trading Volume and Value of Five Listed Companies in YSX

(Unit; Share, Billion MMK)

	2016		2017		2018		2019(Jan to July)	
Company								
	Share	Value	Share	Value	Share	Value	Share	Value
FMI	1482,133	44.574	464,910	6.829	363,458	409.489	221,179	232.696
MTSH	946,178	24.966	1,920,334	7.402	1,718,197	518.700	708,650	221.131
MCB	127,035	1.205	72,780	0.644	32,193	24.390	19,175	14.239
FPB	-	1	261,926	7.256	56,051	139.380	30,121	67.120
TMH	-	-	-	-	198,848	58.602	156,444	45.983
Total	2,555,346	70.745	2,719,950	22.131	2,368,747	1150.561	1,135,569	581.169

Source: Yangon Stock Exchange (in July, 2019)

#### **Share Prices Movement of Five Listed Companies**

Yangon Stock Exchange has been officially conducting as the first ever-stock exchange in Myanmar by trading shares of five listed companies. Investors who have bank account and securities account can trade listed companies shares on YSX through six securities companies. The Following is illustrate of share Prices Movement of Five Listed Companies on the Yangon Stock Exchange;

Figure (3.2) illustrates FMI share Prices Movement from on 25th March up to July 2019. It share's par value was kyat 1000, and its opening price on the listing date of March 25, 2016, was kyat 31,000. As soon as the trading of FMI shares started, its stock price skyrocketed to kyat 41,000, but after one month. it declined to below the opening price due to Myanmar investors' lack of market practice. However, as End of December, 2016 .FMI stock price is going as downtrend kyat 13,500 without stable. At the End of December 2018, FMI was closed price as Kyat 10,000. Now, FMI's share price is range-bound at around kyat 11,000 in July, 2019.

Figure (3.2) FMI Share Prices Movement in YSX

FMI Price Chart 2016~ 2019 45.000 25.000 15,000

(Unit; MMK)

Source: Yangon Stock Exchange (2019)

Figure (3.3) illustrates MTSH share Prices Movement from 25<sup>th</sup> May, 2016 up to November 2016 .MTSH share's par value was kyat 10,000, and its opening price on the listing date of May 20, 2016 was kyat 50,000. In addition, its share price jumped to kyat 70,000 in three days and gradually declined to below the opening price after 2 months.

Figure (3.3) MTSH Share Prices Movement before Stock Split in YSX

(Unit; MMK)



Source: Yangon Stock Exchange (2019)

Figure (3.4) illustrates share Prices Movement from 4<sup>th</sup> May, 2016 up to in July 2019, MTSH split its stock ten-for-one, and its stock price ended at kyat 5,200 on 4<sup>th</sup> November, 2016. End of December, 2018, MTSH went down kyat 2,950 per share significantly declined in spite of being kyat 4,000 per share as the reference price on4th November, 2016. Share price of MTSH share price is Fluctuating between kyat 3,050 per share and kyat 3400 per share in the present time. Among the five listed companies, investors are more prefer to invest MTSH share than other.

Figure (3.4) MTSH Share Prices Movement after Stock Split in YSX

Unit; MMK)



Source: Yangon Stock Exchange (2019)

MCB Share's par value was kyat 5,000and its opening price on the listing day of August 26, 2016 was kyat 6800. In December, 2018, its share price jumped to 13500 MMK MCB in a week but gradually declined to around kyat 7500 per share .In December, 2018, Its share price is stable as around kyat 7300. Currently, it share price steadily go up as kyat 8000 per share. Figure (3.5) illustrates that MCB Share Prices Movement from on 26<sup>th</sup> August, 2016 up to July 2019.

Close Price MCB Price Chat (Aug 2016 ~ 2019)

12,500

10,500

9,500

7,500

6,500

5,500

Agree for the first firs

Figure (3.5) MCB Share Prices Movement in YSX

(Unit; MMK)

Source: Yangon Stock Exchange (2019)

FPB share's par value was kyat10,000 and its opening price on the listing date of January 20,2017, was kyat 3,9000 per share. Its share price started at a base price of kyat 39,000 per share but went down to K34, 000 the floor price for the day after the first matching session.

Unlike previously listed companies, its share price decreased as soon as the market opened and plummeted to kyat 22,500 per share in August 2017. In December, 2018, its share price was closed kyat, 23000 per share. Now, FPB share price of around 24,500 MMK. Figure (3.6) illustrates that MCB Share Prices Movement from on 20<sup>th</sup> January, 2017 up to July, 2019.

Figure (3.6) FPB Share Prices Movement in YSX

Unit; MMK)



Source: Yangon Stock Exchange (2019)

TMH share's par value was kyat 1,000, and its opening price was 3,100 MMK on the listing date of January 26, 2018. Its share price rose slightly to 3,250 MMK on the first trading day but declined to around kyat 2,850 End of December, 2018. During the month of July, 2019, Share price of TMH is fluctuating between kyat 2,950 per share and kyat 3,050 per share. Figure (3.7) illustrates that TMH Share Prices Movement from on 26<sup>th</sup> January, 2018 up to July, 2019.

Figure (3.7) TMH Share Prices Movement in YSX

(Unit; MMK)



Source: Yangon Stock Exchange (2019)

#### **CHAPTER IV**

# ANALYSIS ON EFFECT OF INVESTOR AWARENESS AND PERCEIVED RISK ATTITUDE ON INVESTOR BEHAVIOUR IN YANGON STOCK EXCHANGE

This chapter presents research design, demographic characteristics of respondents, type of stock trading, securities companies trading and frequency of respondents trading on the YSX, analysis on in investor awareness and perceived risk attitude in YSX, analysis on investor behavior, correlation analysis between investor awareness and perceived risk and investor behavior in YSX, regression analysis effect of the investor awareness and perceived risk attitude on stock market investor behavior.

#### 4.1 Research Design

It involved descriptive and analytical research designs to establish whether changes in the investor awareness and perceived risk attitude effect on investor behaviour. Primary data was collected using a questionnaire which was made up of closed ended questions. Secondary data was collected from SECM annual report, YSX annual reports, securities companies reports were used .The survey questionnaire distributed by online. The questionnaire has been divide into four sections where by consists of demographic profiles of the respondents, investor awareness, perceived risk attitude and investor behaviour are asked. The questionnaire are constructed with 5 point Likert scale ranging from strongly disagrees to strongly agree.

A total of 150 questionnaires were sent out to the respondents and 102 responses were received from the directors and Executive Senior Managers of YSX, Officials staff of 6 securities companies, stock market reviewers and individual investors trading with securities companies. All are kindly responded to the questionnaires which is presented in Appendix 1.After collecting the required data were analyzed by using SPSS version 22software. Detail output is can be seen in Appendix 2.

This thesis would utilize the following statistical tools:

- 1. Data organizing and description
- 2. Correlation analysis for reliability statistics
- 3. Multiple linear regression analysis.

#### 4.2 Demographic Characteristics of Respondents

This section presents the description of respondents. The respondents were asked to describe their demographic information, including gender Age level, education level, occupation status, monthly income, invest amount and period of trading on the YSX, the stocks being traded, the trading brokerage firm and the frequency of trading on the YSX. The results showed the following:

#### **Gender of the Respondents**

The respondents are not only males, but also females. Table (4.1) and figure (4.1) show the gender of respondents. the respondents are dominated with males (51%) while on the other hand; the females are followed with 49%. It shows that trading is dominated by the male who are seen to be more confident than female investors when trading on the YSX.

**Table (4.1) Gender of the Respondents** 

Gender	No. of Respondents	Percentage	
Male	52	51.0	
Female	50	49.0	
Total	102	100.0	

Source: Survey data, August 2019

#### Age of the Respondents

Ages of respondents are classified into four groups. The result in table (4.2) illustrate among 102 respondents, the highest percentage is 49% which is up to 30 years. Second highest group is 29.4% which is between 31-40 years while only 14.7% are in the 41-50 years. Only 6.9% were above 50. The findings on the age of respondents indicated that age being a determinant of awareness showed that investors with age of Under 30 years and above were seen to be more aware of stock market activities.

Table (4.2) Age of the Respondents

Age	No. of Respondents	Percentage	
Up to 30	50	49.0	
31 – 40	30	29.4	
41 – 50	15	14.7	
Above 50	7	6.9	
Total	102	100.0	

#### **Education Qualification of the Respondents**

The results in Table (4.3) showed that respondents with Post Graduate dominated the respondents (41.2%) and Graduate holders represented 58.8% of the respondents respectively. This implies that with a higher education level, investors are seen to be more likely aware of the stock market activities; its costs and benefits hence attracting more individuals to trade.

**Table (4.3) Education Qualification of the Respondents** 

Education Level	No. of Respondents	Percentage
Post Graduate	42	41.2
Graduate	60	58.8
Total	102	100.0

Source: Survey data, August 2019

#### **Occupation of the Respondents**

There are four categories of position level in survey questionnaire: Table (4.4) shows occupation of respondents in accordance with survey result one can see that 19.6% of total respondents are Private Owned Business, 3.9% of total respondents are Company employee and Government Staff and NGO employees is only 1%.

**Table (4.4) Occupation of the Respondents** 

Occupation	No. of Respondents	Percentage
Company employees	4	3.9
Government Staff	4	3.9
Private Owned Business	20	19.6
NGO employees	1	1.0
Total	102	100.0

#### **Monthly Income of the Respondents**

Table (4.5) presents the income level of respondents per month. The first income level is kyat 300,000 - 800,000 with 36.3% respondents and the second income level is above kyat 1500,000 with 26.5% respondent and third income level is between kyat 800,000 - 1500,000 with 19.6%. The 17.6% of total respondents are with the income is Up to kyat 300,000.

**Table (4.5) Monthly Income of the Respondents** 

Monthly Income (Kyat)	No. of Respondents	Percentage		
Up to 300,000	18	17.6		
300,000 - 800,000	37	36.3		
800,000 – 1500,000	20	19.6		
Above 1500,000	27	26.5		
Total	102	100.0		

Source: Survey data, August 2019

#### **Current Investment in Stock of Respondents**

Invest in Stock at Present classified into four groups .In result in Table (4.6) indicated that the most investment amount Less than Kyat 500,000 with 60.8% respondents and the second investment amount is between kyat 500,000 - 1,500,000 with 22.5% respondent and third investment amount is Above kyat 2,500,000 with 12.7%. The 3.9% of total respondents are with investment amount of kyat 1,500,000 - 2,500,000.

**Table (4.6) Current Investment in Stock of Respondents** 

Monthly Income (Kyat)	No. of Respondents	Percentage
Less than Kyat 500,000	62	60.8
500,000 - 1,500,000	23	22.5
1,500,000 – 2,500,000	4	3.9
Above 2,500,000	13	12.7
Total	102	100.0

#### **Investment Time Horizons of Investors**

The investment time horizons of investors indicated in Table (4.7). There are classified into four groups such as Less than 3 months, between 3 month and 6 month, between 3 month and 6 month and between 6 month and 12 month and More than 1 year. In according with survey result, 43.1 % of investors invest stock of the company more than 1 year and 42.2% of investors invest stock of the company Less than 3 months.

Table (4.7) Investment Time Horizons of Investors

Time	No. of Respondents	Percentage
Less than 3 months	43	42.2
3 – 6 months	9	8.8
6 – 12 months	6	5.9
More than 1 year	44	43.1
Total	102	100.0

Source: Survey data, August, 2019

#### **Investment Option of Respondents**

Investment Option four respondents are classified into four groups. The result in Table (4.8) indicated that the investors wish to invest in Stock Market with 59.8% and 13.7% of investors are interested in Banking Saving and Gold Market and 13.7% of investors only wish to invest in Real Estate sector with 12.7%.

**Table (4.8) Investment Option of Respondents** 

Market	No. of Respondents	Percentage
Banking Saving	14	13.7
Gold Market	14	13.7
Real Estate	13	12.7
Stock Market	61	59.8
Total	102	100.0

# 4.3 Type of Stocks Trading, Securities Companies Trading and Frequency of Respondents Trading on the YSX.

In this section, three sectors trading questionnaires on the Yangon Stock Exchange asked to the Investor about Type of Stocks Trading, Securities Companies Trading and Frequency of Respondents Trading on the YSX.

#### **Type of Stocks Trading of the Respondents**

Investment Option of investors are divided into five categories: the result in Table (4.9) expressed more likely to invest in MTSH share 55.9%, followed by FMI share is 30.4%, FPB share is 5.9% and 2.9% is MCB share and the trading of TMH share stood at 4.9%.

**Table (4.9) Type of Stocks Trading of the Respondents** 

Type of Trading Stock	No. of Respondents	Percentage
FMI	31	30.4
FPB	6	5.9
MCB	3	2.9
MTSH	57	55.9
TMH	5	4.9
Total	102	100.0

Source: Survey data, August 2019

#### **Securities Companies Trading of the Respondents**

The result in the table (4.10) indicated that the Securities Companies Trading; the majority 36.3% traded with MSEC, followed by KBZSc with 26.5% while 13.7% traded with CBSc,11.8% deal with AYA Trust Sc, 6.9% traded with KTZ<sup>Rh</sup>Sc,4.9% deal with UABSc.

Table (4.10) Number of Respondents by Brokerage Firm Trading

Breakage Firm Trading	No. of Respondents	Percentage
AYA Trust Sc	12	11.8
CBSc	14	13.7
KBZSc	27	26.5
KTZ <sup>Rh</sup> Sc	7	6.9
MSEC	37	36.3
UABSc	5	4.9
Total	102	100.0

Source: Survey data, August 2019

#### Frequency of Respondents Trading on the YSX

Investors Objective of investing in Yangon Stock Exchange: the results in the Table (4.11) indicated that the majority 28.4% traded monthly on the YSX 28.4while 26.5% traded yearly, 15.7% traded quarterly. 13.7% traded weekly, 10.8% traded twice a year and only 4.9% traded Daily basis.

Table (4.11) Frequency of Respondents Trading on the YSX

Trading on the YSX	No. of Respondents	Percentage
Daily	5	4.9
Every six months	11	10.8
Monthly	29	28.4
Quarterly	16	15.7
Weekly	14	13.7
Yearly	27	26.5
Total	102	100.0

Source: Survey data, August 2019

# 4.4 Analysis on Investor Awareness and Perceived Risk attitude in Yangon Stock Exchange

This section describes analysis of Investor Awareness and perceived risk attitude in Yangon Stock Exchange. The Investors expressed their awareness and perceived risk attitude by using the 5 point Likert scale (from 1 strongly disagree to 5 strongly agree). Descriptive analysis is the mean characteristics for each of the variables. The descriptive results for each measured variables in this study are presented in the following. The interpretation of Likert-scale questions is based on the formulation below:

The width of each level = (Highest score – lowest score) ÷ Number of level

$$= (5-1) \div 5 = 0.8$$

The average of 1.00 - 1.79 means a very low level of agreement. The average of 1.80 - 2.59 means a low level of agreement and 2.60 - 3.39 means moderate level of agreement. The average of 3.40 - 4.19 means a high agreement level and the average of 4.20 - 5.00 means a very high level of agreement. (Guven, n.d.)

#### 4.4.1 Analysis on Investor Awareness

In this section, two components of questionnaires asked by Social Learning and Financial Awareness to the Investor about Awareness Levels of the individual investors when they are making investment decision on Yangon Stock Exchange. the Investor Awareness constituted overall mean score is 3.40 mean.

Table (4.12) illustrates the rank by means and standard deviations of investor awareness. From survey result, Most important factors under this component include "access a company's latest reports, prospectus and financial statements of any company on the YSX" in which has the highest level of agreement among respondents mean score 3.67 mean, .926 SD. Third, "follow the stock market through Financial news on TV, newspapers and YSX Website" 3.60 mean, 0.046 SD whereas Stock market regulator and YSX often arrange the seminars, conferences & workshops ,YSX's EXPO, open fairs for general public to aware them stock market activities. Most of investor dealing with licensed brokers when seeking financial advice about stock mean score is 3.43 mean, 0.896 SD. However, Peers influences

mean score is 2.92 mean, 0.864 SD. Investors buy and sell share as per advice of peers who are not expert in this field. Most investors rely more on information from social learning on the stock market.

Table (4.12) Analysis on Investor Awareness

No	Statement	Mean	Std. Dev
1	I usually follow the stock market through Financial news on TV, newspapers and YSX Website.	3.60	.046
2	I easily access the latest reports, prospectus and financial statements of any company on the YSX.	3.67	.926
3	I usually attend seminars, conferences & workshops hosted by the YSX.	3.23	.142
4	I usually visit the stock market website regularly.	3.62	.985
5	The YSX often holds educational programmes to educate the public regularly.	3.62	.934
6	My peers influence my participation on the stock market.	2.92	.864
7	I have trouble paying attention to the information on the stock market	2.60	.967
8	I am somewhat knowledgeable of stock market activities on the YSX.	3.54	.897
9	I clearly understand the role of brokerage firms.	3.68	.935
10	I always trust on existing trading system.	3.49	.920
11	Listed companies publish financial statements regularly.	3.57	.928
12	When seeking financial advice, I deal with licensed brokers, intermediaries or financial services companies.	3.19	.069
13	The YSX gives reports on corporate developments of various companies listed on a timely basis.	3.43	.896
Tota	l Average Scores	3	3.40

Source: Survey data, August 2019

#### 4.4.2 Analysis on Perceived Risk Attitude

In this section, two components of questionnaires asked by Affect and Cognition to the Investor about Perceived Risk Attitude of the individual investors when they are making investment decision on Yangon Stock Exchange. The Respondents expressed their opinion by using 5 point Likert scale (from 1 strongly disagree to 5 strongly agree). The Perceived Risk Attitude constituted overall mean score is 3.23 mean.

Table (4.13) illustrates the rank by means and standard deviations of perceived risk attitude. It includes affective nature and cognitive. Regarding the analysis of affective nature, it is found that respondents "cautious which show sudden changes in price or trading activity" has the highest mean score 3.38 mean, 0.758 SD about stocks. The second statement which has mean score 3.36 mean, 0.910 SD that invest in stocks that have shown a past positive performance in trading. The third indicated that the willingness to invest has the highest mean score 3.26 mean, 0.994 SD in stock on the YSX. How appealing it is for one to participate in stock trading mean score is mean 3.16, 0.914 SD. Respondents "regret of a drop in the price to a great extent" 2.96 mean, 0.927 SD.

As the result, Respondents hopeful when undertaking investment in stocks that have exhibited a sure loss because of mean score has 2.83mean, 0.913 SD. Nevertheless, Respondents do not enjoy investing in those stocks in which have a sure gain 2.73 mean, 0.946 SD.As far as their cognitive nature, it is found that respondents investment in stocks is largely based on investment knowledge, experiences and education which has the highest mean score 3.70 mean, 0.022 SD. Respondents well understand "how different investment products work and the credibility of brokerage firms that provide the financial services with 3.62 mean, 0.833 SD and 3.56 mean, 0.885 SD respectively.

Table (4.13) Analysis on Perceived Risk Attitude

No	Statement	Mean	Std. Dev
1	I am hopeful when undertaking investment in stocks showing a sure loss.	2.83	.913
2	I usually have a fear to invest in stocks that have a sure gain.	2.73	.946
3	I am cautious about stocks, which show sudden changes in price or trading activity.	3.38	.758
4	I usually have worry investing in stocks that have had a past negative performance in trading.	3.15	.876
5	I feel that the idea of participating in a buy/sell on the stock market is appealing	3.16	.914
6	I am always attracted to investing in Stocks.	3.26	.994
7	I am often not afraid to invest in stocks that have shown a past positive performance in trading	3.36	.910
8	I feel regret of a drop in the price of a stock I have purchased	2.96	.927
9	My investment in stocks is largely based on investment knowledge, experiences and education.	3.70	.022
10	I usually consider the credibility of brokerage firms that provide the financial services.	3.56	.885
11	I can easily ascertain the expertise of the brokers offering service.	3.24	.823
12	It is always easy to determine the credibility of the stock market.	3.08	.852
13	I understand how different investment products work.	3.62	.833
Tota	l Average Scores	3	.23

#### 4.5 Analysis on Investor Behaviour

This section presents individual investor behavior when trading in Yangon Stock Exchange. Individual investors influenced by behavioral biases such as psychological factor, sociological factor and emotional factor .Table (4.14) shows overall mean score (3.13 mean) investor behavior of investing in Yangon Stock Exchange.

Table (4.14) illustrates the rank by means and standard deviations of investor behavior when their making investment decision on the stock market. From the survey result, it is found that most of respondents look at and analyst company news prospects before making a decision to buy or sell has the highest mean score 3.66 mean, 0.928 SD that expressed investor analyst the fundamental analysis for this statement. "Investment separate stocks while trading on the stock market depending on their performance is the second statement which has 3.55 mean, 0.804 SD and investors do not devote too much attention to popular stocks. Followed by, when trading stocks, respondents consider public information (news) is mean score 3.52 mean, 0.909 SD. "Buying shares based on future expectations rather than past" is 3.51 mean, 0.920 SD). When trading stock, respondents tend to sell looser stocks and hold on the winners has the highest mean score (3.06 mean, 0.830 SD).

Moreover, investor "prefer to invest on a short term horizon" which has 2.86mean, 0.923 SD, they do not stay long time on the stock market. After that, prefer holding on to looser stocks and selling winners is 2.82 mean, 0.801 SD. "Buy/sell decision greatly relies on personal feelings. Therefore, its mean is 2.70 mean, 0.854 SD and when making investment decisions, most of respondents blindly imitate decisions of others with 2.50 mean, 0.909 SD. However, they less likely to their emotion. It is found that "follow Stocks buy/sell decision is largely based on emotions is the lowest rank of respondents 2.48 mean, 0.909 SD.

**Table (4.14) Analysis on Investor Behavior** 

No	Statement	Mean	Std. Dev
1	I always use predictive skills to time and outperform the market.	3.17	.880
2	I usually base on the purchase price of stocks as a reference point in trading.	3.35	.908
3	My trading on the YSX is usually determined by past experiences in the market.	3.47	.901
4	Usually consider public information (news) when trading stocks.	3.52	.909
5	I always look at and analyst company news prospects before making a decision to buy or sell.	3.66	.928
6	I am more comfortable investing in shares of banking industries than other industries.	3.07	.978
7	I always separate stocks while trading on the stock market depending on their performance.	3.55	.804
8	I usually buy shares based on future expectations rather than past performance.	3.51	.920
9	I often prefer to invest on a short term horizon on the stock market	2.86	.923
10	I always prefer holding on to looser stocks and selling winners.	2.82	.801
11	I often blindly imitate decisions of others when making investment decisions.	2.50	.909
12	My decision to buy /sell greatly relies on personal feelings.	2.70	.854
13	I often consider the information that majority of investors focus on as a basis of trading on the stock market.	3.30	.830
14	I usually tend to sell looser stocks and hold on the winners when trading.	3.06	.830
15	My decision to buy/sell stocks is largely based on emotions	2.48	.962
Tota	l Average Scores	3	3.13

# 4.6 Correlation Analysis between Investor awareness, Perceived Risk Attitude and Investor behaviour in Yangon Stock Exchange

This section describes correlation between of Investor Awareness, perceived risk attitude on investor behavior in Yangon Stock Exchange. The Investors expressed their awareness and perceived risk attitude. This section describes analysis of Investor Awareness and perceived risk attitude in Yangon Stock Exchange. The Investors expressed their awareness and perceived risk attitude by using the Correlation Analysis. It is a measure of relationship between two variables. The correlation coefficient gives value (–1 to 1) for measuring direction and the strength of the linear relationship between two variables. Person's correlation coefficients were computed to test the relationship between the variables of this study. Correlations of all variables used in this study are shown in following two Table (4.15).

Table (4.15) Correlation between Investor Awareness, Perceived Risk Attitude and Investor Behavior in YSX

Variabl	Investor Behavior	
nvestor Awareness Pearson Correlation		.945**
	Sig. (2-tailed)	.000
Perceived Risk Attitude	Pearson Correlation	.740**
	Sig. (2-tailed)	.000

Source: Survey Results, 2019 (SPSS Output)

According to the Table (4.15), the correlation coefficient between Investor Awareness and Investor Behavior is 0.945 at significant 1% level. This shows that there is positively relationship between Investor Awareness and Investor Behavior. Therefore, the analysis revealed that there is a positive and significant relationship between Investor Awareness and Investor Behavior. This means that if Investor Awareness increase investment knowledge on the stock market which indicates their behavior reflect their knowledge and awareness or the more they update themselves the more they behave instantly. On the other hand, the Perceived Risk Attitude and

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

Investor Behavior are positively related (0.740) which indicates that if investor exhibit fear, worry and are cautious (high risk perceived) when making an investment decision on the stock market, it will lead to positive mood resulting into optimistic behavior for instance ,one may be more confident when trading in a particular company stock.

# 4.7 Regression Analysis Effect of the Investor Awareness and Perceived Risk Attitude on stock Market Investor Behavior

Multiple regression analysis is conducted to determine the relationship between two or more independent variables and one dependent variable by calculating the coefficient of multiple determination and regression equation (Saunders et al., 2009). Practically, multiple regression analysis provides an understanding on whether there is a relationship exists between the independent variables and dependent variable, how strong the relationship is, whether the relationship is positively or negatively skewed and the proper way to describe the relationship. The strength of the relationship between independent variables and dependents is determined by the coefficient of determination (r) as it measures the proportion of the variation in a dependent variable that can be explained by the independent variables. In other word, the effect of investor behavior (dependent variable) can be explained by Investor Awareness and Perceived Risk Attitude.

The output from generating multiple linear regression model is shown in Table (4.16).

Table(4.16) Regression Analysis of Investor Awareness, Perceived Risk Attitude, on Stock Market Investor Behavior in YSX.

Independent Variable	Unstandardized Coefficients				Sig.			
	В	Std. Error	Beta					
(Constant)	.110	.109		1.003	.318			
Investor Awareness	.894	.048	.858	18.72	.000			
Perceived Risk Attitude	.102	.039	.121	2.635	.010			
$N = 102$ , $R^2 = .90$ , $F = 447.978$ (p-value = 0.000)								

Source: SPSS Output, 2019

According to the estimated multiple linear regression model, the F-value of 447.978 is significant at the 0.01 level. This indicates that the overall regression model with these two independent variables can well explain the variation the investor behaviour. The regression model revealed an acceptable fit of adjusted R Square (.90). Adjusted R Square 90% indicates that the investor awareness, perceived risk attitudes can predict stock market investor behaviour by (Adjusted R Square = .90). Investors awareness (Beta = .858) is a better determinant of investor behavior than perceived risk attitude (Beta = .121). The implication is that the level of investors awareness or the more they update their knowledge and the more financial information individuals has on a particular company stock/ about the stock market, obviously affect the investor behaviour than the perceived risk attitudes. The more knowledgeable one is the more likely one is to invest a particular stock.

#### **CHAPTER V**

#### **CONCLUSION**

This chapter discussion of finding observed and inferred from the data provided in chapter four. The section presents discussion of findings, suggestions and need for further of the study in line with the research objectives.

#### 5.1 Findings

From the study, the majority investors are males that indicated males trade more often than females. After that, expressed that the majority investors are under 30 years, those investors who are seen to be aware of stock market activities they are eager to invest on the stock market. And then, the most investors are highly educated who are seen to be willingness to invest in Yangon Stock Exchange. It is interesting to see that majority investors who invest in the stock belong to medium and high income. The reason may be investors want speed up theirs earning growth through stock market investment. The majority investors are experienced and beginners investors also acceptable level and this clearly observed that investors want to stay in the stock market for long time. However, the investors invested stock in YSX. On the other hand, theirs desire want to invest different investment channels such as saving deposit in the banking ,buy/hold gold due to the Myanmar people traditional mind set and real estate sector also satisfactory level that shows, they understand how different investment products work and gain and loss. Again, research shown the stock market is dominated by investors who often trade annually and active investors are slightly trade in Yangon Stock Exchange.

According to the survey, showed that both investors awareness, perceive risk attitude had an effect on investor behavior. Although, Investors awareness is a better determinant of investor behavior than perceived risk attitude, financial awareness was less significant determinant of stock market investor behaviour. Its clearly observed investors always look at and analyst company news prospects before making a decision to buy or sell and investors willingness to separate their money into separate accounts based on a variety of subjective reasons and individuals tend to assign different functions to each asset group, which has often irrational and negative effect on their consumption decisions and other behaviors. Investors usually base on the purchase price of stocks as a reference point in trading. According to analysis of

investors' behavior, majority of investors usually consider public information (news) when trading stocks and focus on as a basis of trading in YSX, they are likely to follow the crowds in making investment decision more. However, investors do not buy or sell a stock even if that decision is supported by technical or fundamental analysis. Investor is pressurized by the influence by the peers. In addition, they are more concerned about what others think of their investment decision.

On the stock market, investors tend to have a industries bias where investments in banks' stocks are more preferred than other industries stocks thus a low perceived risk for such stocks and higher probability for investing in those stocks. From the other aspect, perceived risk attitude strongly dominate that means higher investors possess positive information associated with stock market risk, more likely to trade in a particular company stock that means an optimistic investor exhibits low risk perception therefore, likely to invest more(over confident).

#### 5.2 Suggestions

The study find that emerging Myanmar Stock market encountered the number of investors are too small. There are only two groups of individuals investors first group who are only interested in short-term speculations and another who are any interested in dividend incomes rather than capital gains. Investors demand high dividend yields that listed companies cannot afford to pay. Both of potential issuers and investors do not know benefits of stock market. Most of public companies are satisfied with financing through the banking sector and also investor need to understand risk and return of risky investment opportunities on the stock market. Moreover, there are no institutional investors such as insurance companies, pension funds, and mutual funds, Hedge funds, Currently the demand base of Stocks is very small. In addition, Emerging Myanmar Stock Markets need to participate institutional Investors and especially sophisticated foreign investors. Those investors participating in first ever Myanmar stock exchange, listed Stocks' demand can increase and stock market become more active.

Another suggestion is the SECM, YSX and Securities Companies should provide more awareness Programs such as Seminar, workshops, roadshows, conference etc., both for issuers and for investors. For the supply side, issuer companies should seek funding from the equity markets instead of the banking sector.

Inflow of capital from increased the number of the investor in the equity market is essential needed .For the demand side, investors need to know that a stock is a good asset for Long-term investment and wealth accumulation. To enhance investor-education and Investment Channels, Securities Companies need to give education awareness seminar on capital market as well as education programs and knowledge Sharing Campaigns in which should evenly be disseminated to each and every districts of all states and divisions rather than major cities that will be more effective ways for development of capital market in Myanmar.

Listed Companies should disclose business prospects, dividend policy, companies news and carry out timely disclosure actively Yangon stock .The current trading system which provides only four trading matching times in YSX a day. It can be a constraint on increasing market liquidity. Consequently, to enhance price discovery mechanism and increase market liquidity, Yangon Stock Exchange should boost continuous matching times instead of four trading matching times.

#### **5.3** Needs for Further Research

The study only focused on investor awareness, perceived risk attitudes on investor behaviour of the Yangon Stock Exchange. The study does not cover investment behavior of all brokerage firms because Yangon Stock Exchange is the emerging stock market of country and five listed companies in YSX. Its base only on individual and does not include institutional investors although this study is very first paper. Further studies also needed investor satisfaction with brokerage firms and Investor perception of information disclosed in financial reports and investor behavior.

#### REFERENCES

- 2017/2018 Knowledge Sharing Program with Myanmar (III), "Capacity Building for Capital Market Development in Myanmar, Copyright ©2018 by Ministry of Economy and Finance. Republic of Korea, Government Publications Registration Number, 11-1051000-000880-01
- 2. Agarwal, S., Driscoll, J. C., Gabaix, X., & Laibson, D. (2007). The age of reason: Financial decisions over the lifecycle.
- 3. Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, 116(1), 261-292.
- 4. Breckler, S. J., & Wiggins, E. C. (1989). Affect versus evaluation in the structure of attitudes. *Journal of experimental social psychology*, 25(3), 253-271.
- 5. Brennan, M. J. (1995). The individual investor. *Journal of Financial Research*, 18(1), 59-74.
- 6. Brian M. Lucey and Michael Dowling (2005), *The Role of Feelings in Investor Decision making*, Journal of Economic Surveys, Vol. 19, No.2 Blackwell Publishing Ltd.
- 7. Deaves, R., Dine, C., & Horton, W. (2006). How are investment decisions made. *Task Force to Modernize Securities Legislation in Canada*.
- 8. Del Missier, F., Ferrante, D., & Costantini, E. (2007). Focusing effects in predecisional information acquisition. *Acta psychologica*, *125*(2), 155-174.
- Dohmen, T. J., Falk, A., Huffman, D., Sunde, U., & Schupp, J. (2009).
   Individual risk attitudes: Measurement, determinants and behavioral consequences.
- Dreman, D., Johnson, S., MacGregor, D., & Slovic, P. (2001). A report on the March 2001 investor sentiment survey. *The Journal of Psychology and Financial Markets*, 2(3), 126-134.
- Elke U. Weber and Richard A. Milliman (1997), Perceived Risk Attitudes:
   Relating Risk Perception to Risky Choice, Management Science, Vol.43, No.2,
   pp. 123-144.
- 12. Elster, J. (1994). Rationality, emotions, and social norms. *Synthese*, 21-49.

- 13. Finucane, M. L., Alhakami, A., Slovic, P., & Johnson, S. M. (2000). The affect heuristic in judgments of risks and benefits. *Journal of behavioral decision making*, *13*(1), 1-17.
- 14. Gary Charness and Uri Gneezy (2003), *Portfolio Choice and Risk Attitudes*: An Experiment.
- 15. Geetika Madaan & Sanjeet Singh(2019), "An Analysis of Behavioral Biases in
- 16. Guiso, L., & Jappelli, T. (2005). Awareness and stock market participation. *Review of Finance*, *9*(4), 537-567.
- 17. H.Kent Baker and Victor Ricciardi, (February, 2014). "How Biases Affect Investor Behaviour. *The European Financial Review*, 7-10.
- Hirshleifer, D., & Luo, G. Y. (2001). On the survival of overconfident traders in a competitive securities market. *Journal of Financial Markets*, 4(1), 73-84.
   Investment Decision-Making", International Journal of Financial Research, Vol. 10, No. 4; 2019, Online Published: June 26, 2019, *Published by Sciedu Press*, ISSN, ISSN 1923-4023 E-ISSN 1923-4031.
- 19. Johnson, J., Wilke, A., & Weber, E. U. (2004). Beyond a trait view of risk taking: A domain-specific scale measuring risk perceptions, expected benefits, and perceived-risk attitudes in German-speaking populations. *Polish Psychological Bulletin*, 35, 153-172.
- 20. Kahneman, D., & Riepe, M. W. (1998). Aspects of investor psychology. *Journal of portfolio management*, 24(4), pp. 52-66.
- 21. Kim, K. A., & Nofsinger, J. R. (2008). Behavioral finance in Asia. *Pacific-Basin Finance Journal*, 16(1-2), 1-7.
- 22. LeDoux, J. (1998). Fear and the brain: where have we been, and where are we going?. *Biological psychiatry*, 44(12), 1229-1238.
- 23. Lusardi, A., & Mitchell, O. S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of monetary Economics*, *54*(1), 205-224.
- 24. Malcolm Baker and Jeffrey Wurgler (2007), *Investor Sentiment in the Stock Market*
- 25. Ning Zhu (2002), The Local Bias of Individual Investors, Yale ICF Working Paper No.2-30

- 26. Shin, H., & Park, S. (2018). Do foreign investors mitigate anchoring bias in stock market? Evidence based on post-earnings announcement drift. *Pacific-Basin Finance Journal*, 48, 224-240.
- 27. Stephen Diacon (2002), Risk Averse or Loss Averse: The Behaviour of UK Personal Investors, Centre for Risk& Insurance Studies, the University of Nottingham
- 28. Wanyana, B. (2011). Investor awareness, perceived risk attitudes, and stock market investor behaviour: A case of Uganda securities exchange. *Unpublished Masters Dissertation, Makerere University, Business School, Kampala*. https://www.academia.edu
- 29. Weber, E. U., & Milliman, R. A. (1997). Perceived risk attitudes: Relating risk perception to risky choice. *Management science*, *43*(2), 123-144. www. europeanfinancialreview. com ,Access on 24/5/2019
- 30. SECM Annual Reports 2018.
- 31. YSX Annual Reports 2015, 2016, 2017, 2018.

#### INTERNET REFERENCE

- 1. https;//ysx-mm.com
- 2. https://secm.gov.mm
- 3. https://cma.org.sa
- 4. https://www.investopedia.com/stocks
- 5. https://www.academia.edu

#### **APPENDIX**

#### **OUESTIONNAIRES**

#### Master of Banking and Finance (MBF Program)

# INVESTOR AWARENESS, PERCEIVED RISK ATTITUDE AND INVESTOR BEHAVIOUR IN YANGON STOCK EXCHANGE

I am a postgraduate student from Master of Banking and Finance Program, Department of Commerce, Yangon University of Economics, conducting survey for the thesis titled "Investor Awareness, Perceived Risk Attitude and Investor Behaviour in Yangon Stock Exchange". The knowledge and experience you have in this area is vital in providing the necessary information to make this study a success. The information given will be used exclusively academic purposes. Please read each question and request for your time in answering this questionnaire. Thank you very much.

rec	uest for your time ir	i answering this ques	stionnaire. I nank you	i very much.		
1.	Age (Years)					
	a. Up to 30	b. 31-40	c. 41- 50	d. above 50		
2.	Gender					
	a. Male	b. Female				
3.	High Level of Educ	cation				
	a. High School	b. Graduate	c. Post graduate	d. Others		
4.	Your Occupation					
	a. Company employ	yee	b. Private Owned Business			
	c. Government staff	f	d. Others			
5.	Your Monthly Inco	me				
	a. Up to Kyats 300,	000	b. Kyat 300,000- Kyat 800,000			
	c. Kyat 800,000- K	yat1500, 000	d. above Kyat 1500,000			
6.	How much invest in	n stock at present?				
	a. Less than Kyat 5	00,000	b. Kyat 500,000- Kyat1500,000			
	c. Kyat 1500,000 -	Kyat 2500,000	d. above kyat 2500,000			
7.	Which is your inves	stment time horizon	n on the YSX?			
	a. less than 3 month	ıs	b. 3 to 6 months			
	c. 6 to 12 months		d. more than 1 year	S		
8.	. Which market more prefer for your investment option?					

b. Gold Market

Which stocks are you trading in?

c. Real Estate

d. Banking Saving

a. Stock market

9.

	a. FMI	b. MTSH	c. MCB	d. FPB
	e. TMH			
10	The Brokerage firm	trading with		
	a. MSEC	b. KBZSc	c. CBSC	d. AYA Trust Sc
	e. KTZ <sup>Rh</sup> Sc	f. UABSc		
11.	. How often do you t	rade on the YSX?		
	a. Daily	b. Weekly	c. Monthly	d. quarterly
	e. every Six months	3	f. yearly	

Please tick  $\lceil \sqrt{\rceil}$  the number to indicate the extent to which you agree with the following statements.

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

#### 12. Analysis on Investor Awareness

Sr.	Statement	(1)	(2)	(3)	(4)	(5)
1	I usually follow the stock market through Financial news on TV, newspapers and YSX Website.					
2	I easily access the latest reports, prospectus and financial statements of any company on the YSX.					
3	I usually attend seminars, conferences & workshops hosted by the YSX.					
4	I usually visit the stock market website regularly.					
5	The YSX often holds educational programmes to educate the public regularly.					
6	My peers influence my participation on the stock market.					
7	I have trouble paying attention to the information on the stock market					
8	I am somewhat knowledgeable of stock market activities on the YSX.					
9	I clearly understand the role of brokerage firms.					
10	I always trust on existing trading system.					
11	Listed companies publish financial statements regularly.					
12	When seeking financial advice, I deal with licensed brokers, intermediaries or financial services companies.					
13	The YSX gives reports on corporate developments of various companies listed on a timely basis.					

13. Analysis on Perceived Risk Attitudes

Sr.	Factor Analysis for Affective nature	(1)	(2)	(3)	(4)	(5)
1	I am hopeful when undertaking investment in					
	stocks showing a sure loss.					
2	I usually have a fear to invest in stocks that					
	have a sure gain.					
3	I am cautious about stocks which show sudden					
	changes in price or trading activity.					
4	I usually have worry investing in stocks that					
	have had a past negative performance in					
	trading.					
5	I feel that the idea of participating in a buy/sell					
	on the stock market is appealing					
6	I am always attracted to investing in Stocks.					
7	I am often not afraid to invest in stocks that					
	have shown a past positive performance in					
	trading					
8	I feel regret of a drop in the price of a					
	stock I have purchased					
9	My investment in stocks is largely based on					
	investment knowledge, experiences and					
	education.					
10	I usually consider the credibility of brokerage					
	firms that provide the financial services.					
11	I can easily ascertain the expertise of the					
	brokers offering service.					
12	It is always easy to determine the credibility of					
	the stock market.					
13	Service quality of staffs of brokerage firms is					
	measure					
14	I understand how different investment products					
	work.					

### 14. Stock Market Investor Behaviour

Sr.	Investor Behaviour	(1)	(2)	(3)	(4)	(5)
1	I always use predictive skills to time and					
	outperform the market.					
2	I usually base on the purchase price of stocks as					
	a reference point in trading.					
3	My trading on the YSX is usually determined					
	by past experiences in the market.					
4	usually consider public information (news) when					
	trading stocks.					
5	I always look at and analyst company news					
	prospects before making a decision to buy or					
	sell.					
6	I am more comfortable investing in shares of					
	banking industries than other industries.					
7	I always separate stocks while trading on the					
	stock market depending on their performance.					
8	I usually buy shares based on future expectations					
	rather than past performance.					
9	I often prefer to invest on a short term horizon					
	on the stock market					
10	I always prefer holding on to looser stocks and					
	selling winners.					
11	I often blindly imitate decisions of others when					
	making investment decisions.					
12	My decision to buy /sell greatly relies on					
	personal feelings.					
13	I often consider the information that majority of					
	investors focus on as a basis of trading on the					
	stock market.					
14	I usually tend to sell looser stocks and hold on					
	the winners when trading.					
15	My decision to buy/sell stocks is largely based					
	on emotions					

#### **APPENDIX**

### **SPSS Outputs**

Age

		Frequency	Percent	Valid Percent	Cumulative
					Percent
	31-40	30	29.4	29.4	29.4
	41- 50	15	14.7	14.7	44.1
Valid	above 50	7	6.9	6.9	51.0
	Under 31	50	49.0	49.0	100.0
	Total	102	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
	Female	52	51.0	51.0	51.0
Valid	Male	50	49.0	49.0	100.0
	Total	102	100.0	100.0	

**High Level of Education** 

Thigh Level of Education								
		Frequency	Percent	Valid Percent	Cumulative			
					Percent			
	Graduate	60	58.8	58.8	58.8			
Valid	Post graduate	42	41.2	41.2	100.0			
	Total	102	100.0	100.0				

Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent			
	Company employee	77	75.5	75.5	75.5			
	Government staff	4	3.9	3.9	79.4			
Valid	Others	1	1.0	1.0	80.4			
	Private Owned Business	20	19.6	19.6	100.0			
	Total	102	100.0	100.0				

Monthly Income

	Monthly income							
		Frequency	Percent	Valid Percent	Cumulative Percent			
	above Kyat 1500,000	10	9.8	9.8	9.8			
	Above Kyat 1500,000	17	16.7	16.7	26.5			
	Kyat 300,000- Kyat 8	37	36.3	36.3	62.7			
Valid	Kyat 800,000- Kyat15	20	19.6	19.6	82.4			
	Up to Kyats 300,000	18	17.6	17.6	100.0			
	Total	102	100.0	100.0				

#### Amount of invest in stock at present

		Frequency	Percent	Valid Percent	Cumulative Percent
	Above kyat 2500,000	13	12.7	12.7	12.7
	Kyat 500,000- Kyat15	23	22.5	22.5	35.3
Valid	Kyat1500,000 - Kya	4	3.9	3.9	39.2
	Less than Kyat 500,0	62	60.8	60.8	100.0
	Total	102	100.0	100.0	

**Investment Time Horizons of Investors** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	3 to 6 months	9	8.8	8.8	8.8
	6 to 12 months	6	5.9	5.9	14.7
Valid	less than 3 months	43	42.2	42.2	56.9
	more than 1 years	44	43.1	43.1	100.0
	Total	102	100.0	100.0	

Prefer market for investment option

		Frequency	Percent	Valid Percent	Cumulative Percent
	Banking Saving	14	13.7	13.7	13.7
	Gold Market	14	13.7	13.7	27.5
Valid	Real Estate	13	12.7	12.7	40.2
	Stock market	61	59.8	59.8	100.0
	Total	102	100.0	100.0	

**Type of Trading Stock** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	FMI	31	30.4	30.4	30.4
	FPB	6	5.9	5.9	36.3
	MCB	3	2.9	2.9	39.2
Valid	MTSH	57	55.9	55.9	95.1
	TMH	5	4.9	4.9	100.0
	Total	102	100.0	100.0	

Brokage firm trading

	Brokage IIIII trading									
		Frequency	Percent	Valid Percent	Cumulative Percent					
	AYA Trust Sc	12	11.8	11.8	11.8					
	CBSc	14	13.7	13.7	25.5					
	KBZSc	27	26.5	26.5	52.0					
Valid	KTZRh Sc	7	6.9	6.9	58.8					
	MSEC	37	36.3	36.3	95.1					
	UABSc	5	4.9	4.9	100.0					
	Total	102	100.0	100.0						

#### How often do you trade on the YSX

		Frequency	Percent	Valid Percent	Cumulative Percent
	Daily	5	4.9	4.9	4.9
	Every six months	11	10.8	10.8	15.7
	Monthly	29	28.4	28.4	44.1
Valid	Quarterly	16	15.7	15.7	59.8
	Weekly	14	13.7	13.7	73.5
	Yearly	27	26.5	26.5	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	7	6.9	6.9	6.9
	Disagree	5	4.9	4.9	11.8
	Neutral	27	26.5	26.5	38.2
Valid	Agree	46	45.1	45.1	83.3
	Strongly Agree	17	16.7	16.7	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	2	2.0	2.0	2.0
	Disagree	8	7.8	7.8	9.8
\	Neutral	30	29.4	29.4	39.2
Valid	Agree	44	43.1	43.1	82.4
	Strongly Agree	18	17.6	17.6	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 3**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	12	11.8	11.8	11.8
Valid	Disagree	10	9.8	9.8	21.6
	Neutral	34	33.3	33.3	54.9
	Agree	35	34.3	34.3	89.2
	Strongly Agree	11	10.8	10.8	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 4**

		Frequency	Percent	Valid Percent	Cumulative		
					Percent		
	Strongly Disagree	4	3.9	3.9	3.9		
	Disagree	5	4.9	4.9	8.8		
\	Neutral	37	36.3	36.3	45.1		
Valid	Agree	36	35.3	35.3	80.4		
	Strongly Agree	20	19.6	19.6	100.0		
	Total	102	100.0	100.0			

**Investor Awareness 5** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	3	2.9	2.9	2.9
	Disagree	9	8.8	8.8	11.8
	Neutral	26	25.5	25.5	37.3
Valid	Agree	50	49.0	49.0	86.3
	Strongly Agree	14	13.7	13.7	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 6**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	7	6.9	6.9	6.9
	Disagree	19	18.6	18.6	25.5
	Neutral	53	52.0	52.0	77.5
Valid	Agree	21	20.6	20.6	98.0
	Strongly Agree	2	2.0	2.0	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 7**

		Frequency	Percent	Valid Percent	Cumulative	
					Percent	
	Strongly Disagree	15	14.7	14.7	14.7	
	Disagree	28	27.5	27.5	42.2	
\	Neutral	45	44.1	44.1	86.3	
Valid	Agree	11	10.8	10.8	97.1	
	Strongly Agree	3	2.9	2.9	100.0	
	Total	102	100.0	100.0		

#### **Investor Awareness 8**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	3	2.9	2.9	2.9
	Disagree	7	6.9	6.9	9.8
	Neutral	36	35.3	35.3	45.1
Valid	Agree	44	43.1	43.1	88.2
	Strongly Agree	12	11.8	11.8	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 9**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	2	2.0	2.0	2.0
	Disagree	9	8.8	8.8	10.8
	Neutral	27	26.5	26.5	37.3
Valid	Agree	46	45.1	45.1	82.4
	Strongly Agree	18	17.6	17.6	100.0
	Total	102	100.0	100.0	

**Investor Awareness 10** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	3.9	3.9	3.9
	Disagree	6	5.9	5.9	9.8
	Neutral	40	39.2	39.2	49.0
Valid	Agree	40	39.2	39.2	88.2
	Strongly Agree	12	11.8	11.8	100.0
	Total	102	100.0	100.0	

**Investor Awareness 11** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	3.9	3.9	3.9
	Disagree	4	3.9	3.9	7.8
	Neutral	39	38.2	38.2	46.1
Valid	Agree	40	39.2	39.2	85.3
	Strongly Agree	15	14.7	14.7	100.0
	Total	102	100.0	100.0	

#### Investor Awareness 12

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	10	9.8	9.8	9.8
	Disagree	10	9.8	9.8	19.6
	Neutral	43	42.2	42.2	61.8
Valid	Agree	29	28.4	28.4	90.2
	Strongly Agree	10	9.8	9.8	100.0
	Total	102	100.0	100.0	

#### **Investor Awareness 13**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	3.9	3.9	3.9
	Disagree	6	5.9	5.9	9.8
\	Neutral	44	43.1	43.1	52.9
Valid	Agree	38	37.3	37.3	90.2
	Strongly Agree	10	9.8	9.8	100.0
	Total	102	100.0	100.0	

#### Perceived Risk Attitude 1

		Frequency	Percent	Valid Percent	Cumulative Percent	
	Strongly Disagree	10	9.8	9.8	9.8	
	Disagree	20	19.6	19.6	29.4	
\	Neutral	51	50.0	50.0	79.4	
Valid	Agree	19	18.6	18.6	98.0	
	Strongly Agree	2	2.0	2.0	100.0	
	Total	102	100.0	100.0		

Perceived Risk Attitude 2

-		Frequency	Percent	Valid Percent	Cumulative Percent	
					i ercent	
	Strongly Disagree	9	8.8	8.8	8.8	
	Disagree	32	31.4	31.4	40.2	
	Neutral	43	42.2	42.2	82.4	
Valid	Agree	14	13.7	13.7	96.1	
	Strongly Agree	4	3.9	3.9	100.0	
	Total	102	100.0	100.0		

Perceived Risk Attitude 3

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	1	1.0	1.0	1.0
	Disagree	9	8.8	8.8	9.8
	Neutral	47	46.1	46.1	55.9
Valid	Agree	40	39.2	39.2	95.1
	Strongly Agree	5	4.9	4.9	100.0
	Total	102	100.0	100.0	

Perceived Risk Attitude 4

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	2	2.0	2.0	2.0
	Disagree	20	19.6	19.8	21.8
	Neutral	46	45.1	45.5	67.3
Valid	Agree	27	26.5	26.7	94.1
	Strongly Agree	6	5.9	5.9	100.0
	Total	101	99.0	100.0	
Missing	System	1	1.0		
Total		102	100.0		

Perceived Risk Attitude 5

		Frequency	Percent	Valid Percent	Cumulative Percent	
	Strongly Disagree	5	4.9	5.0	5.0	
	Disagree	14	13.7	13.9	18.8	
\	Neutral	48	47.1	47.5	66.3	
Valid	Agree	28	27.5	27.7	94.1	
	Strongly Agree	6	5.9	5.9	100.0	
	Total	101	99.0	100.0		
Missing	System	1	1.0			
Total		102	100.0			

Perceived Risk Attitude 6

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	7	6.9	6.9	6.9
	Disagree	8	7.8	7.8	14.7
	Neutral	49	48.0	48.0	62.7
Valid	Agree	27	26.5	26.5	89.2
	Strongly Agree	11	10.8	10.8	100.0
	Total	102	100.0	100.0	

Perceived Risk Attitude 7

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	3	2.9	2.9	2.9
	Disagree	12	11.8	11.8	14.7
	Neutral	41	40.2	40.2	54.9
Valid	Agree	37	36.3	36.3	91.2
	Strongly Agree	9	8.8	8.8	100.0
	Total	102	100.0	100.0	

**Perceived Risk Attitude 8** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	6	5.9	5.9	5.9
	Disagree	24	23.5	23.8	29.7
\	Neutral	42	41.2	41.6	71.3
Valid	Agree	26	25.5	25.7	97.0
	Strongly Agree	3	2.9	3.0	100.0
	Total	101	99.0	100.0	
Missing	System	1	1.0		
Total		102	100.0		

#### **Perceived Risk Attitude 9**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	2	2.0	2.0	2.0
	Disagree	12	11.8	11.8	13.7
	Neutral	25	24.5	24.5	38.2
Valid	Agree	39	38.2	38.2	76.5
	Strongly Agree	24	23.5	23.5	100.0
	Total	102	100.0	100.0	

Perceived Risk Attitude 10

	1 CIOCIVO A MICK ALLICACO TO					
_		Frequency	Percent	Valid Percent	Cumulative Percent	
					i ercent	
	Strongly Disagree	1	1.0	1.0	1.0	
	Disagree	8	7.8	7.8	8.8	
	Neutral	42	41.2	41.2	50.0	
Valid	Agree	35	34.3	34.3	84.3	
	Strongly Agree	16	15.7	15.7	100.0	
	Total	102	100.0	100.0		

Perceived Risk Attitude 11

		Frequency	Percent	Valid Percent	Cumulative Percent	
					i ercent	
	Strongly Disagree	2	2.0	2.0	2.0	
	Disagree	15	14.7	14.7	16.7	
.,	Neutral	46	45.1	45.1	61.8	
Valid	Agree	35	34.3	34.3	96.1	
	Strongly Agree	4	3.9	3.9	100.0	
	Total	102	100.0	100.0		

Perceived Risk Attitude 12

=		Frequency	Percent	Valid Percent	Cumulative	
					Percent	
	Strongly Disagree	2	2.0	2.0	2.0	
	Disagree	19	18.6	18.6	20.6	
\	Neutral	58	56.9	56.9	77.5	
Valid	Agree	15	14.7	14.7	92.2	
	Strongly Agree	8	7.8	7.8	100.0	
	Total	102	100.0	100.0		

#### **Perceived Risk Attitude 13**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	3	2.9	2.9	2.9
	Disagree	8	7.8	7.8	10.8
	Neutral	46	45.1	45.1	55.9
Valid	Agree	39	38.2	38.2	94.1
	Strongly Agree	6	5.9	5.9	100.0
	Total	102	100.0	100.0	

#### Perceived Risk Attitude 14

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	1	1.0	1.0	1.0
	Disagree	5	4.9	4.9	5.9
	Neutral	41	40.2	40.2	46.1
Valid	Agree	40	39.2	39.2	85.3
	Strongly Agree	15	14.7	14.7	100.0
	Total	102	100.0	100.0	

#### **Investor Behavior 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	3.9	3.9	3.9
	Disagree	16	15.7	15.7	19.6
\	Neutral	45	44.1	44.1	63.7
Valid	Agree	33	32.4	32.4	96.1
	Strongly Agree	4	3.9	3.9	100.0
	Total	102	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
					Percent
	Strongly Disagree	3	2.9	2.9	2.9
	Disagree	11	10.8	10.8	13.7
\	Neutral	45	44.1	44.1	57.8
Valid	Agree	33	32.4	32.4	90.2
	Strongly Agree	10	9.8	9.8	100.0
	Total	102	100.0	100.0	

#### **Investor Behavior 3**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	3	2.9	3.0	3.0
	Disagree	7	6.9	6.9	9.9
	Neutral	43	42.2	42.6	52.5
Valid	Agree	36	35.3	35.6	88.1
	Strongly Agree	12	11.8	11.9	100.0
	Total	101	99.0	100.0	
Missing	System	1	1.0		
Total		102	100.0		

#### **Investor Behavior 4**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	3.9	3.9	3.9
	Disagree	6	5.9	5.9	9.8
	Neutral	36	35.3	35.3	45.1
Valid	Agree	45	44.1	44.1	89.2
	Strongly Agree	11	10.8	10.8	100.0
	Total	102	100.0	100.0	

#### **Investor Behavior 5**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	4	3.9	3.9	3.9
	Disagree	5	4.9	4.9	8.8
	Neutral	28	27.5	27.5	36.3
Valid	Agree	50	49.0	49.0	85.3
	Strongly Agree	15	14.7	14.7	100.0
	Total	102	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	6	5.9	5.9	5.9
	Disagree	20	19.6	19.6	25.5
	Neutral	44	43.1	43.1	68.6
Valid	Agree	25	24.5	24.5	93.1
	Strongly Agree	7	6.9	6.9	100.0
	Total	102	100.0	100.0	

**Investor Behavior 7** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	2	2.0	2.0	2.0
	Disagree	6	5.9	5.9	7.8
	Neutral	36	35.3	35.3	43.1
Valid	Agree	50	49.0	49.0	92.2
	Strongly Agree	8	7.8	7.8	100.0
	Total	102	100.0	100.0	

**Investor Behavior 8** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	3	2.9	2.9	2.9
	Disagree	7	6.9	6.9	9.8
	Neutral	41	40.2	40.2	50.0
Valid	Agree	37	36.3	36.3	86.3
	Strongly Agree	14	13.7	13.7	100.0
	Total	102	100.0	100.0	

#### **Investor Behavior 9**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	7	6.9	6.9	6.9
	Disagree	28	27.5	27.5	34.3
\	Neutral	41	40.2	40.2	74.5
Valid	Agree	24	23.5	23.5	98.0
	Strongly Agree	2	2.0	2.0	100.0
	Total	102	100.0	100.0	

#### **Investor Behavior 10**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	6	5.9	5.9	5.9
	Disagree	25	24.5	24.5	30.4
Valid	Neutral	52	51.0	51.0	81.4
	Agree	19	18.6	18.6	100.0
	Total	102	100.0	100.0	

	investor Benavior 11					
		Frequency	Percent	Valid Percent	Cumulative Percent	
	Strongly Disagree	17	16.7	16.7	16.7	
	Disagree	28	27.5	27.5	44.1	
	Neutral	47	46.1	46.1	90.2	
Valid	Agree	9	8.8	8.8	99.0	
	Strongly Agree	1	1.0	1.0	100.0	
	Total	102	100.0	100.0		

**Investor Behavior 12** 

		Frequency	Percent	Valid Percent	Cumulative	
					Percent	
	Strongly Disagree	7	6.9	6.9	6.9	
	Disagree	34	33.3	33.3	40.2	
\	Neutral	46	45.1	45.1	85.3	
Valid	Agree	13	12.7	12.7	98.0	
	Strongly Agree	2	2.0	2.0	100.0	
	Total	102	100.0	100.0		

**Investor Behavior 13** 

		Frequency	Percent	Valid Percent	Cumulative Percent	
	Strongly Disagree	4	3.9	3.9	3.9	
	Disagree	8	7.8	7.8	11.8	
\	Neutral	47	46.1	46.1	57.8	
Valid	Agree	39	38.2	38.2	96.1	
	Strongly Agree	4	3.9	3.9	100.0	
	Total	102	100.0	100.0		

#### **Investor Behavior 14**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	1	1.0	1.0	1.0
	Disagree	24	23.5	23.5	24.5
	Neutral	50	49.0	49.0	73.5
Valid	Agree	22	21.6	21.6	95.1
	Strongly Agree	5	4.9	4.9	100.0
	Total	102	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Disagree	15	14.7	14.7	14.7
	Disagree	39	38.2	38.2	52.9
	Neutral	35	34.3	34.3	87.3
Valid	Agree	10	9.8	9.8	97.1
	Strongly Agree	3	2.9	2.9	100.0
	Total	102	100.0	100.0	

### **Descriptives**

**Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std. Deviation
Investor Awareness 1	102	1	5	3.60	.046
Investor Awareness 2	102	1	5	3.67	.926
Investor Awareness 3	102	1	5	3.23	.142
Investor Awareness 4	102	1	5	3.62	.985
Investor Awareness 5	102	1	5	3.62	.934
Investor Awareness 6	102	1	5	2.92	.864
Investor Awareness 7	102	1	5	2.60	.967
Investor Awareness 8	102	1	5	3.54	.897
Investor Awareness 9	102	1	5	3.68	.935
Investor Awareness 10	102	1	5	3.49	.920
Investor Awareness 11	102	1	5	3.57	.928
Investor Awareness 12	102	1	5	3.19	.069
Investor Awareness 13	102	1	5	3.43	.896
Valid N (listwise)	102				

## **Descriptives**

**Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Risk Attitude 1	102	1	5	2.83	.913
Perceived Risk Attitude 2	102	1	5	2.73	.946
Perceived Risk Attitude 3	102	1	5	3.38	.758
Perceived Risk Attitude 4	102	1	5	3.15	.876
Perceived Risk Attitude 5	102	1	5	3.16	.914
Perceived Risk Attitude 6	102	1	5	3.26	.994
Perceived Risk Attitude 7	102	1	5	3.36	.910
Perceived Risk Attitude 8	102	1	5	2.96	.927
Perceived Risk Attitude 9	102	1	5	3.70	.022
Perceived Risk Attitude 10	102	1	5	3.56	.885
Perceived Risk Attitude 11	102	1	5	3.24	.823
Perceived Risk Attitude 12	102	1	5	3.08	.852
Perceived Risk Attitude 13	102	1	5	3.36	.830
Perceived Risk Attitude 14	102	1	5	3.62	.833
Valid N (listwise)	102				

### **Descriptives**

**Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std. Deviation
Investor Behavior 1	102	1	5	3.17	.880
Investor Behavior 2	102	1	5	3.35	.908
Investor Behavior 3	102	1	5	3.47	.901
Investor Behavior 4	102	1	5	3.52	.909
Investor Behavior 5	102	1	5	3.66	.928
Investor Behavior 6	102	1	5	3.07	.978
Investor Behavior 7	102	1	5	3.55	.804
Investor Behavior 8	102	1	5	3.51	.920
Investor Behavior 9	102	1	5	2.86	.923
Investor Behavior 10	102	1	4	2.82	.801
Investor Behavior 11	102	1	5	2.50	.909
Investor Behavior 12	102	1	5	2.70	.854
Investor Behavior 13	102	1	5	3.30	.830
Investor Behavior 14	102	1	5	3.06	.830
Investor Behavior 15	102	1	5	2.48	.962
Valid N (listwise)	102				

### Regression

**Descriptive Statistics** 

	Mean	Std. Deviation	N			
Investor Behavior	3.1320	.42908	102			
Investor Awareness	3.2535	.41164	102			
Perceived Risk Attitude	3.2353	.50553	102			

#### Correlations

		Investor Behavior	Investor Awareness	Perceived Risk Attitude
	Investor Behaviour	1.000	.945	.740
Pearson Correlation	Investor Awareness	.945	1.000	.722
	Perceived Risk Attitude	.740	.722	1.000
	Investor Behaviour		.000	.000
Sig. (1-tailed)	Investor Awareness	.000	•	.000
	Perceived Risk Attitude	.000	.000	
	Investor Behaviour	102	102	102
N	Investor Awareness	102	102	102
	Perceived Risk Attitude	102	102	102

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Perceived Risk Attitude, Investor Awarenes <sup>s</sup>		Enter

a. Dependent Variable: Investor Behaviourb. All requested variables entered.

**Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.949 <sup>a</sup>	.900	.898	.13671

a. Predictors: (Constant), Perceived Risk Attitude, Investor Awareness

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	16.745	2	8.373	447.978	.000 <sup>b</sup>
1	Residual	1.850	99	.019		
	Total	18.595	101			

#### Coefficients<sup>a</sup>

Model		Unstandardize	andardized Coefficients Sta		t	Sig.
		В	Std. Error	Beta		
	(Constant)	.110	.109		1.003	.318
1	Investor Awareness	.894	.048	.858	18.721	.000
	Perceived Risk Attitude	.102	.039	.121	2.635	.010

a. Dependent Variable: Investor Behaviour

a. Dependent Variable: Investor Behaviourb. Predictors: (Constant), Perceived Risk Attitude, Investor Awareness