

# **Stock Market Awareness And Participation: To What Extent Do The Ghanaian Elite Class Aware Of, And Take Advantage Of The Financial Market Instruments?**

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## **Abstract**

*The key elements of an efficient market encompass information flow (private and public) and number of stock market participants. Limited stock market participation partly explains the low growth and expansion of the African stock markets. The Ghana Stock Exchange (GSE) is an organized financial market place where registered member companies offer and trade their securities. Being the first of its kind, this paper investigated the extent of awareness, knowledge of the investment products, and to a large extent, participation in the GSE. We made significant findings through both review of literature and electronic survey questionnaires. First, we found that Ghanaians who had formal education ranging from secondary education to graduate education have had reasonable knowledge and exposure to the existence and operations of the Ghana Stock Exchange. Whereas on average, 62% of participants indicated in the survey they're aware (84%) of the existence of the Ghana Stock Exchange (GSE), its products (52%) and operations (50%) through formal education, social media or family relatives and friends, only 28% participate in the stock market. Ironically, what remains undiscovered by this paper are reasons other than education and awareness (cultural, community effect, geographical or proximity) that explain the low participation in the stock market by Ghanaians through stock ownership. Also, we found that proximity to publicly traded firms influence stock market involvement and stock ownership through community effect. The Ghanaian stock market experience low stock ownership and investor participation due to concentration of publicly traded firms in only the few major cities in the country. Findings further indicate that stock brokers in Ghana who serve as a bridge between existing and potential investors and the stock market (GSE) tend to concentrate only in the two major cities – Kumasi and Accra – offering disproportionate services to only those who have access to their services. The study further made a shocking finding which appeared to be inconsistent with existing studies; we did not find significant difference between groups who had business education including accounting economics and finance and those who did not have business education exposure. This finding is essentially at variance with existing reports that financial literacy has a positive correlation with stock market participation.*

**Keywords:** *Community effect, elite class, financial literacy, initial public offering, ETFs*

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## **I. Introduction**

To what extent are the Ghanaian elite class aware of, and take advantage of the financial market Instruments is the main thesis statement of this paper. Spending your precious time to work for your employer for money in return for services rendered is by itself an investment (time investment). Financial investment is a commitment of funds on financial products such as CDs (fixed deposits), money market instruments, equity (common and preferred shares), debt (bonds), ETFs, and many more in order to take advantage of the financial gains associated with such commitments. An efficient financial market is one that not only provides or incorporates available and timely information into stock prices but also, one that has a larger number of market participants that are aware of and participate in the financial market products and activities.

This study is purported to serve in two-prongs: first is to establish the extent of awareness and knowledge of the investment products available in the Ghanaian stock market. The second purpose of the study has educative and awareness creation agenda. It seeks to create awareness of the investment opportunities

available to Ghanaians and other potential investors within and outside Ghana. The paper covers such areas as available investments avenues in Ghana, the investment tools that aide or facilitate investment, and where potential investors can obtain relevant information on various potential investments?

## II. Literature Review

**Elite Class:** An elite class for the purpose of this study is a class or portion of Ghanaians who attained a certain level of education and are, either actively engaged in the public or private sector employment or looking for employment. The current total population of Ghana is estimated to stand at 34,547,167 as of February 2024. Out of this figure, a nationwide illiteracy stood as high as 30 percent with over 13.0 percent unemployed. Economically active total labour force in Ghana between 2015 and 2022 stood over 14 million (Sasu, 2023). Out of these job-hunting population, 77 percent of Ghanaians are either employed in the formal or informal sectors with meagre incomes to sustain their families. This means that, for Ghanaians to make life worth living, they must resort to other income generating activities (investment) in order to supplement their incomes. However, the question of what to invest in or how to invest, and when to invest remains an economic myth.

### A. The Ghana Stock Exchange (GSE)

Like the New York Stock Exchange (NYSE) in the US, the Ghana Stock Exchange (GSE) is the Ghanaian financial stock market where all securities are traded for financial gains. The Exchange was formed over five decades ago with the main goal of providing efficient security market for the trading of equities (shares) debt (bonds), and exchange traded funds, popularly known as ETFs. To make useful information available to potential users in the Ghanaian stock market, the GSE provides relevant and timely market information including listed companies, licensed and non-licensed brokers/dealers, market statistics, and trading reports. However, studies conducted by Amoah, (2020), indicates that the Ghanaian financial market is in a weak-form of market efficiency, meaning that, though there is constant and timely information (public and private) which is considered to be incorporated in stock prices, the arrival of such information, as it were, is not symmetrical, thereby allowing some few individuals to earn above normal profit.

It's interesting to note that the GSE institution has evolved since its inception in the early 1970s. The GSE currently has in its list 42 equities from 37 publicly traded or listed companies. Below is a table that depicts its mile stones.

**Table 1; Mile Stones, the GSE.**

Date	Event
1969	Commonwealth Financial Co Ltd recommended the formation of GSE based on Pearl Report.
1971	GSE Act enacted following Pearls' report but no trading until 1989.
1971	GSE formerly called the Accra Stock Exchange
1989	GSE was incorporated as a private company under the Ghana code 1969.
1990	GSE was officially launched to commence full operation through an executive instrument no. 20.
1990 Nov. 12	First trading activities commenced on the trading floor.
1993 Sept.	GSE moved to its present location, 5 <sup>th</sup> floor, Cedi Hse. Liberia Rd, Accra.
???	GSE introduced electronic trading.

**Source:** Adapted from the GSE Home Page.

### B. The Ghana Investment and Securities Institute (GSI)

Importantly an efficient financial market does not only thrive on efficient flow of information but also thrives on knowledgeable financial professionals and investors. The Ghana Investment and Securities Institute Ltd. (GSI) was formed in 2015 to complement the efforts of the GSE in promoting an efficient financial market in Ghana. GSI was carved out from four public and regulatory institutions which hold a stake in its business – Security Exchange Commission (SEC), the Ghana Stock Exchange (GSE), Central Securities Depository (CSD) and Ghana Securities Industry Association – and is charged with the sole responsibility of training investment professionals. For almost a decade, GSI offers its applicants a professional certificate that revolves around the following course package:

*Corporate Finance, Corporate Governance, Economics, Ethics, Financial infrastructure, Investment, Legal and Regulatory Framework, Marketing, Pensions, and Risk Management.*

The mission of GISI is to continually enhance the capability and capacity of its security professionals through provision of globally competitive and cutting edge professional education, training and certification for Africa.

**C. State-Owned, Public, and Private Companies in Ghana**

There exist 200 plus companies in Ghana, operating in various sectors of the economy (e.g. Banking, energy, real estate, insurance, mining, telecommunication, and Agro-business/commodity sector) as at February 2023. Investment in each sector is affected by firm, market or industry-wide risk elements. Research in investment indicates a direct relationship between risk and return. Thus, the higher the risk, the higher the return and the reverse is also true. Companies running businesses in these sectors are either state-owned, publicly, or privately owned companies. A market survey of existing companies in Ghana as of February 2023 reported 94 state-owned or partially owned (joint venture) enterprises, 37 publicly traded (registered with GSE) with other private companies.

Below is a list of some companies in each ownership type:

**D. State-Owned Enterprise (SOEs) in Ghana**

*Electricity Company of Ghana (ECG), Volta River Authority (VRA), Ghana Water Company Limited (GWCL), Ghana Ports and Harbor Authority (GPHA), Ghana National Petroleum Corporation (GNPC), Ghana National Gas Company Limited (GNGC), Ghana Airport Company Limited (GACL), Consolidated Bank Ghana Limited (CBG), Bui Power Authority (BPA), Ghana Grid Company Limited (GRIDCo), Ghana petroleum company (GPC), Ghana Tourism Development Limited (GTDL), Ghana Railway Company Limited (GRCL), GIHOC Distilleries, State housing Corporation, Ghana Commercial Bank Limited (GCBL), Agricultural Development Bank Limited (ADBL), Ghana Agro-Food Company Limited, Precious Minerals Marketing Company Limited, and Ghana Cocoa Board.*

**E. Private Companies in Ghana**

As the word “private denotes, the private companies in Ghana are those companies which have not been listed with the GSE and do not offer stocks to the general public through initial public offering (IPO) and/or over the counter (OTC) activities. Of course, private companies play a pivotal role in the economic growth of Ghana. The growth and sustenance of the Ghanaian economy hinges on the growth and development of the privately-owned enterprises. Some examples of the non-public (private) companies in Ghana are as follows:

*Accra Brewery Company, Aerogem Aviation Company, Ashanti Goldfields Corporation, AmalBank, Newmont Golden Ridge Limited, Vivo Energy Ghana, Unibank Ghana Limited, Unilever Ghana, Enterprise Group, Multipro Ltd Ghana, Social security bank, HFC Bank Ghana Ltd, Cal bank, and Ghana Enviromental protection Agency (GEPA).*

**F. The Investment Market Facilitators: Brokerage Firms in Ghana**

Joining the investment plain field is made easy and simple with the presence of middlemen. As a bridge between the exchange and investors, the brokerage community of the Ghanaian stock market plays an important role in connecting investors to issuers of stocks and other financial institutions in the country. However, there’s a disproportionate location of the stock brokers in the country with limited outreach. A search in the GSE website and other online resources for existence and locations of individual brokerage firms in the country indicates that most of the stock brokers who also act as investment consultants or advisors are located in the major towns such as Accra, Kumasi, Cape Coast, and Takoradi, with the majority concentrated in Accra, the nation’s capital. This means existing and potential investors outside these cities would have to travel several miles and at cost to the cities in order to receive investment advice and to transact any investment business. Table 2 contains some brokerage firms and their locations.

**Table 2: Brokerage Firms in Ghana**

Broker Name	Location	Broker Name	Location	Broker Name	Location
Amber Securities Ltd.	Accra	Prudential Stock Brokers Ltd.	Accra	UMB Stock Brokers Ltd.	Accra
Bullion Security Ltd.	Accra	Yorke Properties Ltd	Kumasi	SIC Brokerage Ltd.	Accra
DataBank Brokerage Ltd.	Accra	Serengeti Capital Market Ltd.	Accra	Worldwide Security Ltd.	Accra
EDC Stockbrokers Ltd.	Accra	Liberty Capitals	Accra	SBG Security Ltd.	Accra
Teak Tree Brokerage Ltd.	Accra	SAS Brokerage	Accra	NTHC Security Ltd.	Accra

**Source:** Ghana Stock Exchange (n.d)

### **G. The Investment Climate in Ghana**

Ghana is an ECOWAS community member located at the west coast of the African continent. As an emerging economy which mostly relies on exports of primary commodities –cocoa, gold, oil, and timber - of course, faces some economic challenges which in turn, impact its investment climate. Some of the challenges of the Ghanaian economy, undoubtedly include high government indebtedness, relatively low revenue mobilization, less efficient state-owned enterprises, and above all, corruption (U.S Dept. of State, 2023). The investment climate of Ghana basically, encompasses the financial sector (capital markets & money and banking system), real estate, oil and gas sector, mining sector, insurance, telecommunication, and Agro-business/commodity sector. Commencing with the capital markets and portfolio investment, the private sector growth is significantly impacted by capital (funds) inflow constraints with firms and businesses continually challenged with low capital mobilization in the local market and high interest rates triggered by heavy government borrowing. It's interesting to note that, the capital markets and portfolio investment in Ghana is gradually on a positive trajectory. Taking cognizance of the fact that an efficient capital market thrives on large number of market participants (investors), timely and equitable flow of market information, the Ghanaian financial market opens its doors to foreign investors to buy and sell stocks at the Ghana Stock Exchange. To improve liquidity or flow of capital for investment, the GSE introduced a new trading platform called the Ghana Fixed Income Market (GFIM) in 2015. The GFIM was purposely created to promote secondary trading platform of debt instruments in order to increase capital inflow for individuals and businesses (U.S Dept. of State, 2023).

Additionally, still on its liquidity drive, the Ghana government is making strides to invite Foreign Direct investment (FDI), especially in the agro-processing, mining, and the manufacturing sectors. Conversely, the FDI initiative is being stone-walled by some recognizable factors. In essence, some of these factors include, but not limited to expensive financial services, lack of transparency and stakeholder engagement, unnecessary bureaucracy, under-developed infrastructure, corruption, and unskilled labour force that have high propensity to discourage future investment.

Of course, money and banking system of Ghana has its own story to tell. Banks in Ghana play crucial roles as financial institutions as they are tailored for mobilization of capital for investment. Surprisingly, Ghanaian banks are relatively small in size in terms of market capitalization (asset holdings). This problem was exacerbated by bad monetary policies and reforms. The Central bank of Ghana requirement of commercial banks to hold a minimum of 400 million cedis, (USD 35 million equivalent) resulted in a subsequent drop of Ghanaian banks from 36 to 23 between 2017 and 2019 through closures and mergers (U.S Dept. of State, 2023)..

Despite all these setbacks as identified by review of literature, the Ghanaian financial market provides a promising future for investment and investors. With its valuable commodities - minerals (gold, diamond, and bauxite), cocoa, timber, and oil – political stability coupled with the presence of African Continental Free Trade Area Secretariat (AFCFTAS) hosted by Ghana, the future prospects of the Ghanaian investment environment would be a force to reckon with.

### **H. Investor Protection in Ghana**

The corporate governance Acts of many nations attempt to safeguard investors from management taking undue advantage of them by creating wealth for themselves called conflict of interest. Just as any stock market in the world, buying or selling of stocks in the Ghana Stock Exchange is not like a drive-through shop. To trade in stocks at the GSE, an investor must first open what's called a depository account with a broker. The broker then buys and sells shares on behalf of his or her client on demand. However, how safe is it like to entrust one's money into another person's care called a broker? Just as the corporate governance rules are set to protect the investor from exploitation and conflict of interest, the GSE is operated under the Security and Exchange Commission (SEC) of Ghana. SEC was formed under the Security Industry Act 929 (2016) charged with the responsibility of ensuring fair and equitable operations of the security market. In addition, there exist a council or board of directors which plays a supervisory role of preventing unfair trade practice. The council is empowered to suspend or revoke the license of any security dealer who violates the rules (GSE. n.d).

### **I. The Geography of Stock Market Participation**

Thus far, finance researchers are not too concerned with how much returns investors make, rather their focus is, what makes a good and efficient market. In their book, "Investment," Reilly, (1982) identified the factors that determine a good financial market to include the availability of information regarding prices and

volume for past transactions, liquid market (ability to buy or sell an asset quickly), and market depth (large number of potential buyers and sellers of stock).

What makes potential investors to want to participate in the stock market activities further caught the interest of four professors of the university of Illinois; Jeffrey R. Brown, Zoran Ivkovic, Paul, A. Smith, and Scott Weisbenner. In their research article “The Geography of Stock Market Participation: The Influence of Communities and Local Firms,” published in April 2004, the researchers made importance findings regarding factors that influence potential investors to participate in the stock market. Brown, Ivkovic, & Weisbenner, (2004), established in their pioneer study in this direction, two local area effects – community-ownership effect and proximity to publicly traded firms – as catalysts for the growth of stock market participation. Brown et’ al. (2004) posits that not only are potential investors influenced by community members such as family, relatives, and friends, but are also, influenced by proximity of publicly traded firms to involve in stock market participation. Intriguingly, the study made a robust founding that the presence of publicly-traded firms and share of market value in the U.S equity market within a 50-mile radius, has a positive correlation with equity ownership of individual investors.

But why the equity market participation becomes a relevant study to consider by researchers? The answer is grounded on two main factors. Obviously, one is wealth creation. Mehra and Prescott (1985); and Fama and French, (2002) as cited by Brown, et’ al. (2004), found that individuals who participated in the equity (stock) market, on average accumulated more wealth than those who did not. Second, the rate of stock market participation is important consideration for policy makers. For instance, to encourage stock market participation for individuals and households, public policy makers can make and implement wealth distributional policy of cutting down the tax rate on investors’ total returns (capital gains plus dividends received). This policy tends to not only increase shareholders’ wealth but also, increases equity ownership in the stock market (Brown, et’ al. 2004).

## **J. Financial Literacy and Stock Market Participation**

It’s no gain saying that investors have doubled or quadrupled their wealth through investment in the financial market on equity and debt trading. The question that remains is, is it every individual who knows how to invest, or may want to invest, or in a worse scenario, understand the investment game? Most research works have been done in an attempt to answer these underlying questions. While some studies found that the individual’s wealth status, attitude, and culture are the basic factors that influence how an individual may or may not want to go into investment, other studies found that, specifically, financial literacy has a direct impact on potential investors. Van Rooij, Lusardi, and Alessie, (2007), for instance found that financially knowledgeable individuals are more likely to participate in the stock market (hold stocks) than those without knowledge in personal finance and finance related courses such economics, banking, accounting, and risk management. Awareness of stocks, mutual funds, ETFs and other financial instruments through formal education, household resources, and social interaction play a crucial role in stock market participation (Guiso and Jappelli, 2005; Hong, Kubik & Stein, 2004). The university of Michigan professor, Jon Meerdink who conducted a similar study in 2022, also confirmed that, not only individuals who have been exposed to financial literacy participate in the stock market, they also, have high confidence in investing in more risky stocks (Meerdink, 2022).

Review of literature on same topic under investigation shows that many researchers and academicians took similar interest in the research puzzle. For instance, studies conducted by Hong, Kubik, and Stein, (2004) Georgarakos and Pasini, (2011); Almenberg and Dreber, (2015), and Georgarakos and Pasini (2011) as cited by Luuk, (2018), all in the affirmative that individual characteristics such as age, gender, wealth, risk aversion, and education influence their ability, understanding, and readiness to participate in the stock market. With similar findings, the study of Kaustia, Collin, and Luotonen, (2023) show that at the individual level, wealth, income, and education are highly influential in their stock participation decisions. Surprisingly, risk aversion, varied beliefs, habits, and quantity constraints do not form part of the explanation for stock holdings (Haliassos and Bertaut, (1995).

## **III. Methodology**

Being the first of its kind where there’s absence of recorded secondary data, the study adopted the qualitative approach of interviewing respondents through a series of questionnaire. The sample of respondents constituted a cross-section of Ghanaian adults who had at least bachelor’s degree and make income through business or employment. We investigated the extent to which Ghanaians become aware of, and take advantage of the financial market instruments in the Ghana Stock Exchange. Using the random sampling approach, we targeted a sample of 500 respondents but received 430 valid responses through completed and returned questionnaires and electronic respondents, with the electronic means attracting the most respondents across the country. Study participants included literate Ghanaians who had indicated in the survey that they have attained

at least bachelor’s degree in areas of accounting, finance, economics, banking, engineering, education and medicine/nursing. The study targeted this group of participants because of their education and exposure to income through business and/or employment, and their ability to understand and participate in the stock market. Thirty-five questionnaire items were administered to respondents which centered on the following key knowledge areas of the Ghanaian financial market:

- i) Awareness of GSE
- ii) Trading activities
- iii) GSE products – ETFs, shares, bonds, etc.
- iv) Own stocks
- v) Companies registered under GSE
- vi) Own at least current/checking, saving A/Cs

**A. Participant Demographic**

Interestingly, this study did not discriminate against participants’ gender in collecting data as gender plays little to no role in participants’ stock market participation in Ghana. The level of education and professional fields of endeavors are tabulated in panels **A** and **B**. In table 3, participants indicated they had PhDs, doctorate degrees, MPhils, master’s degrees, HNDs, and bachelor’s degrees. Other participants indicate “None” meaning they had some form of education and literacy that could either be diploma, certificate, or high school graduates who make income through business or employment or both. Table 4 indicates participants who specialized in certain educational fields of study. These participant categories included those who specialized in accounting and finance, education and nursing, engineering, IT competence, marketing and banking, and technology. A good number of the total sample indicated they had none of the listed fields of specialization.

**Table 3: Level of Education**  
**A: Indicate which of the following is your background?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bachelor’s degree	212	49.3	49.3	49.3
Doctorate (DBA, Jury-doc.)	4	.9	.9	50.2
HND	53	12.3	12.3	62.6
Master’s degree	86	20.0	20.0	82.6
MPhil	30	7.0	7.0	89.5
None	32	7.4	7.4	97.0
PhD	13	3.0	3.0	100.0
Total	430	100.0	100.0	

**Table 4: Professional fields**  
**Area of Specialization**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Accounting or finance	59	13.7	13.7	13.7
Education/Nursing	97	22.6	22.6	36.3
Engineering	31	7.2	7.2	43.5
IT competence	20	4.7	4.7	48.1
Marketing/Banking	56	13.0	13.0	61.2
None of the above	135	31.4	31.4	92.6
Technology	32	7.4	7.4	100.0
Total	430	100.0	100.0	

**Note,** 139 participants out of the 430 sample population who are categorized as “None” or are not identified in any of the specialized field on the table may include high school graduates.

**IV. Analysis of Results**

Literature reviewed in this study indicates Ghanaians have a plethora of investment opportunities to choose from. These investment avenues include, but not limited to the capital (stock) market, money and banking market, real estate market, energy (oil & gas) mining (gold silver , bauxite) insurance, telecommunication, and commodity markets, which forms the bulk of the investment portfolio for mostly the self-employed. However, a survey of 430 participates in this study indicates that, on average, 230 participants became aware of the existence of GSE and its functions, products (trading of stocks, bonds, and ETFs), own stocks, and understand the GSE trading procedures. While the majority of Ghanaians (84%) became aware of

the existence of the Ghana Stock Exchange (GSE) and its operations through formal education, social media or family relatives and friends, a few (16%) of them participate in the stock market (see table 5) through ownership of stocks (28.4%). Of course, the number of investors in a financial markets matters. Theoretically, financial market becomes more efficient when it attracts a large number of investors that not only understand the financial market activities but also fully participate in the stock market through ownership of stocks.

The survey further made a crossed sectional examination of the knowledge and awareness of the GSE and its activities of participants who come from various professional areas such as accounting/finance, marketing/banking, education/nursing, technology, engineering, IT competency. Included in the survey were participants who had formal education but did not specialize in any of the aforementioned fields. Shockingly, while 57 (97%) out of a total of 59 of those who have had formal education in accounting and finance and are aware of the GSE and its stock market activities, only 31% of them participate (own stocks) in the stock market. This finding cast doubt on whether or not financial education (literacy) plays a role in stock market participation as revealed in the literature (see table 4). Previous studies reported that acquisition of financial literacy through the study of accounting, personal finance, economics and other finance related courses increase understanding and participation in the stock market.

On the marketing and banking category of the study, while more than 90% of participants who indicated they had awareness, knowledge of GSE products (62%), more than 50% of this number showed they did not invest or own stocks in the GSE market. The finding of non-ownership of stock seems to cut across all fields of academic study as gathered by this study.

**Table 5:** Awareness and Participation in the GSE

Variable	No. Participants: Yes	Percent	No. of Participants: No	Percent
Awareness of GSE	360	84%	70	16%
Knowledge of GSE Products	222	52%	208	48%
Knowledge of Trading Activities	217	50.5%	213	49.5%
Own stocks	122	28%	308	72%
<b>Total</b>	<b>921</b>	<b>54%</b>	<b>799</b>	<b>46%</b>

**B. Test of Mean Differences**

**Table 6:** ANOVA Test of Differences  
ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GSE_Products_knowledge	Between Groups	1733.933	6	288.989	8.307	.000
	Within Groups	14716.274	423	34.790		
	Total	16450.207	429			
Trading_Activities_knowledge	Between Groups	50.512	6	8.419	4.875	.000
	Within Groups	730.467	423	1.727		
	Total	780.979	429			
GSE_Awareness	Between Groups	41.887	6	6.981	7.354	.000
	Within Groups	401.557	423	.949		
	Total	443.444	429			
4. I own stocks in one of the companies in Ghana.	Between Groups	1.331	6	.222	1.091	.367
	Within Groups	86.055	423	.203		
	Total	87.386	429			

To prove if there's a positive correlation between financial education and stock market awareness and participation as reported in the literature, test of mean differences was conducted employing the analysis of variance (ANOVA) technique. Not surprisingly and in consistent with existing research reports, the test revealed significant differences in how the study participants' gained knowledge about the existence of the Ghana Stock Exchange market, its products, trading activities and participation in the stock market through security ownership. Invariably, there are significant differences between participants groups who specialized in accounting and finance, education and nursing, engineering, IT competence, marketing and banking,

technology, and those without any specialized education. The only exception as revealed by the study is that there was no significant differences in the ownership of financial securities in the Ghanaian financial market. This revelation calls for further investigations to find out if lack of confidence in the Ghanaian financial market and other reasons explain this lack of stock market participation from Ghanaians.

Below is a summary of test results from table C:

- i) *GSE Awareness*; there was a significant difference between study groups pertaining to the awareness of the existence of the Ghana Stock Exchange as a financial market,  $F(6, 423) = 7.354, P = .000$
- ii) *GSE products*; there was a significant difference between study groups pertaining to the awareness of the existence of the Ghana Stock Exchange's investment instruments,  $F(6, 423) = 8.307, P = .000$
- iii) *GSE trading activities*; there was a significant difference between study groups pertaining to stock trading activities in the Ghana Stock Exchange as a financial market,  $F(6, 423) = 4.875, P = .000$
- iv) *Ownership of stocks*; there was no significant difference between study groups pertaining to participates who own investment securities in at least one company registered in GSE.  $F(6, 423) = 1.091, P = .367$

Generally, the study revealed that Ghanaians who had formal education ranging from secondary education to graduate education have had reasonable knowledge and exposure to the existence and operations of the Ghana Stock Exchange. What remains undiscovered by this paper is its inability to establish reasons other than education and awareness (cultural, community effect, geographical or proximity) for the low participation in the stock market by Ghanaians through stock ownership. This paper found that stock brokers in Ghana (see table . . .) who serve as a bridge between existing and potential investors and the stock market (GSE) tend to concentrate only in the two major cities – Kumasi and Accra – thereby putting potential investors in other regions at a disadvantage. Furthermore, proximity to publicly-traded firms provides yet, another hindrance to potential investors in Ghana. For example, publicly-traded companies in the country are mostly cited in the big cities, including Kumasi, Accra, and Takoradi.

Literature reviewed tied equity market participation to two geographic effects – community effect and local firm effect. Whereas community effect plays a role in explaining how the individual is more likely to invest in the stock market simply because a good number of their neighbors (friends and households) hold stocks in one or more companies, the local firm effect explains how the an individual is influenced to buy stocks due to his/her proximity (approximately 50 miles radius) to publicly traded firms in the community. It's conspicuously clear that, the Ghanaian investment environment absolutely lacks these two geographic effects due to the rather concentration of the publicly traded firms in the few big cities in the country. Additionally, it's not the culture of Ghanaians to disclose openly their investment holdings in companies so as to encourage others to take similar steps in owning assets in companies.

## **V. Limitations**

This empirical study, the first of its kind in Ghana, could not be successfully completed without some research, financial, geographical and technological obstacles. Relative to the total Ghanaian population of 33.48 million as of 2022, a sample of 430 participants is theoretically, an acceptable sample but cannot technically be considered a fair sample representation of Ghanaian workers. The small simple size drawn in this study was partly due to participant reachability and cost. We could not reach out physically to the majority of potential participants residing within and without Greater Accra region to other regions in order to increase the sample size. Additionally, the electronic approach to get participants offer their responses to the survey questionnaire performed incredibly well, however, most phone holders had unstable or no internet access to participate in the survey

Furthermore, the study could not make a survey of stock ownership and participation in the Ghana stock market as individuals and households' tax returns fillings are not accessible from the IRS. To conduct a study on whether or not participants own and trade stocks in the stock market, it is essential to scrutinize individual and household tax returns. As in developed nations, information about individuals' and household's stock ownership can be determined through the presence of both dividend income and capital gains in their tax



returns. However, in the Ghanaian financial system, it's almost impossible to access such crucial data for analysis.

## **VI. Conclusion/Recommendations**

This survey was the first of its kind that sought to investigate the extent of awareness, knowledge of the investment products, and to a large extent, participation in the Ghanaian stock market. We made significant findings through both review of literature and electronic survey questionnaires. First, generally, the study revealed that Ghanaians who had formal education ranging from secondary education to graduate education have had reasonable knowledge and exposure to the existence and operations of the Ghana Stock Exchange. Statistically, while 84% of participants indicated they have awareness of the existence of the Ghana Stock Exchange (GSE) and its operations through formal education, social media or family relatives and friends, only 16% participate in the stock market. Ironically, what remains undiscovered by this paper is its inability to establish reasons other than education and awareness (cultural, community effect, geographical or proximity) for the low participation in the stock market by Ghanaians through stock ownership.

Second, we found that proximity to publicly traded firms matters in stock market participation. It does not only influence stock market involvement, it increases stock ownership through community effect on potential investors. We found that the Ghanaian stock market experience low stock ownership and investor participation due to concentration of publicly traded firms in only the few major cities in the country. In the U.S. nearly 92 percent of households have at least one publicly-traded firm headquartered within a 50-mile radius thereby creating awareness and stock market participation whereas in Ghana almost all publicly traded companies are concentrated in the major cities of Accra, Kumasi, Tema, and Takrodi. As a consequence, we further found that stock brokers in Ghana who serve as a bridge between existing and potential investors and the stock market (GSE) and offer investment advice tend to concentrate only in the two major cities – Kumasi and Accra – thereby putting potential investors in other regions at a disadvantage.

Furthermore, we found low number of stock ownership among participants. Consistent with previous reports, we found that significant difference exist between study groups (accounting/finance, education/nursing, IT competence, and engineering) relating to awareness of GSE, its products, and activities. But shockingly, we did not find significant differences in stock ownership between the financial enlightened groups. We found that a good number of Ghanaians who are enlightened in accounting, economics, finance and finance related do not necessarily own stocks. Our ANOVA test did not show any significant difference between groups who had business education including accounting economics and finance and those who did not have business education exposure. This finding is inconsistent with existing reports that financial literacy has a positive correlation with stock market participation.

Based on the finding that on average, 62% of participants who indicated in the survey of their awareness of the existence of the Ghana Stock Exchange (GSE), its products and operations yet only 28% participate in the stock market, we conclude that there's low stock market participation among Ghanaians. Admittedly, what remains undiscovered by this study is our inability to establish reasons other than education and awareness for the low participation in the stock market by Ghanaians through stock ownership. We therefore, recommend further studies to establish other social and psychological reasons other than education and other factors identified in the study

We further recommend financial education and stock market awareness be increased to increase stock market participation. The paper also found one of the obstacles to this study be limited access to more study participants. Based on this, we recommend that future studies draw a large sample from every regions of the nation for fair representation with increased funding in the future. Furthermore, due to the concentration of investment brokers and advisors in only the four big cities limiting public access, we recommend more investment consultancy services to be extended beyond the big cities identified in the study in order to provide equal opportunities to all potential investors.

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