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# **RELATIONSHIP BETWEEN FINANCIAL WEALTH OF** INDIVIDUAL INVESTORS AND STOCK MARKET PARTICIPATION DECISION AMONG SECONDARY SCHOOL **TEACHERS FROM NAKURU COUNTY, KENYA**

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# Abstract

Individuals' invest to make returns on investment which ultimately results in wealth maximization. Despite the numerous benefits of stockholding, few individuals participate in the stock market a feature known as the stockholding puzzle. Many researches have tried to provide explanation for the limited individual investor participation in the stock market. There was need to investigate the relationship between financial wealth and individual investor stock market participation decision among secondary school teachers in Nakuru County. For this, an explanatory research design was employed. Stratified proportionate random sampling was applied. Data was collected from 231 secondary school teachers usingstructured questionnaires. Data was analyzed using regression with the aid of SPSS. The researchfound that financial wealth has a significant positive relationship with stock market participation decision of secondary school teachers in Nakuru County. The study concludes that that financial wealth of individual investors has a significant relationship with stock market participation decision among secondary school teachers from Nakuru County. The study recommends that investors should be encouraged to engage themselves in income generating activities; savings and investing in order for them to enhance their wealth to enable them participate in the stock market.

Keywords: Financial wealth, investors, stock market participation decision, teachers



# INTRODUCTION

Investment as a trade emerged in the late 1800s when investment trusts were used as main investment vehicles in Great Britain. In the United States, closed-end funds flourished during the 1920s with the emergence of open-ended funds. Exchange traded funds and hedge funds developed in the late 1940s. Investment as a trade later spread to other countries around the various continents (Anderson, Born and Schnusenberg, (2010). Investment sector has since gradually grown over the years.

Securities exchange is an important avenue for raising funds for most companies. It permits companies to sell securities to investors thereby allowing them to raise funds for growth and expansion. Investors can quickly and easily sell securities due to the liquidity offered by the securities exchange. This makes investment in stocks an attractive option against other illiquid investments such as real estates (Aduda, Masila and Osongo, 2012). Carmichael and Pomerleano (2002) are of the view that the capital markets create better platforms for marshalling both local and international capital. Therefore the securities exchange market plays a critical role in an economy.

Participation in the stock market is beneficial to both the general economy and to individual investors. Emerson (1976) is of the view that that the stock market participation makes significant contribution to the financial well-being of a country. Similarly, individuals accrue numerous benefits as a result of participating in the stock market. Mehra and Prescott (1985) report that individuals participating in the stock market amass more wealth compared to non-participants in the stock market and enjoyed higher consumption in their lifetime. Cocco, Gomes and Maenhout (2005) contend that investor lost considerably in their well-being when they failed to participate in the stock market. Therefore, the importance of investor participation in stock market cannot be over emphasized.

Over the years the stock market has been dominated by institutional investors (Rutterford and Hannah 2016; Rutterford, et al., 2010). Rutterford and Hannah (2016) report that there was low individual investor participation in the stock market which stood at 11% for the UK companies in 2016. Further, the study reported a low individual investor participation in the US stock exchange which stood at 42% in the year 2010. Ameriks and Zeldes (2000) also reported that many individual investors do not participate in the market for stocks at any given point in time. Similar findings were also observed by Allen, et al., (2011) who revealed that African stock markets had few number of companies listed and were also limited in capitalization.

According to the regulator of capital markets in Kenya, individual investors reduced their investments in equity from a high of twenty seven percent (27%) of the market capitalization in



2008 to a low of fourteen percent (14%) in 2010. By the end of 2014, the total number of individual investors was fourteen percent of the total investors in the NSE (Aduda, et al. 2012). The Oxford Business Group study also reported that the percentage of individual investors as at 2015 was 4% of total investors in the stock market. Generally, individual investors participating in the stock market is low in Kenya (Aduda, et al., 2012). Many researchers have tried to explain what guides investor in their participation decision and this continues in the empirical front. However, the individual investor participation is still in decline. This implies that the stockholding puzzle is far from being solved. It is on this basis that the study sought to establish the relationship between financial wealth and stock market participation decision of secondary teachers from selected sub counties in Nakuru County.

A number of studies have provided an understanding of for instance financial wealth (Lindquist and Ostling, 2015; Andersen and Nielsen, 2012) on participation in the stock market. In Kenya few studies have tried to explain the reasons why very few individuals participate in the stock market. Therefore there was need to investigate financial wealth and its contribution to the individual investor stock market participation decision.

The study sought to investigate the relationship between financial wealth and stock market participation decision of secondary school teachers in Nakuru County, Kenya. In examining the relationship between financial wealth and stock market participation decision among secondary school teachers the following hypothesis was tested.

H<sub>at</sub>. There is no significant relationship between financial wealth of individual investors and stock market participation decision





# LITERATURE REVIEW

# **Financial Wealth and Stock Market Participation Decision**

Existing literature seems to suggest that financial wealth is an important factor for individual household stock market participation decision.

Briggs, Cesarini, Lindquist and Ostling (2015) examined the effects of wealth on stock market participation using a large sample of Sweddish lottery players. The study used cross sectional analysis and used observed data obtained in the year 1999. The study found a positive relationship between stock market participation and wealth. The study also found that



the effect on participation is not only immediate but also permanent as the increase in participation was observed years after the lottery. Despite this, the estimated effect of wealth on participation for investors who directly owned stocks was observed to be much lower with the effect being greater for those households which purchased mutual funds. The study further revealed that the fixed cost of participation was more relevant to the non-participating households with participating costs of 2800USD being able to explain non-participation for 75% of non-participants while the effect to participating households was negligible. The study also revealed that it is highly improbable that fixed costs, both participation costs and entry costs, would provide credible justification for stock market non participation and suggested that there were other factors that drove non-participation. The study population also may not be representative of the entire population since they were elderly and less likely to have finished college education. For this reason, the study may have suffered lack of external validity and the findings could not be extrapolated to other populations or other countries.

Briggs, et al. (2015) in another study evaluated the effects of windfall gains on the participation in the stock market. Data was collected from Swedish samples of lottery players to whom wealth was assigned. The results reported that these gains resulted in an increase in stock market participation by 12%. However, this increase in investment in the stock market was experienced by the non-participants in the lottery and did not reflect in the individuals already taking part in the lottery. The effect on participation was also observed immediately after the assignment of the money and was experienced for a long time. The non-participants to whom the gains were assigned were observed to also prefer the bond market segment. The models similarly used in the study further predicted that the wealth effects on participation could be far too large than the observed effects. The study however admits that there could be other investor factors that could explain non-participation of investors.

Callado, González and Utrero (2014) investigated the factors influencing portfolio choice for households in Spain. The study obtained data from the Spanish population about their household finances on income, debts, assets and other household characteristics. The study employed multivariate fractional regression model and multinomial logit regression in analyzing the data. This methodology was preferred as it allowed the study to establish how the household characteristics under study influenced the investment decisions among the various asset classes identified for the study. The study found that net wealth and age were important factors that guided household financial portfolio choice. This study revealed that net wealth was important in influencing the investment decision making. The study however focused on different investor asset classes that were available for the investors who were already participating in investment. There is need however to collect data from diverse sample



including those who have not yet participated in stock market to unearth the reasons behind their investment choices.

Andersen and Neilsen (2010) used a natural experiment to examine determinants of individual investor's decisions to participate in the market for stock. The study used panel data from 1998-2003 from unexpected inheritance as a result of sudden death of family members in Denmark. The study found that windfall wealth resulting from unexpected inheritance due to sudden death had a positive effect on stock market participation. However, investor's participation in the stock market was not found to be affected by the costs of participation. The study used wealth that was unexpected since it was inherited from family members who had died suddenly. The effects on stock market participation could differ in circumstances where this wealth belongs to the investor and therefore was expected from income sources of the investor. This study however specifies unexpected wealth as a source of income. It is important to also find out how similar study using individuals earned wealth influences stock market participation decision.

Grinblatt, Keloharju and Linnainmaa (2011) examined how investor cognitive abilities could influence participation in the stock market. The study revolved around the assumption that individuals having limited cognitive abilities tend to lack the ability to process information and act on it. This becomes an extra cost for the investor who has no choice but to incur other costs to acquire the needed information in order to make the investment decision. Data was collected from Finnish investors in all registered stocks for the period 1995-2002. The study employed the probit regression methodology to analyze the participation rates for the wealthy investors. The results revealed IQ plays a significant role in influencing affluent individual investor decision to participate in the stock market. The study suggested that moderate transaction costs inhibit less wealthy individuals from participating. This suggests that the effect of participation costs is relevant to the less affluent investors only. The study used panel qualitative data collected from available records of Finnish investors. Such records are not available in Kenya about the household characteristics of secondary school teachers and therefore the current study used qualitative primary data collected through a questionnaire.

Calveat, Campbell and Sodini (2009) evaluated how portfolio composition of investors varies with wealth. Panel data was used for the study. The data was collected from statistics Central bureau for 4.8 million Swedish households for the period 1999-2002. The data collected comprised information about the demographic characteristics of the people, their incomes and aggregate wealth. Income measured included labor and business income attributable to each individual and capital income in the forms of interest and dividends earned. The securities were categorized in terms of their riskiness. The study revealed that the investors who were more



educated and wealthy had higher chances of participating and were less likely to stop investing in the stock market. The study also found that the more affluent and educated investors having better compositions in their portfolios revised them more frequently. Further, the wealthy investors rebalanced by including riskier assets in their compositions as their affluence levels went up. This means that wealth makes investors less risk averse since they are able to accommodate higher levels of risk as their wealth increases. The investors who directly owned stocks were found to have a tendency of selling well performing securities. However, the tendency of selling well performing securities did not apply in the case of wealthy investors holding well diversified portfolios. This study was interested with investment behavior of individuals who have already invested in the stock market. It does not uncover the reason for their initial decision to participate in stock market.

Brunnermeier and Nagel (2008) investigated whether changes in affluence of individuals affected portfolio distributions for individual investors. Data was collected from the panel study of income dynamics for a 20 year period. Regression analysis was used to analyse the data. The study found that the likelihood of participation in the stock market was positively and significantly correlated to changes in liquid wealth. The study also observed that even with seemingly significant wealth changes, many investors were reluctant to change the compositions of their portfolios. The study suggested that there were that other factors other than wealth that influenced participation and recommended further research.

Calvet, Campbell and Sodini (2007) evaluated the efficiency of household investment decisions from Swedish data. They obtained household level data on wealth from statistics Sweden on capital income of interest, dividends and capital gains, capital losses and assets of households. Panel data was used for the years 1999-2002. They obtained data on income from gross labor income and income from business. Financial assets were also measured using bank balances, mutual funds and stocks. The entire Swedish population was used in the study. The study found that financial wealth had the greatest effect on stock market participation and increased participation by 20%. Further, the study reported that other factors like disposable income, age, education also had significant effects on participation. The study found that wealthy households not only invest more efficiently but also more actively. Therefore wealthier households are expected to make more investment in the stock market than poor households do. This could be used to explain the wealth inequalities that were observed by Guvenen (2006) and Mehra and Prescott (1985).

Another study by Vissing-Jorgenson (2003) sought to evaluate whether wealth would have an impact on the irrational behavior of investors by examining the departure of actual actions from the expected reactions. Data was collected through telephone surveys from US



individual investor during the period 1996-2002. The study found that low participation rates and infrequent trades in the market dropped with the increase investor's wealth and sophistication and that this could be explained by the costs of participating. The study suggested that transaction cost could provide an explanation for investor participation since even small amounts of annual cost could explain nearly the participation of half of the investors who did not participate in the market for stocks.

Vissing-Jorgensen (2002) conducted a study which sought to investigate the causes of limited participation in the stock market. Data was collected from the US consumer expenditure survey on income and asset holdings for the stock market participants from 4842 respondents. The study found a positive effect of income levels on the stock market participation of the investors and also on the proportions of wealth invested in the stocks traded. However, nonfinancial income was found to have a negative influence on participation and the amount invested in stocks for the participants. The study further reported that transaction costs could also explain non participation for almost half of nonparticipants and for the households having low financial wealth. Further, the study revealed that many households had low levels of activity. They rarely traded in the assets already invested in neither did they actively change their portfolio already held.

Guiso, Haliassos and Jappelli (2003) conducted a study to investigate stock ownership for households in major European countries: Netherlands, France, Italy, Sweden, Germany and UK. The study obtained data from the detailed household level data from the countries although the study used different sample designs and different ways to establish household financial assets. The study investigated investor participation for stocks held directly and those held indirectly through financial institutions. The study revealed that stock market participation increased with increase in the resources of investors measured by income and wealth. This suggests that varying participation rates is expected for population with varying degrees of wealth. The study found that at the individual household level, there was a strong positive relationship between participation in the financial market and wealth and that for individual households, lower participation costs explained higher stock market participation. Sameulson, (1994) agrees with this finding by asserting that it is not prudent for retail investors to participate in the financial market when their income levels is too low to take up huge shocks occasioned by volatility of markets that would most likely be witnessed majorly in the short run.

The studies reviewed on financial wealth and stock market participation have helped identify wealth as an explanatory variable for stock market participation. Although, the reviewed studies have found increase in wealth to be associated with increased likelihood of participating



in the stock market, the degrees of estimated effects differ. Also, these studies have been conducted in developed countries. These countries have better developed markets compared to a developing economy like Kenya and therefore the findings from these studies may not be extrapolated to developing countries like Kenya. This study sought to fill this gap through research by investigating the relationship between financial wealth and stock market participation decision among secondary school teachers in Nakuru County, Kenya.

# **Stock Market Participation Decision**

Many researchers have tried to explain why individual investors who make direct investment in the stock markets are few. In Kenya few individuals participate in the market for securities. (CMA, 2014).

Wendo (2015) in the investigation on the factors that influence participation of advocates in the Nairobi Security exchange, evaluated participation by examining the preferred investment avenue of the investors. The study identified the avenues as investment in shares, fixed income securities, real estate and other ventures. The study further sought to investigate the reasons why the advocates invested. The study found that investors invested for the purpose of income and capital gains. The study further found that some individuals invest in order to increase their savings. The study also reveals that although there was a time when retail investor participation in the stock market was high the enthusiasm of retail investors was fast waning away and many firms experienced an exit of individual shareholders.

Ameriks and Zeldes (2000) evaluated the influence that age of investors had on equity allocations. Pooled cross sectional data was collected from accounts of participants for the period 1987-1996. The study observed that almost half of the participants did not make changes to their retirement plan over the period of the study. This showed that there was limited trading activity for the stocks that were held within retirement plans that were employer sponsored.

Grinblatt, Keloharju and Linnainmaa (2011) examined how investor cognitive abilities could influence participation in the stock market for Finnish investors. The participation in the financial markets was measured through observing the investor portfolio sizes and their levels of trading activity and relating the same to their cognitive abilities. The study revealed that the investors that had high IQ rating traded more frequently therefore cognitive abilities were important in influencing the participation of investors.

Agnew, Balduzzi, and Sunden (2000) conducted a study that sought to examine the portfolio choices, trading behavior and returns earned. Data was collected from 401(k) accounts for the period 1994-1998. Regression analysis was used to evaluate the data the study revealed that the investors had very little trading activity and specifically in altering their portfolios already



held. Further, the study revealed that the trading activities of the participants varied depending on their demographic characteristics and other participants' factors. For instance the study reported that male participants traded more frequently than their female counterparts and older employees similarly traded more frequently with those participants earning more trading more frequently.

Briggs, et al. (2015) examined the effects of wealth on stock market participation using a large sample of Sweddish lottery players. The study found a positive relationship between stock market participation and wealth and that the effect on participation is not only immediate but also permanent as the increase in participation is observed years after the lottery. The study further revealed that the fixed cost of participation was more relevant to the non-participating households with participating costs of 2800USD being able to explain non-participation for 75% of non-participants while the effect to participating households was negligible.

Yoong (2011) investigated the effects of financial literacy on stock market participation. Data was collected from American Life Panel from a sample of 1000 individuals who were 40 years of age and above. The study used split sample analysis to measure the participation variable. The individuals from whom data was collected were categorized into two groups; the individuals who owned stocks and the individual who did not own stocks. The two categories of individuals were further grouped into the ones with and without a planner. The study found that lack of financial knowledge affects the decision to participate in the stock market. The findings reported that lack of knowledge in finance impedes investors from participating in the stock market and the impact is worse for risk averse individuals as the lack of awareness in financial concepts affects their ability to amass wealth.

Vissing-Jorgensen (2002) conducted a study that sought to provide reasons for limited participation in the stock market. Data was collected from the US consumer expenditure survey on income and asset holdings for the stock market participants from 4842 respondents. In order to measure market participation, data about the individual holdings on stocks, bonds, mutual funds and other securities were obtained. The households were then separated into those who held stocks and the ones who did not, as well as those who held other securities verses those who did not. The study found a positive effect of income on the stock market participation of the investors and also on the proportions of wealth invested in the stocks traded. The study further reported that transaction costs could also explain non participation for fifty percent of nonparticipants and for the households having low financial wealth. Further, the study revealed that many households had low levels of activity. They rarely traded in the assets already invested in neither did they actively change the portfolios already held.



Calveat, et al. (2009) evaluated how portfolio composition of investors varies with wealth. Panel data was used for the study. The data was collected from statistics Central bureau for 4.8 million Swedish households for the period 1999-2002. On participation in the financial market, the study revealed that the investors who were more educated and wealthy had higher chances of participating and were less likely to stop investing in the stock market. The study also found that the more affluent and educated investors having better compositions in their portfolios revised them more frequently. The study suggests that informed investors traded actively in the financial markets.

Guiso, Sapienza and Zingales (2008) conducted a study that sought to provide explanation for the limited stock market participation. The study measured participation in terms of the individuals who either invested in the stocks of companies and those who did not. The study revealed that less trusting individuals were less likely to invest in the stock market and should they decide to participate would buy very few stocks. The problem of trust was found to be significant and this could explain non participation of many on the wealthiest households in the United States.

Brunnermeier and Nagel (2008) investigated whether changes in affluence of individuals affected portfolio distributions for individual investors. The study found that the likelihood of participation in the stock market was positively and significantly correlated to changes in liquid wealth. The study also observed that even with seemingly significant wealth changes, many investors were reluctant to change the compositions of their portfolios. This shows that investors are inactive in their trades in the financial markets.

Constantinides, Donaldson and Mehra (2002) examined the reason why there were anomalies in the financial markets. First, the study sought to establish the reasons why few individuals participated in the stock market. The study also sought to provide explanations why investors preferred investing in bonds despite equity securities having a history of better performance. The study divided the population into three categories the young who receive low endowment income, middle age who are employed and therefore have a large mean income and the old who retire and depend on what was saved in the second stage. The study further introduced aspects of borrowing constraints and calibrated the investments for each of the categories of individuals in the economy. Stock market participation was measured through individual investment in both equity and bond securities and the portfolio compositions between the two securities for each of the categories evaluated. The study found that although the young wanted to borrow and invest in equity, the borrowing constraint restricted them. The middle age investor, even with the borrowing constraint is able to borrow against their labor income. The middle age investor further



seeks to diversify in order to secure their returns in the future by investing in both equity and bond securities. The young were found to invest in equity in the absence of borrowing constraint.

The Security's exchange in Kenya provides an avenue for various investment opportunities. Despite this, investment ratios for individuals still remain abysmally low (CMA, 2015). Therefore it was important to investigate individual investor dynamics and how they affect individual investor stock market participation decision.

#### Modern Portfolio Theory

This theory was introduced by Harry Markowitz who initiated the analysis of portfolios of investment in 1952. The Markowitz Portfolio Theory suggests that given a certain level of expected return, investors can reduce the risk of their portfolio by diversification. According to this theory, if investors have the same expected returns and have the same information about the investment vehicles in equilibrium they select identical safe and risky assets. The theory is applicable in investment management since it helps to describe a standard behavior that investors should adopt when faced with the investment decision. The theory suggests that given estimates of the returns, volatilities and correlations of investments coupled with constraints on investment choices, investors can perform an optimization that results in the efficient frontier. For this reason, this theory is applicable in the areas of asset allocation, portfolio construction, management of portfolio and investment management in general (Fabozzi, Gupta & Markowitz 2002).

#### **RESEARCH METHODOLOGY**

This study employed explanatory research design.

#### **Population and Sample**

The population of the study comprised of 1,609 secondary school teachers from the Nakuru, Molo, Njoro, Naivasha and Gilgil sub counties of Nakuru County as indicated by the Teachers Service Commission Report (2018).

Stratified proportionate random sampling was used in this study. The Sub Counties represented the strata. Simple random sampling was then used to determine the representative sample in each stratum. The sample size was 320 secondary school teachers. Out of the 320 questionnaires that were distributed to the respondents, 231 were returned fully filled. This represented a response rate 72%. Babbie (1990) asserts that a response rate of 70% is very good for analysis and reporting from manual surveys.



Primary data was used and was collected using structured questionnaires. Pilot testing was used to check the instruments reliability. Cronbach alpha was used to test reliability of items measuring financial wealth. The results obtained an overall Cronbach Alpha correlation coefficient of 0.713 on financial wealth and a coefficient of 0.853 on stock market participation decision. Factor analysis was used to check validity of the constructs and all the items met the loading cut off of 0.4 and were thus retained for analysis.

Descriptive and inferential statistics were used to analyze the data with the aid of Statistical Package for Social Scientists (SPSS) version 25. Descriptive statistics entailing frequencies, percentages and chi-square values were used to summarize data, while inferential statistics such as correlation coefficient, ANOVA and regression analysis were used. Regression analysis was used where the dependent variable was regressed against the explanatory variable to establish the relationship between financial wealth and stock market participation decision. Research hypothesis was tested at 5% significance level using the regression while F-statistic was used to measure whether the model fits the data significantly. The study employed the following regression model

# $Y = \beta_0 + \beta_i X_i + \varepsilon$

Where:

- Y - Stock market participation decision
- Xi - Financial wealth of individual investors
- Bi - Regression coefficients for the independent variable
- Regression Constant  $\beta_0$
- Stochastic error term assumed to be normally distributed 3

# ANALYSIS AND FINDINGS

# **Financial Wealth of Individual Investors**

Respondents were asked to indicate the extent to which they agreed with financial wealth of individual investor statements. The responses were analyzed using descriptive statistics (frequencies and percentages) and chi-square. The chi-square values which are statistically significant indicate that there is association between financial wealth statements and stock market participation decision.



Financial wealth statements	Strongly	Agree	Neutral	Disagree	Strongly	Chi-	P value
N=231	agree				disagree	Square	
	%	%	%	%	%	( <b>X</b> <sup>2</sup> )	
Financial wealth plays a role in	112(48.5%)	77(33.3%)	23(10.0%)	8(3.5%)	11(4.8%)	171.988	0.034
the investment decision by							
determining how much I invest							
I consider financial wealth in	67(29.0%)	98(42.4%)	33(14.3%)	19(8.2%)	14(6.1%)	178.293	0.016
the investment decision by							
rendering the effects of							
investment costs insignificant							
I consider financial wealth	91(39.4%)	83(35.9%)	46(19.9%)	4(1.7%)	7(3.0%)	182.246	0.009
while making the investment							
decision since I have more to							
invest							
Financial wealth plays into the	61(26.4%)	65(28.1%)	66(28.6%)	25(10.8%)	14(6.1%)	165.058	0.073
decision by enabling me to							
absorb losses that result from							
stock volatility							
Net wealth will make me	58(25.1%)	74(32.0%)	47(20.3%)	33(14.3%)	19(8.2%)	126.352	0.789
invest more efficiently and							
aggressively							
Net wealth guides my decision	82(35.5%)	62(26.8%)	47(20.3%)	24(10.4%)	16(69%)	156.015	0.142
to participate in an investment							
I consider investment costs	50(21.6%)	75(32.5%)	60(26%)	25(10.8%)	21(91%)	176.961	0.019
while making the investment							
decision							

Table 1:Descriptive Results for Financial Wealth of Individual Investors

On financial wealth of individual investors, the results indicate that majority of the respondents 189(81.8%) were in agreement that their financial wealth plays into their investment decision by determining how much they invest ( $\chi^2$ =171.988, *p*<0.05). Majority of the respondents 165(71.4%) agreed that they consider financial wealth in the investment decision by rendering the effects of investment costs insignificant ( $\chi^2$ =178.293, *p*<0.05). There was agreement among majority 174(75.3%) of the respondents that they consider financial wealth while making the investment decision since they have more to invest ( $\chi^2$ =182.246, *p*<0.05).



According to a fair majority of the respondents 126(54.5%), financial wealth plays into the decision by enabling the respondents to absorb losses that result from stock volatility while 66(28.6%) of the respondents held neutral opinion on whether really financial wealth plays into the decision in enabling the absorption of losses that result from stock volatility ( $\chi^2$ =165.058, p>0.05). A majority 132(57.1%) of the respondents agreed that net wealth will make them invest more efficiently and aggressively with 47(20.3%) holding neutral opinion and 52(22.3%) being in disagreement ( $\chi^2$ =126.352, p>0.05). Respondents 144 (62.3%) were in agreement that net wealth guides their decision to participate in an investment while 47(20.3%) of the respondents held neutral opinion and 40(17.3%) disagreed with the statement ( $\chi^2$ =156.015, p>0.05). Further, majority of the respondents 125(54.1%) held the opinion that they consider investment costs while making the investment decision with only 19.9% being in disagreement and 60(26.0%) holding neutral opinion ( $\chi^2$ =176.961, *p*<0.05).

#### **Stock Market Participation**

Respondents were asked to indicate the extent to which they agreed with stock market participation statements. The responses were analyzed using frequencies and percentages.

	•				•		
Stock market	Strongly	Agree	Neutral	Disagree	Strongly	Chi-Square	P value
participation	agree				disagree	( <b>x</b> <sup>2</sup> )	
statements	%	%	%	%	%		
N=231							
I have invested in stocks/	50(21.6%)	61(26.4%)	77(33.3%)	29(12.6%)	14(6.1%)	267.290	0.000
shares							
The stocks/shares I have	10(4.3%)	13(5.6%)	38(16.5%)	71(30.7%)	99(42.9%)	323.000	0.000
invested in are traded in							
the security's exchange							
I invest in order to make	106(45.8%)	92(39.8%)	19(8.2%)	5(2.2%)	9(3.9%)	290.230	0.000
a return in form of							
dividends and capital							
gains							
I invest to increase	94(40.7%)	69(29.9%)	26(11.3%)	24(10.3%)	18(7.8%)	312.562	0.000
savings and to borrow							
funds							

Table 2:Descriptive Results for Stock Market Participation



11(4.8%) 51(22.1%) 88(38.1%) 71(30.7%) I actively buy and sell in 10(4.3%) 269.178 0.000 the stocks Т have invested in

On stock market participation, the results indicate that majority of the respondents 111 (48%) agreed that they have invested in stocks/ shares, 77 (33.3%) held neutral opinion while 43 (18.7%) were in disagreement ( $\chi^2$ =267.290, p<0.05). According to 170 (73.6%) of the respondents, the stocks/shares they have invested in are not traded in the security's exchange while 23 (6.5%) indicated that the shares they have invested in are traded in the security's exchange ( $\chi^2$ =323.000, p<0.05). Majority 198 (85.6%) of the respondents were in agreement that they invest in order to make a return in form of dividends and capital gains ( $\chi^2$ =290.230, p < 0.05). According to 163(70.6%) of the respondents, they invest to increase savings and to borrow funds ( $\chi^2$ =312.562, p<0.05) while there was disagreement among most respondents159 (68.8%) on whether the respondents actively buy and sell in the stocks they have invested in  $(\chi^2 = 269.178, p < 0.05).$ 

Table 3 presents the model summary for the regression analysis between the predictor variable (financial wealth) and the dependent variable (stock market participation decision. The R square was 0.108 which implies that 10.8% variation in stock market participation performance can be explained by financial wealth of individual investors. This means that 89.2% can be explained by other factors other than financial wealth.

Table 3: Model Summa	ry of Financial Wealth and Stock Market Participation	on Decision
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					Change Statistics				
			Adjusted R	Std. Error of	R Square	F			Sig. F
Model	R	R Square	Square	the Estimate	Change	Change	df1	df2	Change
1	.419 <sup>a</sup>	.108	.094	.83798	.108	11.490	1	229	.001

The following regression equation was obtained

 $Y = 2.260 + 0.284 X_1$ 

Where;

Y – Stock market participation decision

X1 - Financial wealth of individual investors

Table 4: Coefficients	s Results for Financial	Wealth and St	tock Market Participatio	n
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	Standardized				
Model	Unstandardized Coefficients	Coefficients	t	Sig.	



		В	Std. Error	Beta			
1	(Constant)	2.260	.314		7.196	.000	-
	Financial Wealth	.284	.084	.219	3.390	.001	

The results on Table 4 indicate that there exist a statistically significant positive relationship between financial wealth of individual investors and stock market participation among secondary school teachers from selected sub counties in Nakuru county ( $\beta$  =0.284, p<0.05). This implies that when financial wealth of individual investors increases by an additional shilling, stock market participation increases by 0.284. The null hypothesis (Ho1) wasrejected that "There is no significant relationship between financial wealth of individual investors and stock market participation decision".

#### CONCLUSIONS AND RECOMMENDATIONS

It was concluded that financial wealth of individual investors has a significant relationship with stock market participation decision among secondary school teachers from selected Sub Counties in Nakuru County, Kenya. There exists a positive significant correlation between financial wealth of individual investors and stock market participation decision. Further, the findings of the objective lead to the conclusion that financial wealth influences how much is available for the investor to invest in the stock market and that it renders the costs of participation insignificant. Further, it can be concluded that financial wealth give the teachers cushion against losses that may result from trading in the financial markets and also makes them trade more efficiently and aggressively. The findings also lead to the conclusion that net wealth guides individual investor decision to participate in an investment.

The study recommends that the investor should be encouraged to engage themselves in income generating activities and that they should be enlightened on savings and investing in different ventures in order for them to be able to participate in the stock market. This is because the study established that financial wealth influences the stock market participation decision. The study recommends that the government should avail funds to the youths, women and all its citizens at large that will boost entrepreneurial activities and other income generating activities of citizens to encourage investing to enhance financial wealth. The government should also provide an enabling environment that encourages investing and opening of business ventures in a bid to enhance the wealth of its citizens in order to encourage investment in the stock market. This will encourage individuals to participate in the stock markets since financial wealth renders the effects of the costs of participation insignificant and makes the investors invest more aggressively. Further, the study recommends that the government through the Nairobi securities



Exchange should sensitize Kenyans on the benefits of investing in the stock market in a bid to enhance wealth creation of individual investors excluded from the investment scene.

The study adopted a case study approach of secondary school teachers from selected Sub Counties in Nakuru County, Kenya. The findings of the study may not be extrapolated to other groups within the population and therefore the study recommended that a similar study should be conducted on a broader scale in Kenya. This is because individual dynamics which influence stock market participation decision among secondary school teachers in Nakuru County may not be the same for other groups within the population. Yin (2003) reveals that case study findings cannot be generalized.

In determination of measurable indicators under each variable of the study qualitative research was used. The study therefore recommends that further research should use a quantitative approach in order to test and validate the research findings.

#### REFERENCES

Aduda, J., Masila, J. M., & Osongo, E. N. (2012). The determinants of stock market development: The case for the Nairobi Stock Exchange. International Journal of Humanities and Social Science, 2(9), 214-230.

Agnew, J., Balduzzi, P., & Sunden, A. (2000). Portfolio choice, trading, and returns in a large 401 (k) plan. Center for Retirement Research Working Papers, 40.

Ameriks, J., &Zeldes, S. (2000). How Do Households Portfolio Shares Vary with Age?. Working paper: Columbia University and TIAA-CREF.

Andersen, S., & Nielsen, K. M. (2010). Participation constraints in the stock market: Evidence from unexpected inheritance due to sudden death. The Review of Financial Studies, 24(5), 1667-1697.

Anderson, S. C., Born, J., & Schnusenberg, O. (2010). Closed-end funds, exchange-traded funds, and hedge funds. Innovations in Financial Markets and Institutions, 18(3), 87-103.

Babbie, E. (1990). Survey Research Methods. Wadsworth Publishing Company, Belmont, California.

Briggs, J., Cesarini, D., Lindqvist, E., &Ostling, R. (2015). Wealth and stock market participation: estimating the causal effect from Swedish lotteries. NBER Working Paper, 21673.

Briggs, J. S., Cesarini, D., Lindqvist, E., &Östling, R. (2015). Windfall gains and stock market participation (No. w21673). National Bureau of Economic Research.

Brunnermeier, M. K., & Nagel, S. (2008). Do wealth fluctuations generate time-varying risk aversion? Microevidence on individuals. American Economic Review, 98(3), 713-36.

Callado-Muñoz, F. J. A., González, C. J. B., &Utrero-González, N. C. (2014). Analysis of deviance in household financial portfolio choice: Evidence from Spain. Centro Universitario de la Defensa de Zaragoza.

Calvet, L. E., Campbell, J. Y., &Sodini, P. (2009). Fight or flight? Portfolio rebalancing by individual investors. The Quarterly Journal of Economics, 124(1), 301-348.

Calvet, L. E., Campbell, J. Y., & Sodini, P. (2007). Down or out: Assessing the welfare costs of household investment mistakes. Journal of Political Economy, 115, 707-47.

Carmichael, J., & Pomerleano, M. (2002). The development and regulation of non-bank financial institutions. Washington, DC: The World Bank.

Cocco, J. F., Gomes, F. J., & Maenhout, P. J. (2005). Consumption and portfolio choice over the life cycle. The Review of Financial Studies, 18(2), 491-533.

Constantinides, G. M., Donaldson, J. B., & Mehra, R. (2002). Junior can't borrow: A new perspective on the equity premium puzzle. The Quarterly Journal of Economics, 117(1), 269-296.



Emerson, R. M. (1976). Annual review of sociology. Annual Reviews, 2, 335-362.

Fabozzi, F. J., Gupta, F., & Markowitz, H. (2002). The legacy of modern portfolio theory. The Journal of Investing. 11(3), 7-22.

Guiso, L., Haliassos, M., & Jappelli, T. (2003). Household stockholding in Europe: where do we stand, and where do we go? Economic Policy. 18(36), 123-170.

Grinblatt, M., Keloharju, M., & Linnainmaa, J. (2011). IQ and stock market participation. The Journal of Finance, 66(6), 2121-2164.

Mehra, R., & Prescott, E. (1985). The equity premium-A puzzle. Journal of Monetary Economics, 15, 145-161.

Rutterford, J., Green, D. R., Maltby, J., & Owens, A. (2010). Who comprised the nation of shareholders? Gender and investment in Great Britain: 1870–1935. Economic History Review, 64 (1), 157–187.

Rutterford, J., & Hannah, L. (2016). The rise of institutional investors. CFA Institute Research Foundation.

Vissing-Jorgensen, A. (2003). Perspectives on behavioral finance: Does" irrationality" disappear with wealth? Evidence from expectations and actions. NBER Macroeconomics Annual, 18, 139-194.

Vissing-Jorgenson, A. (2002). The returns to entrepreneurial investment: a private equity premium puzzle? American Economic Review, 92, 745-778.

Wendo, C. (2015). Factors influencing individual investors' participation in the Nairobi Securities Market, A case of advocates in Nairobi County, Kenya (Doctoral dissertation, USIU University-Africa).

Yin, R. K. (2003). Case study research: Design and methods. Thousand Oaks, CA: Sage.

Yoong, J. (2011). Financial illiteracy and stock market participation: Evidence from the RAND American Life Panel. Financial literacy: Implications for retirement security and the financial marketplace, 76.

