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Title of Dissertation: The effect of awareness on stock market participation among potential retail investors in Zimbabwe

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DEGREE TITLE
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SIGNED

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DEDICATIONS

I dedicate this dissertation to my family and friends. My heartfelt gratitude goes to my loving mother, Georgina and my brother Simbarashe, my dear Patience, for their continued support and inspiration throughout my tenure at university. Finally, all glory be unto God for without whom this dissertation might not have been written and to whom I am greatly indebted.
ACKNOWLEDGEMENTS

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Finally, I acknowledge the miraculous touch of the Lord in my life, as I toiled to get pieces of this dissertation together.
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ABSTRACT

The participation of retail investors at the Zimbabwe Stock Exchange is insignificant and worryingly low. The reasons for the insignificant level of retail investor participation at the Zimbabwe Stock Exchange are not widely known. It is from this background that the study sought to understand the effect of awareness on stock market participation with a view to chart out strategies that can help encourage individual investors to participate at the local bourse. The study also controlled for financial literacy, education, income, age and gender in order to understand the independent effect of awareness on stock market participation. The objectives of the study were to explore the factors that influence the participation of retail investors on the ZSE, to determine the level of retail investor participation on the ZSE, to understand why retail investors shy away from the Zimbabwe stock exchange market, and to explore ways to promote stock market participation among potential retail investors in Zimbabwe. The researcher adopted a descriptive research design which allowed for the use of a logistic regression model to analyze primary data gathered using questionnaires and to run regression results. The findings of the study showed that awareness is very significant in encouraging people to participate in the stock market. The study therefore concludes that awareness is positively and significantly related to stock market participation. The study recommends that policy makers should ensure that retail investors get educated of the stock market dynamics, financial institutions should work on distributing investment information on various media platforms, and the government should ensure that financial literacy is introduced in primary, secondary and tertiary institutions.
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<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECZIM</td>
<td>Securities Commission of Zimbabwe</td>
</tr>
<tr>
<td>ZSE</td>
<td>Zimbabwe Stock Exchange</td>
</tr>
<tr>
<td>WFE</td>
<td>World Federation of Exchanges</td>
</tr>
<tr>
<td>RBZ</td>
<td>Reserve Bank of Zimbabwe</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.0 Introduction
The study seeks to explore the effect of awareness on stock market participation among potential retail investors. This chapter describes and explains the background to the study, statement of the problem, purpose of the study, research questions, significance of the study, assumptions, delimitations of the study, limitations, and definition of terms and summary of the overall chapter one.

1.1 Background to the study
Financial inclusion in capital markets contributes enormously to the socio-economic development of a country. According to World Bank Group, (2015), high usage of formal financial services enhance the economic well-being of people in a country and also play a pivotal role in economic development. This has not been true for Zimbabwe, according to the FinScope Survey of 2011, majority of the people exhibit lack of financial knowledge of about 74% and understanding financial market terms of which this adversely affect individual participation on the ZSE. Financial inclusion is considered important in widening access to and usage of financial services, thus, promoting savings and investments. Financial inclusion is decisive for national prosperity. According to the Reserve Bank of Zimbabwe (2016), financial inclusion is defined as the effective use of a broad range of quality, affordable and accessible financial services provided in a fair and transparent manner through regulated entities. Financial inclusion enhances investor participation in financial markets.

Financial markets play a significant role in enhancing economic growth and social development in both developed and emerging economies by pooling financial resources from surplus units and channeling those financial resources to deficit units (Remund, 2010). The stock market provides such a platform for linking deficit and surplus units. The exchange market channels funds to the
productive sectors of the economy such as industry, mining, agriculture, thus, fueling social and economic growth of a country. Globally, there has been an overwhelming increase in individuals who participate in financial markets, and this has been immensely attributed to innovations in financial products and services. However, some of these financial products are complex and difficult to understand especially for those who are not financially literate. Market deregulation and structural reforms in social security and pensions have had a significant influence in shifting financial decision power away from employers and government to private individuals. Therefore, individuals have been empowered with the capacity to take charge of their own financial security (Rooij, Lusardi and Alessie, 2007).

Financial literacy, education and awareness have been areas of major concern at global stage particularly when attributed to stock market participation. The stock market plays a significant role in enhancing the financial well-being of many people across the globe. Retail investors perceive stocks as an investment vehicle through which they can raise long-term income for retirement and achieving important financial goals and objectives. According to Reserve Bank of Zimbabwe (RBZ) (2016), capital markets promote economic and social development through mobilization of financial resources in an economy. Capital markets provide a platform for the exchange of financial assets such as stocks and bonds in line with established regulations thus, making it convenient for companies to raise long-term finance which is necessary to fuel economic and national prosperity.

According to the FinScope survey of 2014 about 99% of the Zimbabwean adult population does not largely invest in formal investments and capital market product. This suggests that financial illiteracy is widespread and that most of the Zimbabwean adult population shy away from the stock market. Guiso and Jappelli (2005), documents that limited stock market awareness has significant implications for understanding the stockholding puzzle. In light of the insignificant participation on the stock market by retail investors, policymakers in both advanced and emerging economies have increasingly recognized the importance of financial literacy, awareness and have since started to invest resources in financial education programs. The growing importance of stock markets around the globe has reinforced the belief that finance is really an essential component for economic growth. According to the IFC (1998), the proliferation of stock exchanges in Africa is impressive and indicates that a number of countries, including Zimbabwe, now consider the stock
exchange as one of the efforts or strategies intended to develop national, and regional economies. The role of stock markets in economic growth processes is to help companies raise finance through the issuing of shares, and providing a secondary market for trading of those shares (Tsaurai and Odhiambo, 2012).

The Zimbabwe Stock Exchange was established in 1896 with the strong intention to meet the capital needs of the gold mining industry, whose increased expansion was fuelled by speculation of a major gold rush in Zimbabwe (Chiwunze, 2015). The ZSE is also the dominant exchange in Zimbabwe and has grown considerably to become one of Africa’s leading equity exchanges and provider of services that support the raising of capital and trading of shares. According to the S&P survey of 2001, the ZSE was rated the second best performer in the world’s emerging capital markets, in terms of both returns in US dollars and share prices, over other 33 African stock bourses. By December 2018, the exchange had 67 listed companies, marginally higher than the 64 companies listed in December 1996. There were 79 listed companies in 2008 but the number has since plummeted as many firms were delisted for failing to meet exchange rules and regulations, particularly the ZSE Act (Chapter 24:18) and corporate governance framework which requires that listed firms should publish their audited financial statements within six months of the end of their financial periods (Chiwunze, 2015). The ZSE became an important capital market only in the 1990s, subsequent to the introduction of market reforms in the form of the Economic Structural Adjustment Programme (ESAP) which was adopted in 1991. These reforms provided a strong impetus for investor participation on the ZSE, and also included the removal of restrictions on foreign investment controls to a level equivalent to about 40% of the annual turnover of the ZSE (Chiwunze, 2015).

Between 2002 and 2008, the Zimbabwean economy went through an era of economic downturn and declining performance. In spite of the deteriorating economy, the stock market responded inversely to the factors that affected the economy negatively. The ZSE performance was dominantly driven by speculation as investors hedged against hyperinflation, which reached an all-time high of 231 million percent in July 2008. Investors sought stock market shares as a store of value for their investment. In November 2008 the government suspended trading activities of the local bourse for three months due to the increased loss of value of the Zimbabwean dollar which was caused by hyperinflation. The suspension was lifted in February 2009 to enable the
resumption of business at the ZSE owing to the introduction of the multicurrency regime (Chiwunze, 2015).

The deteriorating economy coupled with acute liquidity challenges, have largely affected the investment decisions of domestic investors and resulted in foreign investors accounting for the bulk of total market turnover (Chiwunze, 2015). Increased participation on the Zimbabwe Stock Exchange has considerably been attributed to foreign investors comparable to that of local retail investors which has been gradually plummeting to very low levels. In a bid to promote retail investor participation the Security Exchange Commission of Zimbabwe, ZSE and other market players have made significant strides and invested resources in a series of awareness and investor education programs across the country. The statistics of investor participation in terms of total market turnover are shown below;

**Table 1.1: Investor Participation Statistics**

<table>
<thead>
<tr>
<th>Investor Type</th>
<th>Market Value ($m)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pension Funds</td>
<td>260</td>
<td>18</td>
</tr>
<tr>
<td>Corporates</td>
<td>95</td>
<td>7</td>
</tr>
<tr>
<td>Individuals</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Insurance</td>
<td>385</td>
<td>26</td>
</tr>
<tr>
<td>Unit Trust Funds</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>Unclassified Local</td>
<td>89</td>
<td>6</td>
</tr>
<tr>
<td>Unclassified Foreign</td>
<td>596</td>
<td>41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,463</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Chengetedzai Securities Depository, 2017.*

**1.2 Statement of the Problem**
There has been an insignificant participation by retail investors in the Zimbabwe’s capital markets of about 1% of the adult population according to the FinScope survey of 2014. In addition, the participation of individual investors at the Zimbabwe Stock Exchange is extremely low (Gumbo and Sandada, 2018). The revealed low uptake in capital market products by Zimbabwe’s adult population has been largely attributed to limited disposable income, lack of education and
awareness. Consequently, comprehensive investor education and awareness programs play a considerable role in enhancing capital market knowledge and promoting participation among retail investors on the ZSE (Reserve Bank of Zimbabwe, 2016).

1.3 Research Objectives

1. To explore the factors that influence potential retail investor participation on the Zimbabwe Stock Exchange
2. To determine the level of retail investor participation on the Zimbabwe Stock Exchange
3. To determine the effect of awareness on stock market participation by retail investors
4. To determine why retail investors shy away from the Zimbabwe Stock Exchange
5. To explore ways to promote stock market participation by potential retail investors in Zimbabwe

1.4 Research Questions

1. What are the factors that influence potential retail investors to participate on the Zimbabwe Stock Exchange?
2. What is the level of retail investor participation on the Zimbabwe Stock Exchange?
3. What is the effect of awareness on stock market participation by retail investors?
4. Why do retail investors shy away from the Zimbabwe Stock Exchange?
5. What are the strategies that can be employed to promote retail investor participation in the Zimbabwe Stock Exchange?

1.5 Significance of Study

This section addresses the significance of the study to policy makers, academia and potential retail investors.

1.5.1 To the policy makers

The research study provide insights that will be used in bolstering policy decisions to attract more retail investors and encourage the equity culture. The study will serve as an important tool for reference on driving the national financial inclusion strategy in capital markets to ensure economic growth and social development.

1.5.2 To academia

The research study will sensitize the student community on stock market functionalities and its importance in re-vitalizing the Zimbabwean economy. Further, the study will urge students and lecturers to appreciate capital markets, the stock exchange and undertake research that can
contribute in shaping the future direction of capital markets, forging new ideas, connections and capital market related body of knowledge that can be used by all the relevant stakeholders in enhancing capital market operations.

1.5.3 Retail investors
The study will be useful to individual investors in that it will serve as a vehicle through which individuals can learn about the consequences of non-participation in the stock exchange and promote an equity culture. The study will also help them to make appropriate, and informed financial decisions with regards to investing and personal finance matters. The study will induce individuals to increase their future wealth, avoid falling prey to high cost borrowing and plan for retirement through participating on the local bourse.

1.6 Assumptions
The research study has the following set of assumptions;

- Respondents will provide accurate and reliable information.
- The findings of the research study will reflect the true situation of the state of retail investor participation on the Zimbabwe Stock Exchange
- Respondents will be cooperative.
- Participation on the stock market differs from country to country and between households.
- There are many factors that influence the decision to hold publicly traded shares or not to hold shares.
- Stock market participation rates are different between women and men.

1.7 Delimitations of the Study
The research study focuses on assessing the effect of awareness in encouraging individual investors to participate at the stock market in Zimbabwe. The study will not focus on stock market performance. The research study is limited only to capital markets in Zimbabwe, particularly the ZSE. Stocks considered are common stocks only. The researcher makes use of questions measuring retail investor participation before investing in the stock market.

1.8 Limitations
The respondents during data collection may be unwilling to give reliable and accurate data. To ensure that data is valid and reliable the researcher had the questionnaire pretested by the project mentor so that the items on the questionnaire measure exactly the content they are intended to
measure. The researcher also self-administered questionnaires in this study to reduce the chance of obtaining biased results.

1.9 Definition of terms

1.9.1 Retail Investor
Retail Investor is a person who is not financially sophisticated, one who has little or no knowledge of finance, and is more likely to fall prey to high cost borrowing and pay a considerable amount of money to purchase different financial services (Lusardi and Mitchell, 2011).

1.9.2 Financial Inclusion
Financial Inclusion is defined as the effective use of a broad range of quality, affordable and accessible financial services provided in a fair and transparent manner through regulated entities (Reserve Bank of Zimbabwe, 2016).

1.9.3 Stock Market Participation
Stock Market Participation describes the percentage of people who actively invest in the stock market (Dillen, 2018).

1.10 Chapter Summary
The chapter mirrors the introduction to the proposed study. It covered the background to the study which is hinged on the statement of the problem. Additionally, it covered why the researcher has decided to carry out this study. The insignificant proportion of domestic investors participating on the Zimbabwe Stock Exchange has been of intense interest to the researcher and the major climax of the study. The study formulates research questions and objectives to investigate the problem under study. The findings of this study ought to benefit future researchers and policy makers to effectively help bolster the resilience and vibrancy of the local capital markets. The study assumptions and limitations have been stated for transparency and relevance of the study. The following chapter will focus on theoretical and literature review in relation to the proposed study.
CHAPTER TWO

LITERATURE REVIEW

1.0 Introduction
This chapter presents empirical evidence on the effect of awareness on stock market participation among potential retail investors in Zimbabwe. Focus is also given on stock market participation barriers and the determinants that enhance retail investor participation in stock markets. This chapter shall cover conceptual, theoretical and empirical literature related to the study. The theories shall help to explain the effect of independent variables such as awareness and education among others on stock market participation among potential retail investors. Additionally, the chapter shall also delve into related empirical literature to the study in a way to establish the knowledge gap.

2.1 Conceptual Framework
This section illustrates the concept of awareness on stock market participation, retail investor participation and stock market participation barriers.

2.1.1 Awareness
Awareness refers to the spreading of financial and investment information which leads individuals to make important, informed investment decisions. Awareness includes spreading information about financial assets such as stocks, bonds, mutual funds, stock market basics and its operations (Guiso and Jappelli, 2005). Additionally, investor awareness refers to a situation whereby investors are literate and updated with information about the investment environment. Investors’ extent of exposure and knowledge of the investment industry is measured by the level of awareness. Therefore, awareness is a determinant of stock market participation.
2.1.2 Importance of Awareness
Guiso and Jappelli (2005), asserts that limited stock market participation has significant implications for individual welfare. Individuals who do not participate in the stock market often have trouble taking charge of their own financial security. Cocco, Gomes and Maenhout (2005), calculate that the welfare loss for individuals who do not participate in stock markets can be substantial. Limited stock market participation and changes in participation over time are considered important especially for household wealth distribution (Guvenen, 2005), household decisions concerning retirement (Bernheim and Garrett, 2003), and wealth effects on consumption (Dynan, 2001). Therefore, it is important for mutual fund managers and retirement accounts to invest resources in broadening the stockholding base by first understanding what drives decisions to invest in stocks. Guiso and Jappelli (2005), found that awareness of the stock market is the first order step in promoting potential individual investors to participate in the stock market. Thus, retail investors who are aware of stocks and the stock market have a higher probability of investing in stocks than those who are not. Awareness help explain the stockholding puzzle.

2.1.3 Awareness and Stock Market participation
Guiso and Jappelli (2005), found that limited stock market participation has significant implications for understanding the stock holding puzzle. Stock holding puzzle refers to a situation whereby individuals shy away from the stock market (Campbell, 2006). With awareness, individual investors can learn about financial assets from asset suppliers who might be financial institutions or through peers (Guiso and Jappelli, 2005). Therefore, if asset distributors have the incentive to provide information about the assets they offer, investment and financial information to potential retail investors, this increases the probability that individuals may invest in stocks once aware. Awareness is the first order step in any endeavor to encourage individuals to participate in stock markets (Guiso and Jappelli, 2005). Awareness is a significant predictor of stock market participation. In Zimbabwe, there has been limited awareness among retail investors of the stock market, its operations and the available menu of assets (Reserve Bank of Zimbabwe, 2016).

2.1.4 Awareness and Potential Retail Investors
Potential retail investor is defined as an individual who is not financially sophisticated, one who has little or no knowledge of finance, and who is more likely to fall prey to high cost borrowing and pay a considerable amount of money to purchase different financial services (Lusardi and
Mitchell, 2011). In addition, potential retail investors maybe individual clients of a financial institution who receive information on financial products and investment opportunities which lead them to make informed investment decisions. Potential retail investors make decisions based on information privy to them and once informed they are likely to invest in stocks. Potential retail investors don’t choose to become aware, therefore, they depend on asset distributors for information regarding stock market opportunities and available menu of assets (Guiso and Jappelli, 2005). In Zimbabwe, most individuals are not aware of the Zimbabwe Stock Exchange and rely on commercial banks for funding. In this context, most individuals fall prey to high cost borrowing since banks charge high interest rates for the loans they advance.

2.1.5 Promoting Awareness among Potential Retail Investors

Guiso and Jappelli (2005), carried out a study on the drivers of financial market awareness and stock market participation. They concluded that awareness of stocks, bonds, investment opportunities and mutual funds has a positive relationship with education, household incomes and wealth, long-term bank relations and social interaction. Volpe et al. (2002), argues that individuals’ knowledge of capital markers vary with age, education, income, experience and gender. Investors who trade using online platforms are likely to be influenced by financial misinformation and therefore, they should be more informed about stocks than other investors to succeed in the securities market. Capital market players such as the ZSE, SECZIM, securities dealers and stock brokers among others can make use of promotional campaigns, seminars, publications and other educational programs in national radio and television channels to increase awareness amongst the general public about the capital market (Baidhya and Parajuli, 2004).

2.1.6 The Level of Retail Investor Participation in Zimbabwe Capital Markets

Retail investor participation has been worryingly low in the Zimbabwe Stock Exchange (Gumbo and Sandada, 2018). Policy makers have been very much concerned about the limited level of participation in capital markets by individual investors. The FinScope Survey Report of 2014, reports a 1% participation rate by the Zimbabwe adult population. Institutional and foreign investors are attributed for the bulk of the market capitalization on the ZSE. While this has been commendable, there is still need to diversify the investor base and this can be done by promoting retail investor participation through awareness, educating potential retail investors and spreading
information on capital markets dynamics and the menu of available assets (Guiso and Jappelli, 2005). The limited participation by retail investors on the ZSE has been largely attributed to the unavailability of information, limited awareness and lack of education (Reserve Bank of Zimbabwe, 2016).

2.1.7 Retail Investor and Stock Market Participation in Africa
There has been extensive growth of stock markets in Africa since 1990. Around 1989, there were only 5 exchange markets in Sub-Saharan Africa and 3 in North Africa. In addition, Africa had 22 stock exchanges with an average of 65 listed companies as of December 2011. Despite the proliferation of exchange markets, a large number of African stock markets are still small compared to stock markets in other emerging economies globally. African stock markets are mainly dominated by institutional and foreign investors who account for the bulk of total market capitalization (Reserve Bank of Zimbabwe, 2016). Therefore, most African stock markets still face limited retail investor participation among other constraints. This is in line with Ghenimi, Ali and Omri (2015), who argued that in spite of extensive efforts to enhance the growth of financial markets in Africa, stock markets are still small in terms of market capitalization and domestic individual participation. For instance, the Ghana Living Standard Survey Report of 2009 revealed that about 1% of Ghanaians hold stocks (Ghenimi, Ali and Omri, 2015). The participation rates of individuals in Ghana matches with that of the Zimbabwe adult population of about 1% as revealed by the Finscope Survey of 2014 (RBZ, 2016). This shows that there is need to intensify efforts to promote retail investor participation in capital markets.

2.1.8 Zimbabwe Capital Markets
This section presents the Zimbabwe capital market structure, the level of retail investor participation, stock market participation in Africa at a glance and stock market participation barriers.

2.1.8.1 Capital Market Structure in Zimbabwe
The capital market in Zimbabwe is subject to regulation by the Securities and Exchange Commission (SECZ) which is the apex regulator of the market. The main mandate of the Commission is to ensure that individual investors are protected as they trade in listed securities. The capital market is a financial market for raising long-term capital which is important for fueling the productive sectors of the economy. In addition, the capital market links investors with excess
funds and companies in search for long term capital. The capital market intermediary base is supported by Securities Dealers, Custodians, Transfer Secretaries, Securities Advisors, Investment (Asset) Managers, Securities Trustees and a Central Securities Depository (Reserve Bank of Zimbabwe, 2016) as depicted below;

**Table 2.1.8.1: Architecture of Licensed Capital Market Players as at December 2018**

<table>
<thead>
<tr>
<th>Licensed Players</th>
<th>Number of Players</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities dealers (individuals)</td>
<td>37</td>
</tr>
<tr>
<td>Securities Dealing Firms</td>
<td>13</td>
</tr>
<tr>
<td>Securities Trustee</td>
<td>2</td>
</tr>
<tr>
<td>Custodians</td>
<td>5</td>
</tr>
<tr>
<td>Transfer Secretaries</td>
<td>3</td>
</tr>
<tr>
<td>Investment Advisors</td>
<td>31</td>
</tr>
<tr>
<td>Investment Managers</td>
<td>16</td>
</tr>
<tr>
<td>CSD (Private)</td>
<td>1</td>
</tr>
<tr>
<td>Securities Exchange</td>
<td>2</td>
</tr>
</tbody>
</table>

**Source:** Securities and Exchange Commission of Zimbabwe

**2.2 Theoretical literature**

The study employs the use of theoretical literature to explain and understand the link between independent variables such as investor education, investor awareness and the dependent variable, stock market participation. Therefore, the researcher has discussed the Modern Portfolio theory and Efficient Market Hypothesis to ascertain the relevance and shortcomings of these theories in relation to the research under study.

**2.2.1 Modern Portfolio Theory**

The Modern Portfolio Theory is one of the most significant economic theories in finance. The theory was founded by Harry Markowitz in his paper "Portfolio Selection," published in 1952. Modern Portfolio Theory (MPT) is an investment theory on how to minimize risk and maximize return of a portfolio through diversification and proper capital allocation (Ardelean, 2009). In
addition, Modern portfolio theory (MPT) is a theory on how risk-averse investors can design portfolios to maximize expected return based on a given level of systematic risk, emphasizing that risk is an inherent part of greater reward (Chen, 2019). The Markowitz model has the following set of assumptions;

- Investors desire to maximize the expected return of their total wealth
- All investors have the similar expected single period investment horizon
- All investors are risk-averse
- Investors make their investment decisions based on expected return and risk
- Investors always desire to maximize returns on a given level of risk
- No transactional costs in buying and selling securities

Therefore, the main objective of the theory is to help investors choose a portfolio of assets that have a lower collective risk for a given expected return than any individual asset (Chen, 2019). This is possible since the prices of different assets do not move exactly the same. Investors should choose assets that are negatively correlated. Thus, an asset should not be selected based on its own merits, instead, based on how it performs and changes value relative to every other asset in the portfolio (Markowitz, 1959). Modern Portfolio Theory basically encourages individual investors to practice passive portfolio management styles so as to profit from the stock market. Therefore, individual investors may invest in stocks through stock brokers, unit trusts, pension funds and mutual funds. Guiso and Jappelli (2005), emphasize that asset distributors should focus more on providing stock market related information such as financial instruments, portfolios, operations of the stock market and players in the capital market. Therefore, individual investors should first be aware of the stock market in order to make decisions to participate in it.

The Modern Portfolio Theory like any other model also has its shortcomings. The assumption that investors are rational and risk averse have drawn criticism from academics. Furthermore, the assumption that there are no transactional costs in purchasing and selling securities is also heavily criticized in the real world setup. Technically, an investor pays brokerage, taxes and other transactional fees (Ardelean, 2009). The modern portfolio theory discourages investors who use fundamental and technical analysis when trading in the stock market. Volpe et al. (2002), argues that individual investors’ knowledge vary with people's age, experience, education, income and gender. In most cases, online investors have a high probability to be influenced by financial
misinformation and manipulation. Thus, they should be more knowledgeable about stocks than normal investors in order to succeed in the stock market. Maditinos et al. (2007), also suggest that professional investors depend more on fundamental and technical analysis whereas individual investors depend more on noise in the market, newspapers and other media when making their investment decisions.

2.2.2 The Efficient Markets Hypothesis
The Efficient market hypothesis is an important theory in modern finance and also provides a basis for explaining the modern portfolio theory. The theory was developed by Eugene Fama in 1965. The Efficient Market Hypothesis (EMH) is an investment theory which states that share prices reflect all available information about a security and consistent generation of above average returns is impossible (Kuepper, 2019). Additionally, the theory premise that in an efficient capital market, prices of securities adjust rapidly to the arrival of new information, and, therefore, current prices of securities fully reflect all available information (Reilly & Frank, 2004). The efficient market hypothesis has the following set of assumptions; in an efficient market there is a large number of profit-maximizing investors who analyze and value securities, each independently of the others. The second assumption is that new information about securities comes to the market in a random fashion, and the timing of one announcement is generally independent of others. The third assumption is that the buy and sell decisions of all those profit-maximizing investors trigger security prices to adjust rapidly to reflect the effect of new information (Reilly and Frank, 2004). Therefore, prices of securities adjust quickly since the many profit-maximizing investors are competing against one another to benefit from the new information.

The EMH rejects trading rules based either on technical or fundamental analysis to produce risk-adjusted excess returns, or alpha, consistently and propose that only inside information can result in excess risk-adjusted returns. However, proponents of the EMH argue that it should be impossible to beat the market based on active strategies and the only way an investor could possibly obtain higher returns is through use of passive portfolio management strategies through mutual funds and stock brokers among other securities dealers (Kuepper, 2019).
The EMH is related to the idea of a random walk where all subsequent security price changes reflect random departures from previous security prices (Reilly and Frank, 2004). Therefore, the notion behind the random walk theory is based on the assumption that if information flows smoothly without interruption and security prices adjust rapidly to the infusion of new information, then tomorrow’s security price change will reflect only tomorrow’s news and will be independent of the security price changes today. Therefore, the collective effect of information coming in a random, independent, unpredictable fashion and several competing investors adjusting stock prices rapidly to reflect this new information means that one would expect security price changes to be independent and random (Reilly & Frank, 2004). Therefore, since security prices fully reflect all known available information, this gives room for even uninformed investors to purchase a diversified portfolio at given security prices in order to obtain high returns (Malkiel, 2003). In the context of the EMH, there is absolutely no reason why investors should shy away from the stock market since no one has monopoly of information and security prices fully reflect all available information about a security.

The EMH despite holding a central position in modern finance, has widely been disputed and highly criticized. Proponents of the EMH have persistently argued that it is pointless to search for securities trading below their intrinsic values or to try to predict trends in the market through either fundamental or technical analysis (Kuepper, 2019). Critics of the efficient market hypothesis believe that the market is not always efficient and does experience inefficiencies and inadequacies that contradict the fundamental principle of the theory (Muchiri, 2015). For example, successful individual investors such as Warren Buffett have consistently beaten the market over long periods of time, which by definition is impossible according to the EMH (Kuepper, 2019). In addition, opponents of the Efficient Market Hypothesis also bring into consideration events such as the 1987 stock market crash, when the Dow Jones Industrial Average (DJIA) plummeted by over 20% in a single day, as evidence that stock prices can seriously deviate from their fair values (Investopedia). Critics of the EMH strongly believe that the stock market is not always efficient, therefore, investors should rely on information provided by asset distributors to determine how much the company’s stock is really worth. Despite the stock market being efficient, individuals should be aware of the market, financial instruments and its operations in order to make informed decisions to participate on the stock market. This is in line with Guiso and Jappelli (2005), who
found that information provision by asset suppliers is critical in fueling stock market participation by individuals.

2.2.3 Stock Market Participation Barriers
This section presents stock market participation barriers which hold many individual investors from investing in stocks. Stock market participation barriers provided by literature include, risk aversion, borrowing and lending rates, risk-return relationship, information barriers and limited disposable income.

2.2.3.1 Limited Disposable Income
Despite the growing importance of investing in stocks around the globe, it still remains a puzzle why so many individuals do not hold stocks (Campbell, 2006). Retail investor participation has been largely noted to vary across countries. Therefore, in some countries high retail investor participation has been recorded whereas, in some countries the participation has been deplorably low (Arts, 2018). Extensive research on stock market participation reveals that it is still a puzzle why so many individuals shy away from the stock market (Campbell, 2006). Some researchers argue that young people have no capacity to borrow funds and therefore, have less wealth to invest in stocks (Constantinides, Donaldson and Mehra, 2002).

2.2.3.2 Lending and Borrowing Rates
Davies, Kubler and Willen (2006), believes that the gap between borrowing and lending rates can provide some explanation for limited stock ownership, however, it is still not convincing why so many individuals do not hold stocks. High borrowing rates mean that individuals will not be able to access funds to invest in the stock market especially for the jobless and the poor. Therefore, high borrowing rates provide an explanation why many people hold no stocks.

2.2.3.3 Risk Aversion
Individual’s risk aversion provides a justification of why many people do not invest in stocks. Barsky, Juster, Kimball and Shapiro (1997), Donkers and Van Soest (1999) and Kapteyn and Teppa (2011) argue that different types of individuals portray differing levels of risk aversion which match with their background and financial status. Risk aversion also affects individual sentiments in stock markets. Therefore, investor sentiments may prompt prices to deviate from underlying fundamentals as reflected in the retail investor demand. Risk taking investors invest in
stock markets and are likely to stick to principles and basics of stock trading than investors who risk averse.

2.2.3.4 Risk-Return Relationship
Individual investors consider the risk-return relationship when making investment decisions. Generally, investors attempt to make the highest return for a given level of risk as supported by the modern portfolio theory. Therefore, investors are not willing to take risks and will try to measure and compare the risk-return relationship of the assets traded in financial markets before making a decision to buy or sell. In fact, investors generally anticipate higher returns for riskier assets and this indicates a positive correlation between risk-return relationship and stock market participation (Ghysels, Santa-Clara and Valkanov, 2004), (Leon, Nave and Rubio, 2005), and (Raputsoane, 2009). This is in line with Raputsoane (2009), who argued that risk-return relationships have important implications in explaining why most people do not invest in stocks given a positive, statistically significant risk-return relationship on the decision to participate in the stock market.

2.2.3.5 Information Barriers
Guiso and Jappelli (2005), put much emphasis on the problem of information asymmetry or lack of information among potential retail investors about the stock market, products and its processes as the basis for explaining the stockholding puzzle. Therefore, limited awareness provides significant implications for understanding why people shy away from the stock market. Globally, the uptake of stocks is still insignificant. Stock market participation is substantially low (Campbell, 2006). The knowledge and awareness of the menu of available financial assets, investment opportunities and familiarization with stock market operations are critical in promoting stock market participation (Guiso and Japelli, 2005).

2.3 Empirical Literature
The empirical literature section focuses on literature from previous studies which is related to the current study. The section will explore empirical literature which addresses the problem of limited stock market participation among potential retail investors. Determinants of stock market participation to be discussed include awareness, education, financial literacy, household income, age and gender.
2.3.1 Investor Education and Stock Market Participation

In this section empirical literature on the relationship between education and stock market participation is presented.

2.3.1.1 Liivamägi (2016), carried out a study on investor education and trading activity

The objective of the study was to analyze how educational characteristics of individual investors affect their participation on the stock market. The study used secondary data from the Tallinn Stock Exchange with data ranging from 2004 to 2012 and a data set with official educational background data for all retail investors. The study was conducted in Estonia. Logistic regression model was adopted which allowed for the control of gender, age, wealth, portfolio diversification and average stock holding period. A descriptive analysis of data was presented in the form of tables. The research study found that retail investors with top results in high school national exams or investors with an academic degree participate more frequently and actively than those with a lower level of education. In other words, the study found out that the level of education is highly correlated with the decision to participate on the stock market (Liivamägi, 2016).

2.3.1.2 Liivamägi, Vaarmets and Talpsepp (2014), carried out a study entitled Masters of the stock market

The purpose of the study was to analyze how intellectual abilities and education individual investor’s risk-adjusted returns in the stock market. The study used secondary data from Tallinn Stock Exchange in Estonia containing detailed transactions, Estonian individual investor performance on the national stock exchange and their past educational data from the national registry. The data from the national registry included information about individual’s educational level, including university degrees and types of education. For data analysis, the study adopted binary and ordinal setup for the use of different probability models. Controlling for trading style, wealth, experience and various educational characteristics, the study found that the type and level of education has an impact on one’s investment decisions and holdings of stock. Therefore, higher education and intellectual abilities increase the potential that retail investors participate on the stock market (Liivamägi, Vaarmets and Talpsepp, 2014).

2.3.2 Awareness and Stock Market Participation

In this section empirical literature on the link between awareness and stock market participation is presented.
2.3.2.1 Guiso and Jappelli (2005), carried out a study on awareness and stock market participation

The purpose of the study was to analyze the effect of awareness on stock market participation and why individuals shy away from the stock market. The study was based on a survey conducted by the bank of Italy in 1995 and 1998 on household income and wealth. Guiso and Jappelli (2005) in their study established the drivers of awareness and found that the probability that the survey respondents are aware of stocks, investment accounts and mutual funds is significantly related to demographics such as education and household wealth. There is a high degree of correlation between education and household financial wealth, wealth and income vary in predictable ways with age. Education and wealth tend to correlate with social learning since highly educated individuals have a high chance to learn from others. Therefore, to account for such degrees of correlations the study adopted probit regressions. Limited financial awareness provides a significant basis for understanding the stockholding puzzle (Guiso and Jappelli, 2005). Therefore, the degree to which individual investors are aware of available financial assets depends on the incentives of asset suppliers to disseminate information about the instruments they issue. The study found that a large proportion of consumers are not aware of the existence of available financial instruments such as stocks and mutual funds, thus, awareness is highly significant in influencing individual investors to participate on the stock market (Guiso and Jappelli, 2005).

2.3.2.2 Ghenimi, Ali and Omri (2015), conducted a study on limited stock market participation in Ghana.

The purpose of the study was to find out why the level of retail investor participation in the stock market is low in Ghana. The study also focused on finding the behavioural factors that influence an individual’s decision to participate in the stock market in Ghana and to explore the drivers of stock market participation in the country. The research study used a survey approach which made use of semi-structured questionnaires to collect data from respondents. In addition, the study used primary data from Accra Metropolitan Area. Data was gathered from 162 respondents who were a representative sample for the study. To analyze results for the study, the researchers adopted a logistic regression model which was used by several studies in related studies. The results of the study were that education and awareness are positively and significantly correlated to stock market participation in Ghana. Therefore, the study recommended the Ghana Stock Exchange to promote awareness of the stock market through massive public education programs (Ghenimi, Ali and Omri, 2015).
2.3.2.3 Gumbo and Sandada (2018), carried out a study on the determinants of stock market participation: Evidence from individual investors in Zimbabwe

The study sought to explore why there is low stock market participation among individual investors in Zimbabwe. Therefore, in order to achieve the research problem the study sought to understand the impact of awareness among other explanatory variables on individual investor participation in the stock market. The study also used data from stock broking managers, asset managers, investment managers, regulators and investment analysts. In addition, the study used 120 questionnaires and analyzed results from a representative sample of 108 households. The results were analyzed using regression models. The results revealed that awareness, and other explanatory variables such as transaction costs, access to internet, cognitive skills and perceptions are significant determinants of stock market participation by individual investors. The study also recommended that managers and policy makers should consider bolstering individual participation in the stock market (Gumbo and Sandada, 2018).

2.3.3 Financial literacy and Stock Market Participation

The section presents empirical literature on the relationship between financial literacy and stock market participation.

2.3.3.1 Rooij, Lusardi and Alessie (2007), conducted a study on financial literacy and stock market participation

The objectives of the study were to understand the variable financial literacy in relation to financial decision-making. In order to understand the relationship between financial literacy and financial decision making, the study designed two special modules for DNB household survey with questions to measure numeracy, basic economic principles and advanced financial knowledge of financial instruments such as stocks, bonds and mutual funds. Moreover, the study sought to examine the significance of financial literacy in relation to stock market participation. To assess the direction of causality, the study designed questions to measure financial literacy before individual investors participate in the stock market. The study used data from the 2005 DNB Household Survey and the data set is a representative of the Dutch Population containing about 2000 households. The study findings showed that lack of understanding of economic principles and finance is a significant deterrent to stock ownership. Thus, the study provide empirical evidence of a positive and significant effect of financial literacy on stock market participation (van Rooij et al., 2007).
2.3.4 Household Income and Stock Market Participation

Guiso and Jappelli (2005), in their study on awareness and stock market participation, also documents a positive and significant relation between participation on the stock market and household income in several developed countries. Transaction costs may provide some explanation why many people do not hold stocks. Transaction costs can be in the form of fixed costs, variable transaction costs and per period trading costs. Guiso and Jappelli (2005), point to information costs and barriers as an explanation for why many people shy away from the stock market. Individual participation on the stock market is mostly like to be affected by participation costs. Therefore, individuals with less wealth or whose wealth is below a certain threshold do not enter the stock market except only for the affluent (Guiso and Jappelli, 2004).

2.3.5 Age and Stock Market Participation

Attanasio, Banks, and Tanner (2002), carried out a study on the implications of limited participation in stock markets and the asset market. Their findings indicate that the probability of investing in financial assets, is related with factors such as age and level of education. Age is also another determinant of stock market participation. Age is a critical component in explaining how individuals adjust their risk profiles to the stock market. People who are in their old age tend to adjust their attitude towards holding stocks and tend to reduce their participation in the stock market. Young investors have a different investment horizon than aged investors which plays a crucial role in the formulation of an investment strategy (Ameriks & Zeldes, 2004). Risk aversion is also associated to age. The older a person gets, the more risk averse they become (Sung & Hanna, 1996). For instance, there exists a huge difference between a salaried person who is in his early years of work and somebody who is retired. The salaried person can take more risk than the retired person (Yao, Wang, & Sharpe, 2011). When getting older and coming closer to retirement time, the intention to take a lot of risk decreases significantly. This is so because there is simply no time left anymore to recover from losses, if any. In contrast, a younger person who still has a lot of time left to make up for losses and act accordingly can take more risk. Therefore, these conclusions are backed up by the ‘life-cycle risk aversion hypothesis’ which proves that how older a population gets, the higher the average risk aversion will be (Bakshi & Chen, 1994).
2.3.6 Gender and Stock Market Participation

Almenberg and Dreber (2012), conducted a study on Gender, Stock Market Participation and Financial Literacy with the objective to investigate the relationship the gender gap in stock market participation and financial literacy. The study used data from a survey carried out on a random sample of 1300 individuals that is a representative of the Swedish population. The study also adopted probit regression model with robust standard errors to analyze how basic financial literacy affects the observed gender gap in stock market participation. The results revealed that women are less likely to participate in the stock market. The results further showed that women who are also highly educated, have lower incomes, score lower on basic financial literacy and advanced financial literacy and are risk averse than men. Therefore, the study recommends policy makers to strengthen policy reforms and financial development since individuals are increasingly being empowered to take charge of making key economic decisions (Almenberg and Dreber, 2012).

2.4 Significance of participation in Stock Markets

This section focuses on the importance of capital markets. The discussion has been divided into three dimensions, deepening capital markets, capital markets and economic growth, and benefits of investing in capital markets.

2.4.1 Stock Markets Deepening and Liquidity

World Federation of Exchange (2017), carried out a study on why exchanges seek to enhance retail participation in emerging markets. The research sought to understand the effect of retail investor participation on stock markets and the determinants that may impact the levels of retail participation. The research used data gathered from 14 participating exchanges from Africa and outside Africa. The study concurs with previous literature that retail investors have a significant effect in stock markets. Globally, stock exchanges enormously seek to encourage the presence and direct participation of retail investors in capital markets. Retail investors are known for contributing positively to both market liquidity and resilience. Academic research finds that individual investors, who trade more frequently and generally employ contrarian trading strategies, supply levels of liquidity that institutional buy-and-hold investors might fail to provide. Although there is evidence that retail participation contribute to greater market volatility, the presence of retail investors in stock markets may significantly enhance the legitimacy and perceived relevance of the market (Exchange, 2017).
2.4.2 Stock Market and Economic Growth
The stock market is considered highly significant in the economic growth of a country. The stock market serves as a bedrock for capital market activities and is often taken as a barometer of business direction. Therefore, an active and efficient stock market can be used as an indicator to track changes in the general economic activities using the stock market index. Petros (2007), assets that the stock market contributes immensely to economic growth through mobilization of savings, liquidity creation, risk diversification and appropriate allocation of funds to productive sectors of the economy such as mining, agriculture and industry. In addition, the stock market allows corporates and the government to raise long-term capital which may be used for construction of new factories, new machinery and for infrastructural development (Petros, 2007).

2.4.3 Benefits of investing on the Stock Market
This section presents benefits that accrue to retail investors from investing in the stock market. Benefits include, dividend income, capital gains, voting rights, and liquidity among other benefits.

2.4.3.1 Dividend Income
Investment in stock generates periodic cash flows or income return. Income return from stock is known as dividend income. A dividend is a payment made out of profits to shareholders in the form of cash or stock. Shareholders may receive cash flows or dividends if a company’s board of directors announce that the company has performed well and has made sufficient profits to distribute to its shareholders. Stocks that pay dividends typically distribute them every quarter of the year. Therefore, investors with the objective to generate periodic income from their investments in stock are particularly interested on the income return. A number of investors use dividend-paying stocks as a way of a long-term wealth building strategy. In addition, some investors employ dividend investing style to pick high dividend paying stocks (Frank and Reilly, 2004).

2.4.3.2 Capital gains
Price change is the rise or fall in price of the asset in relation to the purchase price or the market price in the previous time period. Capital gain is an appreciation in the price of the asset while a price decline is called a capital loss. The prices of assets such as stocks, bonds, and real estate fluctuate over time in response to a myriad of factors such as economic news, industry conditions,
company’s performance, political conditions, as well as speculation. Therefore, the volatility in the price of stocks over time brings risk to the investor. Investors whose primary objective for investment is capital appreciation focus on the price change component of return (Frank and Reilly, 2004).

2.5 Ways to Promote Stock Market Participation
This section explains various ways exchanges around the globe adopt in a bid to promote retail investor participation in stock markets. Exchanges rely on financial planners, brokers, newspapers, company reports and disclosures, internet and financial literacy programs in spreading investment information and opportunities to potential retail investors.

2.5.1 Financial Planners
Capital market players such as securities dealers or brokers employ highly qualified financial planners who provide expert financial education to retail investors. Financial planners play a significant role by helping individuals make appropriate, informed financial decisions and enhancing their financial situations. Financial planners or advisors help individual investors understand their investment needs and objectives and work towards achieving the investor’s desired financial status (Tony, 2013).

2.5.2 Brokers
The main objective of full-service brokers is to provide knowledge on stocks and give advice to retail investors about which stocks to purchase and sell. Full-service brokers take into account investor’s risk profile and investment goals. In addition, they discuss with their clients about their risk tolerance levels and offer investment advice and discuss about strategies to meet investor’s investment goals. Full-service brokers are found in brokerage firms (Mapakame, 2019).

2.5.3 Newspapers
Financial institutions disseminate valuable information on current financial news in the press. The information may include, business growth prospects, downfalls, business performance and new business developments. Companies make use of the press to also educate investors on new products and services. Current business scandals and frauds are exposed. Financial statements, price of securities and their performance are also published in press (Ryan, 2011). Policy makers in Zimbabwe can make use of the press to spread investment information.
2.5.4 Company Reports and Disclosures
All public limited companies are required by law to disclose their yearly annual reports. Annual reports are reports that help shareholders understand the financial position of the company. Annual reports provide information on profits or losses, company stock, dividends, company’s future plans and the company’s financial position. Investors may use information contained in financial reports to compare performances of companies in related lines of business. Therefore, investors may employ technical analysis skills to learn a great deal about the company from reports which may be accessible in company website pages (Ryan, 2011).

2.5.5 Internet
In the contemporary world, financial institutions make use of the internet to educate investors on all financial products and developments. Web blogs such as Bloomberg, CNNMoney.com, Kiplinger, Morningstar and Reuters provide comprehensive information on stockholding which is useful to beginners (Ryan, 2011). The ZSE also provide information on its website which is useful to beginners.

2.5.6 Online Financial Resources
Many financial institutions offer free courses online. Financial education provided include, comprehensive information on budgeting, saving and borrowing, and investing (Wong, 2014). SecZim maintains an updated, user-friendly and comprehensive website for investor education. My ZimHustle is an online, comprehensive investor education platform designed to enhance the financial literacy of individual investors. The platform teaches finance basics such as saving, financial planning, budgeting and investing. Therefore, policy makers in Zimbabwe has to make sure that people are aware of such a platform.

2.5.7 Online Mobile Platforms
In 2018, SECZIM approved the introduction of C-trade an online mobile trading platform in a move aimed at promoting financial inclusion among potential retail investors. The C-Trade platform is an added service designed to supplement the ongoing efforts to develop and deepen the Zimbabwe capital markets (Mapakame, 2019). C-Trade is compatible with any type of mobile device. With C-Trade summary trading information is displayed on a real-time basis where investors can view various key market indicators such as the prevailing bid and offer prices, value and volume traded. C-Trade is critical for transparency purposes, which means that investors can
also keep track of their portfolio transactions. The fact that C-Trade is available 24 / 7 allows investors more time to assess and review their investment activity for the day even though trading only takes place during normal trading hours (Mapakame, 2019). Furthermore, most people in Zimbabwe are not aware of this mobile platform and do understand how it works.

2.5.8 Financial literacy programs
The ZSE and SECZIM hold investor education programs in tertiary institutions and exhibitions in order to educate potential investors on investment opportunities, capital market products and processes. The overarching objective of the programs is to build investment capacity of investors through education and awareness to enable investors to make informed investment decisions and become encouraged to participate on the stock market. The ZSE in its investor education programs cover topics such as rights of investors, different instruments traded, difference between investing and trading, the concept of portfolio building, process of trading for example, how trades are cleared and settled, dematerialization for investors, safety of transactions on the exchange and forms of redressal for the investors (Reserve Bank of Zimbabwe, 2016).

2.6 Gap Analysis
To the knowledge of the researcher, there have been few research conducted on awareness and stock market participation in Zimbabwe. Therefore, it is against such a background that the researcher has sought to undertake this study. The study reviews the existing related academic literature from similar previous studies and also contributes to the literature of the importance of awareness in promoting stock market participation.

2.7 Summary
The chapter covered conceptual, theoretical and literature review related to the study. It also covered on the factors that influence retail investor participation as well as investor education and awareness programs that have been conducted by market stakeholders to enhance stock market participation among retail investors. The following chapter focuses on the research design which the researcher adopted to carry out the study.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction
In this chapter, the researcher explains how the research study was conducted. The chapter covers such concerns of the research study as the research design, sources of data, research instruments, data collection procedures, data presentation and analysis procedure and the chapter summary.

3.1 Research Design
The researcher adopted descriptive research design in this study to achieve the research objectives, problem statement, and research questions and also to collect both qualitative and quantitative data. Creswell (2014), asserts that descriptive research design is used when data is collected to describe persons, organizations, settings or phenomena. The research study used descriptive research design to establish whether a change in the independent variables, awareness and education will induce an increase in the dependent variable, stock market participation. Descriptive research design has adequate provision for protection of bias and for ensuring maximum reliability. In addition, descriptive research design seek to provide precise and relevant representation of variables that relate to the study.

3.2 Subjects
Research subjects are research participants who contributed immensely to the success of the study. The research participants’ analysis start from the target population, sample population and ultimately to the sample size.

3.2.1 Target Population
Target population refers to any group of people who have one or more characteristics in common that is of interest to the researcher (Wegner, 1999). The target population comprised of stock brokers, asset managers, transfer secretaries and potential retail investors. The researcher was able to access a list of brokers from ZSE website, asset managers and transfer secretaries from Chengetedzai Depository Company. Stock brokers contacted include, EFE Securities, FBC Securities. Asset Managers contacted include, Imara Asset Managers, Platinum Asset Managers
while transfer secretaries include ZB Transfer secretaries. Potential retail investors included clients of financial institutions such as ZB bank, CBZ bank and Barclays Bank who reside in Harare. The researcher got assistance from the bank to contact the retail clients. The target population consisted of individuals with varying characteristics and perceptions about the stock market which is why it is ideal for this research study.

### 3.2.2 Sample Population

The sample population was based on the selection of a representative sample from the target population for the intention of drawing inferences about the entire data set. The procedure was aimed at obtaining adequate, appropriate and reliable evidence to draw up a concrete conclusion.

### 3.2.3 Sample Size

A sample is a part of the population that is taken into consideration under a statistical enquiry (Saunders, 2003). Stratified sampling and simple random sampling was used to select respondents. The population comprised of 87 participants split into four categories which are stock brokers, asset managers, transfer secretaries and potential retail investors. Potential retail investors amounted to 58 of the total population size of 87. It was costly to collect data from the entire population as such a representative sample was chosen and was assumed to be a fair representation of the entire elements of the population. With a representative sample data can be collected rapidly and in a timely manner.

The study used the following formula to determine the sample size:

- **Calculation of a sample size for a population less than 10 000**

  \[
  n^* = n \times \frac{1}{1 + (n/N)}
  \]

  Where;
  
  * \( n^* \) = the necessary sample size
  * \( n \) = a desired sample size when the population is less than 10 000
  * \( N \) = an estimated population size
  * \( n/N \) = sampling fraction

  Source: Mutambirwa (2002)

### 3.2.3 Table: Research sample
### Organization Type Population Number of respondents

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Population</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock brokers</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Asset Managers</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Transfer Secretaries</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Potential Retail Investors</td>
<td>58</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>61</td>
</tr>
</tbody>
</table>

**Source: Primary Data**

### 3.2.4 Sampling Method

The research used stratified sampling to gather data from respondents. Stratified sampling technique involves segmenting heterogeneous populations, that is, individuals with different characteristics into homogenous strata of people with similar or identical characteristics and attributes. After the stratified sampling was carried out the population was then divided into stock brokers, asset management, transfer secretaries and potential retail investors. Random sampling was then used to come up with the desired sample.

### 3.2.5 Justification of Sampling

- It was impossible and impractical to gather data from the entire population
- Sampling helped to minimize costs involved in data collection
- Gathering data from a sample was not difficult than if it were collected from the entire population

### 3.2.6 Drawbacks of Sampling

- There may be bias in the chosen sample, especially if it does not truly and objectively represent the entire population
- Sampling error may occur
3.2.7 Addressing Weaknesses

The researcher had to increase the total sample size from 70 to 87 in order to deal with sampling error and also by collecting data from about four strata groups of respondents. The study used the sample size formula in section 3.2.3 to determine the ideal sample size.

3.3 Econometric Specification

The econometric model used in this study is similar to the equation and econometric specification adopted from Ghenimi, Ali and Omri (2015). Many socio-economic variables which describe individuals and households are correlated with each other. For instance, education is positively correlated with income, awareness is correlated with education, financial literacy, and income, therefore, to account for this correlation and to eliminate the effect of each explanatory variable while controlling for others, the study adopted logistic regression model. Stock market participation by retail investors is mostly estimated with binary response models such as logit and probit (Ghenimi, Ali and Omri, 2015). The study uses logit regression analysis to estimate household participation in stock markets. Logit or logistic regression model allows for the control of a wide range of potential determinants of stock market participation, including dummies for different participant individual and additional demographics, such as age and gender (Ghenimi, Ali and Omri, 2015). When making a decision whether or not to participate on the stock market, individuals investors compare the utility gain from being a stockholder to the market entry costs. Therefore, the stockholder’s utility function can be modelled with the following function;

\[ I^* = X_i \beta + \mu \]

Where;

\( i \) is the retail investor, \( X_i \) is the variable affecting the utility gain from stock ownership. Therefore, \( X_i \) is the observable individual characteristics that potentially affect stock market participation decisions. Unobservable observations affect the utility gain through the error term, a standard normally distributed term. Individual \( i \) invests in stocks if \( I^*_i \geq 0 \). If the unobserved variables \( \mu_i \) are distributed normally, the logit model can be adopted in estimating \( \beta \) with the method of maximum likelihood. Therefore the logit model becomes;

\[ SMP_i = \beta_0 + \beta_1 AWAR_i + \beta_2 EDU_i + \beta_3 FINLIT_i + \beta_4 INCOM_i + \beta_5 AGE_i + \beta_6 GENDER_i + \mu_i \]
The econometric specification for this study is identical to that of Ghenimi, Ali and Omri, (2015), in their study on limited stock market participation in Ghana.

3.3.1 Justification of variables

This section provides justification and explanation of variables for the study. Stock market participation is the binary dependent variable whilst awareness, education, financial literacy, income, age and gender are independent variables.

3.3.1.1 Stock market participation (SMP)

Stock market participation is the percentage of retail investors who hold stocks. Stock market participation is the dependent variable and measures an individual’s decision to participate in the stock market. The study is in line with Fan and Xiao (2006), who do not focus on quantitative differences of holdings of stock but only on the decision to participate on the stock market. Stock market participation was taken as the binary dependent or dummy variable and was coded 1 if the retail investor has directly or indirectly invested in stocks, interested to invest in stocks and 0 otherwise.

3.3.1.2 Awareness (AWAR)

Stock market awareness is a major determinant of stock market participation. Respondents can only participate in exchange markets they are aware of. Awareness is a dummy explanatory variable which focuses on whether a retail investor is aware of the stock market or not. Awareness is coded 1 if the retail investor is aware and 0 otherwise. Retail investors who are aware of the stock market have a high probability of investing in stocks whereas those who are not shy away from the stock market.

3.3.1.3 Level of education (EDU)

Education is divided into four educational categories which are Secondary, University, Professional and No formal education. The level of education is categorized as a dummy variable coded 1 if a respondent has at least a university degree and 0 if a respondent indicated educational credentials below a university degree including those with no formal education. Therefore, retail investors who are highly educated tend to participate on the stock market compared to those with little and no formal education.
3.3.1.4 Financial Literacy (FINLIT)
Financial literacy was treated as a dummy variable. In this study a question was designed to measure financial literacy and examine its relationship with financial decision making. Respondents were asked whether they were knowledgeable about interest rates, time value of money and other basic calculations. Financial literacy was coded 1 if the respondent was financially literate and 0 otherwise.

3.3.1.5 Income (INCOM)
Income is an ordinal qualitative variable referring to net monthly income categories expressed in dollar terms. Retail investors with less income or wealth shy away from the stock market than those with high income.

3.3.1.6 Age (AGE)
Age is a continuous variable referring to age of the retail investors. Retail investors who are young and old do not largely invest in stocks, hence, they do not participate on the stock market. Retail investors who are in between the young and aged populations tend to participate more on the stock market.

3.3.1.7 Gender (GENDER)
Gender is a dummy variable which focuses on whether a client is a male or female. Gender is coded 1 for male and 0 for female. Men participate more on the stock market than women.

3.4 Sources of Data
The research used both primary and secondary data with the objective of answering the research questions in order to accomplish the research objectives. Self-administered questionnaires were used to collect data from stock market participants. The researcher designed two types of questionnaires to collect relevant information from different respondents. One questionnaire was for brokers, asset managers and investment advisors while the other was for potential retail investors.

3.4.1 Secondary Data
Saunders et al (2012), defined secondary data as data that has already been collected for some other purpose. Secondary data sources include, text books, CSD reports, monetary policy statements, journals, newspapers, internet, stock broker publications, ZSE reports, SECZIM reports and data from transfer secretaries. The researcher collected registers of shareholders from
Transfer Secretaries and CSD to support primary data and provided reliable and accurate information which is critical for the study.

3.4.2 Justification of Secondary Data

It provides a strong linkage with primary data and therefore, supports data gathered by way of primary survey.

3.4.3 Advantages of Secondary Data

- Secondary data is inexpensive. Therefore, the researcher was able to collect valuable information at a low or no cost. This makes the research cheap than if it were to be conducted by the researcher.
- Secondary data offers convenience. It was not difficult to access data from various online platforms.
- The use of secondary data helps to provide clarity on research questions.
- Secondary data shows the difficulties involved in collecting primary data. Secondary data originators show how information was originally gathered. This includes the procedures used to gather data and difficulties encountered.

3.4.4 Disadvantages of Secondary Data

- Sometimes, the researcher may find useful information and may be restricted to access the entire reports. This is because researchers provide a small portion of their work free of charge and charge highly for access of the entire report.
- Secondary data is not always reliable. Therefore, there is great need to intensively check the validity and reliability of information since it is questionable.
- Owing to fast changing and dynamic economic environment, some of the information become out-dated and unfit for modern research work.

3.4.5 Addressing Weaknesses of Secondary Data

- Secondary sources of data used in this research study were thoroughly checked.
- Data was gathered from ZSE and Chengetedzai Depository websites
3.4.6 Primary Data
Primary data refers to previously unknown data which has been gathered directly by the researcher particularly for the research being carried out (Kotler, 1988). The researcher collected primary data using questionnaires during the time period of study. Primary data has the following advantages such as that it is reliable, specific and relevant. However, primary data has its own drawbacks. The method is costly and time-consuming however, this drawback does not entirely disqualify the relevance of primary data.

3.5 Research Instruments
According to Creswell (2003), data collection is defined as a means by which data is gathered from the selected subjects under investigation. Questionnaires were used to collect relevant data for the research. A pilot study was done before the questionnaires were distributed to the targeted population. Questionnaires were distributed to a few selected colleagues to help in analysing the questions and coming up with an ideal questionnaire.

3.5.1 Questionnaire
A questionnaire is a document that is used by the researcher to collect information from the sample or population (Gall and Bard, 1996). The respondents express their opinions, attitudes and knowledge of the questions at hand. The questionnaires were both emailed and hand delivered to different respondents who were stock brokers, asset managers, transfer secretaries and potential retail investors. The questionnaires comprised of pre-developed closed-ended and open ended questions. Closed ended questions were structured in such a way that they provide an option for respondents like Yes, No, Agree, Disagree or Not Sure. Open ended questions allowed respondents to freely express themselves and show their opinions and justify themselves.

3.5.2 Justification of Questionnaire
Questionnaires offer a practical method of collecting relevant data for the research study and varied views from different respondents without manipulating their opinions and attitudes. The use of a questionnaire is justified geographical location of respondents. The use of the structured questionnaire was also meant to enhance objectivity and support statistical analysis.
3.5.3 Advantages of Questionnaire

- It is a standardized way of collecting data therefore, results in uniformity given the fact that all respondents were asked the same set of questions.
- Questionnaires can reach a large number of people located in distant areas when administered by way of an email.
- Data interpretation was not difficult since the questionnaires were standardised and thus, enhancing the reliability of the method.
- It reduces respondent’s bias since they have ample time to consider their responses.
- Questionnaires promote accurate answers that could not be disclosed in face to face situations.
- The choice of questionnaire was hinged on its low cost and adequacy of time for respondents to give timely responses.

3.5.4 Disadvantages of Questionnaire

- It was complicated to know if the respondents fully understood the questions due to the inability to probe respondents for more detailed information.
- Some questions were left unanswered.
- Some answers were grossly wrong.
- Some respondents were helped by their peers to fill in the questionnaires.

3.5.5 Addressing Weaknesses of Questionnaires

- The questionnaires were designed in a simple and easy-to-understand way in order to ensure quality responses which meet the expectations and objectives of the research.
- A pilot study was carried out to people who understood the subject matter and objectives of the study. The pilot study was meant to assist the researcher with actual wording of questions, procedural matters, ordering of questions and reducing non-response rates.
- The researcher redistributed questionnaires to a different group of people upon learning that other respondents were helped by their peers to complete them.

3.5.6 Validity

According to Body et al (2003), validity refers to the degree to which an instrument measures what it is supposed to be measuring. In this research study, to ensure validity the questionnaire was pre-
tested before data collection. Pre-testing of an instrument is carried out to determine its feasibility and validity. The questionnaires were submitted to the project mentor from the department of Banking and Finance and to peers for pre-testing or pilot testing. The project mentor assessed the questionnaire for content, concurrent and construct validity. The project mentor tested the questions on questionnaires to see whether they were really measuring the effectiveness of investor education and awareness programs in enhancing stock market participation among retail investors. The scores on the questionnaire were also assessed whether they were able to generate results that will correlate with other results from similar previous studies. Finally, the items on the questionnaire were assessed whether they were ideal to draw perceptions from respondents about their knowledge of the capital market, its products and processes.

3.5.7 Reliability
Reliability means the probability of getting the same results when the researcher measures the same variable more than once, or when more than one person measures the same variable (Saunders, 2012). After completion of data collection, the questionnaire was submitted again to the project mentor for reliability testing. The project mentor and other peers assessed whether there was consistency in test administration and scoring for example, errors caused by carelessness in administration and or scoring.

3.6 Data Collection Procedures
Primary and secondary instruments were used to collect data from respondents.

3.6.1 Secondary Data
Secondary data was gathered directly from the secondary sources. The researcher requested reports from transfer secretaries, Chengetedzai Securities Depository and some reports were accessed on official websites of market players such as the Securities Commission of Zimbabwe and the Zimbabwe Stock Exchange.

3.6.2 Primary Data
Primary data was collected through use of questionnaires. Questionnaires were prepared and some copies were sent directly to the targeted respondents through email while some were delivered by hand. The researcher also made use of telephone to make appointments with respondents. The choice of telephone was against the backdrop that telephone is fast and effective when reaching respondents for appointments especially when data is required urgently. Following appointments
by telephone, the researcher undertook the activity of distributing and administering the questionnaires to respondents by hand at the agreed, convenient time and venue. The respondents would complete the questionnaires on the day of distribution. The questionnaires would take 25 minutes to fill, this allowed respondents to complete the questionnaire template on the day of distribution. The researcher was available to answer questions and clarify problems raised by respondents. Therefore, this largely helped the researcher in the timely collection of data and bias reduction. The researcher collected the questionnaires after respondents had finished with them. The researcher also prepared a checklist to make sure that all questionnaires were delivered.

3.7 Data Presentation and Analysis Procedures
The study used STATA 13 Software package to analyze collected data and to generate results for the study. The researcher adopted binary logistic regression model to explain the effect of awareness, education, income, financial literacy, age and gender on stock market participation in Zimbabwe. Results from logistic regression such as descriptive statistics and regression output were presented in tables, analyzed and discussed in chapter four.

3.8 Chapter Summary
The chapter covers how the researcher carried out the study. Descriptive research design was adopted as the ideal plan to achieve research objectives and for collection of both qualitative and quantitative data. The study used both primary and secondary data. The study also adopted the use of questionnaires as the suitable research instrument for gathering quantitative data from respondents. In this research study, questionnaires contained questions measuring awareness, level of education and financial literacy of respondents before investing in the stock market. To enhance validity and reliability of data the questionnaire was submitted for pre-testing to the project mentor and peers. After data collection and verification, data was analyzed using logit regression analysis and descriptive statistics and regression output were discussed in chapter four. The subsequent chapter focuses on data presentation, analysis and discussion.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction
The chapter focuses on the discussion and interpretation of the study findings. Data for the study was primarily collected from primary sources of data by distributing questionnaires to capital market players and potential retail investors. The total number of questionnaires collected from respondents were 61. Results from the study were analysed using binary logit regression model. The study used STATA statistical software package to regress the collected data and produce results which answered all research questions.

4.1 Response Rate
The table below shows response rates from four categories of respondents.

<table>
<thead>
<tr>
<th>Investor Type</th>
<th>Number of questionnaires sent</th>
<th>Number of Respondents</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Brokers</td>
<td>16</td>
<td>10</td>
<td>62.5%</td>
</tr>
<tr>
<td>Asset Managers</td>
<td>10</td>
<td>7</td>
<td>0.70%</td>
</tr>
<tr>
<td>Transfer Secretaries</td>
<td>3</td>
<td>1</td>
<td>0.33%</td>
</tr>
<tr>
<td>Potential Retail Investors</td>
<td>58</td>
<td>43</td>
<td>0.74%</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>61</td>
<td>70.11%</td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 4.1 shows response rates for respondents of the study. Stock brokers have a response rate of 62.5%, Asset managers account for 0.70%, Transfer Secretaries 0.33%, and potential retail
investors have a high response rate of 0.74%. Overall, of the 87 questionnaires, 61 were returned, yielding a response rate of 70.11% and this entails that the response rate is adequate to guarantee accurate and reliable results as supported by Payne (1983), who asserts that a survey involving 5-10% of the population is fairly representative of the entire population especially the population from which the sampling is being done is less than 10,000.

4.2 Secondary Data
The study used both primary and secondary data as stipulated in chapter three. Secondary data for this study constituted of reports from which the researcher took statistics for retail investor participation in Zimbabwe’s capital markets. Statistical information from reports was used to support arguments in chapter one and two.

4.3 Descriptive Statistics

The table below shows descriptive statistics that were produced when the primary data was run using STATA Statistical package. Therefore, the mean, minimum, maximum and standard deviations are presented in the table below;

<table>
<thead>
<tr>
<th>Table 4.3: Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>SMP</td>
</tr>
<tr>
<td>AWAR</td>
</tr>
<tr>
<td>EDU</td>
</tr>
<tr>
<td>AGE</td>
</tr>
<tr>
<td>GENDER</td>
</tr>
<tr>
<td>INCOM</td>
</tr>
<tr>
<td>FINLIT</td>
</tr>
</tbody>
</table>

Table 4.3 shows the number of observations, mean, standard deviation, minimum and maximum values for both the response and explanatory variables of the study. Mean indicates the average value of a data set whilst standard deviation is the average distance of each point to the average of the data set. The standard deviation provides insights into how much variation there is within a group of values.

4.3.1 Interpretation of Descriptive Statistics

This section presents interpretation of descriptive statistics from Table 4.3.
4.3.1.1 Participation at the Zimbabwe Stock Exchange

As shown in Table 4.3, of 61 observations, SMP has, a minimum value of 0, maximum value of 1, a mean value of 0.230 and a standard deviation of 0.424, this entails that there is greater deviation in the responses given that the standard deviation is greater than the mean value. Therefore, this means that there are wider variations in the responses between individuals who participate and those who do not participate on the ZSE of which a large proportion do not wish to participate on the ZSE. This is in line with Ghenimi, Ali and Omri (2015), who found that most people in Ghana do not participate in the stock market. Gumbo and Sandada (2018), also found that there is low individual participation on the ZSE among the adult population in Zimbabwe.

4.3.1.2 Awareness of the stock market, its products and operations

Table 4.3 shows that of the 61 observations, AWAR has a minimum value of 0, maximum value of 1, a mean value of 0.198 and a standard deviation of 0.401 this implies that the deviations in the responses are large as shown by a greater standard deviation of 0.401 than the mean value of 0.198. Thus, this entails that there are large variations in the responses between individuals who are unaware and those who are aware of the stock market in Zimbabwe. Of the 61 observations, a large proportion of individuals is not aware of the ZSE, its products and operations. Guiso and Jappelli (2005), confirm these findings, they found that most individuals are not aware of the stock market, financial assets and its operations.

4.3.1.3 Level of education

As shown in Table 4.3, of the 61 observations, EDU has a minimum value of 0, maximum value of 1, a mean value of 0.246 and a standard deviation of 0.434, this implies that the deviation in the responses is large as shown by a mean value of 0.246 which is below a standard deviation of 0.434. Therefore, this means that the variation in the responses is large between those individuals with education below university and those with university education. Of the 61 observations, a large percentage of individuals has education below university. This shows that those with education below university are not willing to take risks, and they do not consider participating on the ZSE. Of which individuals with university education have a great aptitude for risk and are more willing to participate on the ZSE. These findings are confirmed by Liivamägi (2016), who found education to be an essential element in understanding risk taking behaviour. He also found that most people have education below university.
4.3.1.4 Age
Table 4.3 shows that of the 61 Observations, AGE has a minimum value of 20, maximum value of 49, mean value of 34.41 and a standard deviation 6.566, this entails that the deviations in the ages are small as shown by a mean value of 34.41 which is above the standard deviation of 6.566. Therefore, this means that there are no large variations in the ages of respondents. This means that the age differences among respondents are not very wide between those who participate and those who do not participate on the ZSE especially for those who fall in the 31-40 age range.

4.3.1.5 Gender
As shown in Table 4.3, of the 61 Observations, GENDER has a minimum value of 0, maximum value of 1, mean value of 0.607 and a standard deviation of 0.493, this entails that the variations in the response are small as indicated by a standard deviation of 0.493 which is lower than the mean value of 0.607. Thus, of the 61 observations this indicates that there are no large variations between men and women. This implies that there is no much variation in terms of gender, although men constitute a larger proportion of the total observations. Men tend to participate more in the stock market than women.

4.3.1.6 Income
As shown in Table 4.3, of the 61 observations, INCOM has a minimum value of $150, maximum value of $1500, mean value of 412.295 and a standard deviation of 306.547, this implies that the deviations in the income are small as indicated by a mean value of 412.295 greater than the standard deviation of 306.547. Of the 61 observations, this shows that the deviation in incomes of respondents is small. This implies that there are no wide variations in incomes of respondents and this entails that individuals can participate in the stock market with whatever level of income they have.

4.3.1.7 Measuring Financial Literacy
Table 4.3 shows that of the 61 observations, FINLIT has a minimum value of 0, maximum value of 1, mean value of 0.574 and a standard deviation 0.499, this entails that the deviations in the data are small as shown by a mean value of 0.574 which is below a standard deviation of 0.499. Of the 61 observations, this shows that the variations in the responses between those who are financially literate and financially illiterate are small, therefore, a large percentage of the respondents are financially literate. Therefore, most individuals can participate on the ZSE if they are aware. This
is supported by Rooij, Lusardi and Alessie (2007), who found that financial literacy is very significant in encouraging individuals to participate in the stock market.

4.4 Effect of Awareness on Stock Market Participation

The study adopted logistic regression model to ascertain the independent effect of awareness, financial literacy, income, education, age and gender on stock market participation. The study regressed primary data collected using questionnaires.

4.4.1 Logit Regression Model Results

The table below presents regression results for the variables used in the study.

|        | Coef.  | Std. Err. | Z     | p>|z| | [95% Conf. Interval] |
|--------|--------|-----------|-------|-----|----------------------|
| SMP    |        |           |       |     |                      |
| AWAR   | 6.665687 | 2.01756   | 3.30  | 0.001 | 2.711342 10.62003   |
| EDU    | 1.46205  | 1.322259  | 1.11  | 0.269 | -1.129531 4.053631  |
| AGE    | 0.20405  | 0.1231413 | 1.66  | 0.098 | -0.0373026 0.4454026|
| GENDER | -0.9462349 | 1.345136  | -0.70 | 0.482 | -3.582653 1.690183  |
| INCOM  | 0.0021652 | 0.0025015 | 0.87  | 0.387 | -0.0027377 0.0070681|
| FINLIT | 1.634548  | 1.493198  | 1.09  | 0.274 | -1.292066 4.561162  |
| Const. | -12.6368 | 5.574023  | -2.27 | 0.023 | -23.56168 -1.711914 |

Number of obs = 61
LR chi2 (6) = 46.68
Log Likelihood = -9.5202445

4.4.1.1 Interpretation of Regression Results

Table 4.4.1 presents logistic regression results for the predictors or drivers of stock market participation. The method of maximum likelihood was used to estimate the parameters from the logistic modelling in which the response variable was coded 1 to measure if the respondent participates on the stock market and 0 if the respondent does not participate on the stock market in a sample with 61 observations. Pseudo $R^2$ is 0.7103. Pseudo shows a percentage of correct predictions of 71.03%. Therefore, this entails that 71.03% of the variations in the response variable are explained by variations in explanatory variables. The table also shows LR chi2 (6) with a value of 46.68 and a prob > chi2 value of 0.0000 which indicates that the model is statistically significant.
About five of all the variables in the logit model have been very significant in explaining an individual’s decision to participate on the stock market. The estimated coefficients show which factors influence respondents to participate or not to participate in the stock market. A coefficient that is statistically significant suggests the probability of participating in the stock market, and will increase or decrease as the response of the predictor variable increases or decreases (Njanike, 2018). Logistic regression results show that awareness and age are statistically significant at 1% and 10% levels respectively. Other variables are positively related to stock market participation.

4.4.1.2 Awareness

According to the logistic regression results, awareness is significant in influencing an individual’s decision of whether to participate or not to participate in the stock market. Drawing from the above logistic regression results in Table 4.4.1, the estimated coefficient of an individual investor being aware of the stock market implies that the log of the odds in favor of the individual investor making a decision to participate on the stock market increases by 6.666 units. The coefficient of AWAR is highly correlated with the decision to participate on the stock market by retail investors. In addition, the study desired such a positive result between awareness and stock market participation. The positive relationship between awareness and stock market participation entails that awareness promotes the potential of a retail investor investing in stocks, thus, participating on the stock market. Globally, various studies have found awareness to be a significant predictor of stock market participation by individual investors. For instance, Guiso and Japelli (2003), found that there is a strong positive relationship between awareness and stock market participation. They came to a conclusion that retail investors will only participate in stock markets if they are aware of it, its operations and the extent of awareness of the stock market.

4.4.1.3 Financial Literacy

Financial literacy is also an important determinant of stock market participation. As shown in Table 4.4.1, the study found financial literacy (FINLIT) to be highly correlated with the individual investor’s decision to participate on the stock market. FINLIT coefficient implies that the log of odds in favour of the retail investor participating on the stock market goes up by 1.635 units. This is in agreement with Rooij, Lusardi and Alessie (2007), who found that there is a positive and significant effect of financial literacy on retail investor’s decision to participate in stock markets. Therefore, individuals who are financially literate have a higher probability to hold stocks or
participate in the stock market. Individuals who understand basic economic principles such as, saving, budgeting, interest rates, inflation and basic calculations are more likely to invest in stocks. 

4.4.1.4 Age

Age is really a significant predictor of stock market participation. As shown in Table 4.4.1, the logistic regression results indicate also that age is positively and significantly related to the decision of an individual investor to consider participating on the stock market. The coefficient of AGE suggests that the log of odds of a retail investor investing in stocks as age increases, goes up by 0.204 units. This is in line with Attanasio, Banks, and Tanner (2002), who found that age is important in determining an individual’s probability of participating in the stock market. As an individual age increases they tend to hold stocks rather than participating on the stock market. Other argue that as an individual ages they become risk averse. In contrast, a younger person who still has a lot of time left to make up for losses and act accordingly can take more risk (Bakshi & Chen, 1994).

4.4.1.5 Education

On education, results show that those with higher education are more likely to participate in the stock market. As shown in Table 4.4.1, the study found retail investor’s level of education to be highly correlated to stock market participation. The coefficient of EDU indicates that the log of odds in favour of an individual investor investing on the stock market given advancement in education increases by 1.462 units. This is in line with Liivamägi, Vaarmets and Talpsepp (2014), who revealed that higher education increase the potential that individual investors participate on the stock market. These results are also consistent with Liivamägi (2016), who showed that retail investors with top results in high school or holders of an academic degree participate in stock markets more frequently than those with lower education. There is need to intensify efforts in ensuring that financial education is introduced and taught in schools.

4.4.1.6 Income

The research study revealed that income is also a significant predictor of stock market participation. Therefore, as shown in Table 4.4.1, the coefficient of INCOM shows that the log of odds in favour of an individual investor making a decision to purchase stocks given an increase in income goes up by 0.0022 units. This result was expected in this study. Table 4.4.1 shows that there is a positive relationship between income and stock market participation. Therefore,
individuals with wealth or high incomes are likely to participate in the stock market than those individuals with low levels of income. This is in line with Guiso and Jappelli (2005), who asserts that individuals with incomes above a certain threshold may consider participating in the stock market especially if the income covers transaction costs. However, there are also arguments that some affluent individuals in developed countries do not participate in the stock market, and this suggests that there could be some factors at play which are other than income. Therefore, there is need to lower transactional costs such that even poor people with lower incomes can participate in the stock market.

4.4.1.7 Gender
The study found that gender has no significant effect on stock market participation. As shown in Table 4.4.1, the coefficient of GENDER indicates that the log of odds in favour of a retail investor making a choice to invest on the stock market decreases by 0.946 units. This result was expected for this study. This is so because women are considered risk averse than men. Women participate less in stock markets than men. This confirms findings in a number of studies in both developed and developing countries where men participate in the stock market more than women (Almenberg and Dreber, 2012). Therefore, there is need to empower women economically and encourage them to participate in the stock market. The logistic results on gender are similar to those of Almenberg and Dreber, 2012), who revealed that women are less likely to participate in the stock market. Therefore, the study recommends policy makers to strengthen policy reforms and financial development since individuals are increasingly being empowered to take charge of making key economic decisions (Almenberg and Dreber, 2012).

4.5 Summary
The study found that a large proportion of the adult population do not participate in the stock market. The study also found that awareness is positively and significantly correlated with stock market participation and this entails that most individuals tend to participate in stock markets when they are aware of it, financial assets and its operations. Other factors such as financial literacy, education, income and age have been found to have a positive relationship with stock market participation except for gender. The following chapter focuses on study findings, conclusions and recommendations.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction
This chapter presents the results or conclusions of the research study on the effect of awareness on stock market participation among potential retail investors in Zimbabwe. The chapter shall give a concise summary of the study findings and then proceed to draw conclusions from the research findings based on the data presented in chapter four. This chapter also presents recommendations and suggestions for further research.

5.1 Summary of Major Findings
The study showed that the level of retail investor participation in Zimbabwe’s capital markets, particularly the ZSE is deplorably low. Therefore, this forms the bedrock of the research study. The main objective of the study was to understand the effect of awareness on stock market participation among potential retail investors in Zimbabwe. The study was also premised on sub-objectives such as examining the level of retail investor participation in the stock market, determining ways to encourage the participation of potential retail investors in stock markets and exploring the factors that influence potential retail investors to participate in capital markets.

A deep investigation reveals that retail investor participation in the stock market is promoted by a number of factors which include, awareness, financial literacy and education of individual investors of the stock market. The study showed that financial institutions promote retail investor participation in stock markets by using different media channels to educate individual investors, for example, the press, internet and conducting financial literacy programs.

The research study used a descriptive research design to achieve the objectives of the study. The target population consisted of stock brokers, asset managers, transfer secretaries and potential retail investors and the study made use of primary and secondary sources to collect data. The study used primary data and made use of questionnaires to collect primary data. Data was collected from
respondents who reside in Harare. The results of the study revealed that there is a positively and highly significant relationship between awareness and stock market participation. The results further showed that the development and growth of the stock market can be promoted by raising awareness, educating retail investors about the dynamics of stock the market and spreading investment information through the press, internet and financial literacy workshops.

5.2 Conclusions
Drawing from research findings, the researcher concludes that awareness is significant in promoting stock market participation among potential retail investors. Awareness is a significant determinant of stock market participation. Therefore, individual investors who are aware of the stock market are most likely to participate in the stock market than those who are unaware. The study also found factors such as education, financial literacy, income, age to be significant in influencing individual investor decisions to participate in stock markets. Above all, the study found a positive and significant relationship between awareness and stock market participation.

5.3 Recommendations
This section provides recommendations to policy makers, financial institutions, government and universities, drawing from research findings.

5.3.1 Policy Makers
Policy makers include regulators of and capital market players such as the SECZIM and the ZSE among other players respectively.

5.3.1.1 Securities Exchange Commission of Zimbabwe
SECZIM should ensure that they are widely known by the majority of the Zimbabwean populace. They should make an effort to make sure that their reason for existence and operations are well-known. Therefore, SECZIM may take time on radio or the national television to make sure that people know of them and may introduce daily or weekly columns in the press encouraging people to participate on the stock market.

5.3.1.2 Zimbabwe Stock Exchange
The ZSE should spearhead the raising of awareness of the stock market through various media platforms for example, may consider road shows, TV shows, radio programs on investment opportunities and education of potential individual investors. The ZSE should introduce a comprehensive web-based free stock trading course where potential retail investors may come to learn about the stocks and operations of the stock market.
5.3.2 Financial Institutions

Financial institutions such as commercial banks may introduce payment systems that will make it easy for potential retail investors to deposit funds into CSD accounts for stock trading on the ZSE from their wallet or bank accounts. Banks should also play a part in spreading investment information to their clients.

5.3.3 Government

Government should ensure that financial education is introduced in primary schools. Therefore, it should be the focus of the government, policy makers and economists to make sure that students in high school and university are introduced to financial education.

5.3.4 Universities

Universities or colleges may introduce financial literacy modules and make them compulsory for all students. Universities should make efforts to improve the financial literacy of students so that they develop interests in the stock market.

5.4 Suggestions for Further Research

Further research should be conducted on the effect of awareness on stock market participation among women in Zimbabwe. Women are considered risk averse and usually do not participate in capital markets. In Zimbabwe, women constitute a larger percentage than men therefore, encouraging women to participate in the stock market may improve financial inclusion and deepen capital markets in Zimbabwe.
REFERENCES LIST


Reilly, F. K. (no date) Investment Analysis & Portfolio Management TENTH EDITION.


Dear Sir/ Madam

I am a student who is studying towards a Bachelor of Business Studies Honours Degree in Banking and Finance. I am conducting a research study entitled: *the effect of investor education and awareness in enhancing capital market participation among retail investors in Zimbabwe.*

Your participation will involve the completion of the attached questionnaire and should only take about 25 minutes. Your involvement and participation in the study is voluntary, and you may choose not to participate or to stop at any time. The results of the research study may be published, but your name will not be used. Your identity will not be associated with your responses in any published format. The findings from this project will provide information on capital market participation in Zimbabwe with no cost to you other than the time it takes for the survey. If you have any questions about this research project, please feel free to call me on 00263713 622 592 or send an e-mail to gmaguju2000@gmail.com. Your completion of this questionnaire and the
subsequent returning of this questionnaire to the undersigned will be taken to imply your willingness to participate in the research

Thanks for your consideration!

Appendix 1

Section A

Demographic Information

1. Age
   - 20-40 years
   - 40-60 years
   - Above 60 years

2. Sex
   - Male
   - Female

3. Educational Background
   - Secondary education
   - College education
   - Professional and
   - Others specify

4. Occupation/profession
   - Salaried/employed
   - Self-employed
   - Others specify
5. Monthly income:  
- Below $500  
- $500-$1000  
- above $1000

Section B: Measuring Stock Market Participation

6. Do you have an investment account?  
- Yes  
- No

7. If not, do you wish to participate on the Zimbabwe stock market?  
- Yes  
- No

8. Do you understand how the Zimbabwe Stock Exchange operates?  
- Yes  
- No

Section C: Stock Market Awareness

9. Are you aware of the available menu of financial assets, and the stock market?  
- Yes  
- No

10. Which range of financial assets are you aware of? Tick your responses in the table below;

<table>
<thead>
<tr>
<th>Type of investment vehicle</th>
<th>Tick</th>
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</thead>
<tbody>
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<td>Mutual funds</td>
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<tr>
<td>Insurance policies</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td></td>
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<tr>
<td>Commodities such as gold</td>
<td></td>
</tr>
<tr>
<td>Fixed deposits (including other money market products)</td>
<td></td>
</tr>
<tr>
<td>Shares (stocks or equities)</td>
<td></td>
</tr>
</tbody>
</table>
11. Have you or any member of your household ever invested in shares at any time?

☐ Yes ☐ No

Section E: Financial Institutions & Financial Education

12. Do you receive financial education from any financial institution?

☐ Yes ☐ No

13. How accessible is financial education from financial institutions?

☐ Extremely difficult
☐ Difficult
☐ Extremely easy
☐ Easy
☐ None of the above

14. What are the channels through which investors receive investment information?

<table>
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<tr>
<th>Investment sources of information</th>
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<td>Newspapers, journals &amp; magazines</td>
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<tr>
<td>Radio &amp; Television Channels</td>
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<tr>
<td>Company announcements&amp; publications e.g. financial statements</td>
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<tr>
<td>Stock exchange &amp; Security Exchange Commission announcements</td>
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<tr>
<td>Brokers or financial analysts</td>
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</table>
Others (including friends, relatives etc.)

Section F: Financial Literacy

15. In your own opinion, do you think you are financially literate?

Yes  No

16. How best can you describe your financial literacy in your attempt to create long-term wealth? Rank your responses.

<table>
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<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>I find it more fulfilling to save money for the long-term than to spend money</td>
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<tr>
<td>I think long-term, I don’t only live for the present</td>
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<tr>
<td>Money is there to be invested to grow wealth not just to be spent</td>
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<tr>
<td>I prefer to invest money than to spend all of it</td>
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<tr>
<td>I think I have the capacity to participate on the stock market</td>
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</table>

17. What do you think are the challenges holding you back from investing on the stock market?……………………………………………………………………………………………………………………………..
……………………………………………………………………………………………………………………………..
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……………………………………………………………………………………………………………………………..

18. Do you think wealth problems can block you from investing on the stock market?
Appendix 2

QUESTIONNAIRE FOR MARKET PLAYERS

Section A: Background information

1. Name of the company?

.................................................................................................................................

2. What is your institution type?

☐ Stock broking firm

☐ Transfer Secretaries

☐ Investment Advisors
Section B: Promoting Stock Market Participation

3 Is it important to promote stock market participation to retail investors?
   □ Yes          □ No

4 In your opinion what do you think are the major challenges hindering retail investor participation in the Zimbabwe Stock Market?
   ___________________________________________________________
   ___________________________________________________________

5 Promoting financial literacy will boost retail participation on the ZSE. Do you agree?
   □ Strongly agree
   □ Agree
   □ Strongly Disagree
   □ Disagree
   □ None of the above

6 Do the use of media platforms such as the press, television, radio, online platforms & social interaction help increase stock market participation?
   □ Strongly agree
   □ Agree
   □ Strongly Disagree
   □ Disagree
   □ None of the above
7 In your opinion, do you agree that transaction costs discourage participation of retail investors on the ZSE?

☐ Strongly agree
☐ Agree
☐ Strongly Disagree
☐ Disagree
☐ None of the above

Section B: Stock Market Awareness

8 What are you doing to ensure that people are aware of the stock market?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Section C: Stock market Benefits

9 How do you raise awareness of the Stock Market?

...........................................................................................................................
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Section C: Stock market Benefits

10 Do you think Zimbabwe stock market returns are higher than those of other investments?

☐ Strongly agree

☐
11 What benefits do investors expect when they participate on the ZSE?

What objectives or financial goals that retail investors wish to meet when they participate on the ZSE?

Section E: Role of financial institutions in delivering financial education to Retail Investors

12 Which channels do you use to educate & spread investment information to retail investors?

- Television
- Radio
- Newsletters & Publications
- Newspapers
Refer-a friend emails

13 What else do you think can be done to effectively educate retail investors?

Appendix 3: PRIMARY DATA

RETAIL INVESTOR DATA SET

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