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**Behavioral Drivers of Stock Market Participation: Insights from Ghanaian Investors**

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## **Abstract**

Understanding the complexities of stock market participation in Ghana is crucial for addressing the challenges associated with low participation rates. This study delves into the behavioral factors that influence individuals' decisions to engage in the stock market, aiming to provide actionable insights for policymakers and market participants. One key finding of this research is the significant impact of awareness of the stock market on participation levels. This underscores the importance of educational initiatives aimed at demystifying the stock market and empowering individuals to make informed investment decisions. Thus, the implementation of targeted public education campaigns could play a pivotal role in increasing awareness and understanding of the benefits and opportunities offered by the stock market. Moreover, trust emerged as another crucial determinant of stock market participation. Building trust in the market necessitates transparency, integrity, and effective regulation. Therefore, policymakers and market regulators should prioritize measures to enhance market integrity and investor protection, thereby fostering greater confidence among potential investors. Additionally, the study highlights the role of education in influencing stock market participation. By improving access to financial literacy programs and investment education, individuals from diverse socioeconomic backgrounds can be empowered to engage more actively in the stock market. Lastly, the research identifies herding behavior as a significant factor influencing stock market participation. This suggests the importance of social influences and peer networks in shaping investment decisions. Efforts to promote a positive investment culture and dispel misconceptions about the stock market could help counteract herding behavior and encourage more independent decision-making among investors. In conclusion, this study offers valuable insights into the behavioral drivers of stock market participation in Ghana and provides actionable recommendations for stakeholders. By addressing these factors and fostering a supportive environment for investment, we can work towards promoting broader and more inclusive participation in the stock market, ultimately contributing to the country's economic growth and development.

**Keywords:** Stock Market Participation, Behavioral Factors, Awareness, Trust, Education, Herding Behavior

**JEL Codes:** D14, G02, G11

## **1. INTRODUCTION**

The evolution of stock markets in Africa over the past decade reflects significant changes driven by various factors, including the liberalization of financial sectors, financial innovation, and efforts towards regional integration. Scholars such as Irving (2000), Mensah (2004), and Kumo (2011) have documented these transformations, highlighting the role of policy reforms and institutional initiatives in shaping Africa's capital markets landscape. One notable development in this regard is the establishment of the African Stock Exchanges Association (ASEA) in 1993. ASEA serves as a platform for collaboration among African stock exchanges, aiming to promote the growth and diversification of these markets. By facilitating the participation of both local and foreign investors, ASEA plays a vital role in fostering liquidity, transparency, and efficiency in African stock markets. Furthermore, financial liberalization initiatives have been instrumental in shaping the trajectory of stock market development in Africa. Since the mid-1980s, many African countries have embarked on structural adjustment programs aimed at liberalizing their financial sectors. These programs have often been accompanied by stabilization policies aimed at ensuring macroeconomic stability, including measures to control inflation and reduce budget deficits (Ocampo, 2011). The liberalization of financial markets has led to increased competition, innovation, and access to capital for businesses and investors in Africa. It has also facilitated the emergence of new financial instruments and services, contributing to the deepening and broadening of stock markets across the continent. Moreover, regional integration efforts, such as the creation of regional economic communities and the establishment of common currency zones, have further boosted cross-border investment flows and market integration.

Despite these advancements, challenges remain in Africa's stock market development journey. Issues such as market fragmentation, regulatory and legal frameworks, investor protection, and market transparency need to be addressed to unlock the full potential of African capital markets (Raubenheimer, 2019). Continued efforts towards policy reforms, institutional strengthening, and capacity building will be essential to foster sustainable and inclusive growth in Africa's

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financial markets. In recent years, African countries have placed considerable emphasis on financial sector reforms aimed at liberalizing interest rates, deregulating financial markets, and strengthening banking systems. This concerted effort also extends to the development of securities markets, with particular focus on nurturing the growth of stock markets. Scholars like Oshikoya (2019) have underscored the significance of these reforms in mobilizing savings for productive investments and enhancing overall economic efficiency and productivity. Stock markets play a crucial role in channeling savings towards productive investment opportunities. By providing a platform for companies to raise capital through equity financing, stock markets facilitate the mobilization of domestic resources for investment in various sectors of the economy. This, in turn, contributes to economic growth and development by supporting entrepreneurship, innovation, and job creation (Szabo and Herman, 2012). Moreover, the development of stock markets in Africa serves as a means to diversify sources of capital beyond traditional bank lending. By attracting both domestic and foreign investors, stock markets offer alternative avenues for capital formation that are less reliant on debt financing. This is particularly important for African economies seeking to reduce their reliance on external borrowing and mitigate the risks associated with high debt levels. Furthermore, the growth of stock markets enhances financial intermediation and promotes the efficient allocation of capital within the economy. By providing liquidity and price discovery mechanisms, stock markets facilitate the flow of funds from savers to investors, thereby enhancing the allocation of resources to projects with the highest potential returns (Aduda et al., 2012). The development of stock markets in Africa is integral to the broader goal of promoting sustainable economic growth and development. By fostering an environment conducive to capital formation, investment, and entrepreneurship, African countries can harness the full potential of their financial markets to drive inclusive and resilient economic development. Continued efforts to strengthen regulatory frameworks, enhance market transparency, and promote investor confidence will be essential in realizing this vision (Fung, 2014). The push to promote stock markets in African nations aligns with broader trends in global financial market development. Factors such as technological advancements, financial market deregulation, globalization, and the introduction of new financial instruments have spurred increased securitization, liberalization, and integration of financial markets worldwide.

The rapid pace of technological innovation has transformed the landscape of financial markets, enabling greater efficiency, transparency, and accessibility. Advancements in electronic trading platforms, algorithmic trading, and information dissemination have facilitated the participation of a wider range of investors in global financial markets, including those in Africa. Furthermore, the deregulation of financial markets in industrialized countries has created opportunities for capital flows across borders, encouraging the integration of global financial markets. This integration has been facilitated by the emergence of multinational financial institutions, cross-border investment vehicles, and interconnected trading networks. The globalization of financial markets has also led to the proliferation of new financial instruments and investment products, offering investors greater choice and flexibility in managing their portfolios (Davis, 1996). These innovations, ranging from derivatives and exchange-traded funds to structured products and alternative investments, have contributed to the diversification of investment opportunities available to investors in both developed and emerging markets. Moreover, the growing role of institutional investors, such as pension funds and mutual funds, has played a significant role in driving demand for investment opportunities in emerging markets, including Africa. Institutional investors seeking to diversify their portfolios and enhance returns have increasingly turned to emerging markets, recognizing the growth potential and attractive valuations offered by these markets.

In this context, African stock markets are increasingly viewed as attractive investment destinations, offering diversification benefits and opportunities for long-term growth (Osinubi and Amaghionyeodiwe, 2003). As global investors seek to capitalize on emerging market opportunities, African countries are positioning themselves to attract investment by enhancing market infrastructure, improving regulatory frameworks, and promoting transparency and investor protection. The promotion of stock markets in African countries reflects broader trends in global financial market development, driven by technological innovation, financial liberalization, globalization, and the changing preferences of institutional investors. As Africa continues to integrate into the global economy, its stock markets are poised to play an increasingly important role in facilitating capital formation, fostering economic growth, and enhancing financial inclusion across the continent. Harvey (1995) highlights an intriguing aspect of emerging stock markets: while they may exhibit high individual volatility, collectively they offer a risk-adjusted return that surpasses that of developed markets. Additionally, these emerging markets often demonstrate low and negative correlations with more established financial markets, both within and outside their respective regions. Despite these favorable characteristics, participation in African stock markets has not reached desired levels even many years after their establishment. Several factors contribute to this situation.

**Limited Investor Awareness and Education:** Many potential investors in Africa lack sufficient knowledge and understanding of how stock markets function, as well as the potential benefits and risks associated with investing in equities (Osei, 1998). This lack of awareness hampers participation, particularly among retail investors. **Underdeveloped Market Infrastructure:** African stock markets often face challenges related to inadequate market infrastructure, including limited trading systems, inefficient settlement processes, and a lack of custody services. These shortcomings can deter both domestic and foreign investors from participating in these markets. **Weak Regulatory Frameworks:** In some African countries, regulatory frameworks governing stock markets may be insufficiently developed or inadequately enforced (Yartey, 2008). This can lead to concerns about investor protection, market transparency, and the reliability of financial reporting, all of which can undermine investor confidence. **Political and Economic Instability:** Political instability, economic volatility, and governance

issues in certain African countries can create uncertainty and risk for investors. Concerns about currency devaluation, expropriation, and political unrest may discourage both domestic and foreign investors from allocating capital to African stock markets. Lack of Diversification: African stock markets may offer limited diversification opportunities due to their relatively small size and narrow sectoral composition (Allen et al., 2011). This lack of diversification can deter institutional investors, who typically seek a broad range of investment options to manage risk effectively. Addressing these challenges requires concerted efforts from various stakeholders, including governments, regulatory authorities, stock exchanges, financial institutions, and investor advocacy groups. Initiatives to improve investor education and awareness, enhance market infrastructure, strengthen regulatory oversight, and promote political and economic stability can help foster greater participation in African stock markets and unlock their full potential for driving economic growth and development across the continent. The challenges facing African stock exchanges, aside from the Johannesburg Stock Exchange, are significant and multifaceted (Chipeta, 2012). One major obstacle is the limited number of indigenous companies listed on these exchanges. Without a robust pool of domestic companies, the overall market size remains small and less attractive to investors. Additionally, the average size of listed companies tends to be small, further limiting the market's depth and breadth. Low liquidity levels also pose a significant challenge for African stock exchanges. Liquidity, measured by the value of shares traded relative to total market capitalization, is essential for efficient market functioning and investor confidence. The lack of liquidity can deter both domestic and foreign investors, as it may be difficult to buy or sell securities at fair prices without significant price movements.

Furthermore, governance issues, regulatory inefficiencies, and inadequate market infrastructure contribute to the underdevelopment of African stock exchanges (Osinubi and Amaghionyeodiwe, 2003). Weak governance frameworks and regulatory oversight can undermine investor confidence and deter long-term investment. Moreover, insufficient market infrastructure, such as clearing and settlement systems and trading platforms, hinders the smooth operation of exchanges and limits their capacity to attract investors. Addressing these challenges requires concerted efforts from various stakeholders, including governments, regulatory authorities, stock exchanges, and market participants. Policies aimed at promoting indigenous company listings, enhancing market liquidity, strengthening regulatory frameworks, and investing in market infrastructure are crucial for the development of African stock exchanges. Additionally, regional integration initiatives and collaboration among exchanges could help deepen liquidity and expand market opportunities for investors across Africa. The low number of companies listing shares on African stock exchanges contributes to the limited trading activity and market liquidity (Hearn et al., 2010). In many cases, trading may be concentrated in just a handful of stocks, further exacerbating the issue. However, it's important to recognize that participation in financial markets is influenced by a multitude of factors beyond the availability of listed companies. One significant factor is the level of awareness among potential investors regarding the existence of financial markets and the various financial assets traded within them. In many African countries, there may be limited awareness or understanding of stock exchanges and investment opportunities, particularly among retail investors. Without adequate education and outreach efforts to promote financial literacy and awareness, participation in stock markets may remain subdued.

Additionally, investor confidence plays a crucial role in shaping participation in financial markets. Concerns about market transparency, regulatory oversight, and corporate governance standards can deter investors from engaging in stock trading (Cunningham, 2002). Improving transparency, enhancing regulatory frameworks, and strengthening corporate governance practices are essential for building trust and confidence in African stock markets. Furthermore, accessibility and affordability are important considerations for potential investors. Issues such as transaction costs, brokerage fees, and the ease of accessing market information can influence investors' decisions to participate in stock trading. Efforts to reduce barriers to entry, such as lowering transaction costs and improving market infrastructure, can help make financial markets more inclusive and attractive to a broader range of investors. While the limited number of listed companies is a notable challenge for African stock exchanges, addressing broader issues related to investor awareness, confidence, accessibility, and affordability is essential for fostering greater participation and liquidity in these markets.

The factors influencing participation in financial markets are multifaceted and include various elements such as the characteristics of investment vehicles available in the market, the subjective characteristics of individual investors, Vlaev , (2002) and the level of trust in the market and its participants. Additionally, transaction costs play a significant role in shaping investor behavior and market participation. Investors' decisions to participate in financial markets are influenced by the range of investment options available to them and their understanding of these vehicles. The complexity of financial products, as well as investors' perceptions of risk and return associated with these products, can impact their willingness to invest. Furthermore, individual investors' subjective characteristics, including their risk preferences, investment goals, and level of financial literacy, shape their investment decisions. Investors with higher risk tolerance and greater financial knowledge may be more inclined to participate in stock markets compared to those who are more risk-averse or less familiar with financial instruments. Trust in the market and its participants is another critical factor influencing investor confidence and participation (Kwon and Suh, 2004). Transparency, regulatory oversight, and corporate governance standards play a crucial role in building trust and credibility in financial markets. Investors are more likely to participate in markets where they perceive fair treatment and integrity among market participants. Transaction costs, including brokerage fees, taxes, and other expenses associated with buying and selling financial assets, also impact investor participation. High transaction costs can discourage investors, particularly small investors, from engaging in market activities. Lowering transaction costs and

improving market efficiency can help attract a broader base of investors and enhance market liquidity. By improving the level of financial market participation is essential for mobilizing savings, allocating capital efficiently, and fostering economic growth and development. Addressing barriers to entry, enhancing investor education, strengthening regulatory frameworks, and promoting market transparency are essential steps toward achieving greater market participation and driving economic progress (Carayannis and Popescu, 2005). The potential of stock markets to increase savings and investment rates by introducing new financial instruments and facilitating the pooling of savings for large-scale projects is well-documented in economic theory. However, in many African countries, including Ghana, there has been limited progress in realizing this potential. Despite the existence of stock markets, total savings as a percentage of GDP remains relatively low, indicating a gap between theoretical expectations and practical outcomes. In Ghana, for instance, total savings as a percentage of GDP declined from 17 percent in 1960 to just 12 percent in 1995. This trend suggests that traditional financial institutions and investment opportunities continue to dominate the savings behavior of Ghanaians. Even individuals with sufficient income levels to access conventional financial services are more inclined to invest their savings in government securities or other assets, rather than participating in the stock market.

Several factors may contribute to the limited impact of stock markets on savings and investment rates in African countries like Ghana. These factors include a lack of awareness and understanding of stock market instruments among the general population, limited access to financial services, and a preference for safer and more familiar investment options. Additionally, issues related to market liquidity, transparency, and regulatory frameworks may undermine investor confidence and deter participation in stock markets (Lakhani, 2016). Addressing these challenges requires coordinated efforts from policymakers, regulators, financial institutions, and market participants. Initiatives to enhance financial literacy, promote investor education, and improve access to financial services can help broaden participation in stock markets. Strengthening market infrastructure, implementing sound regulatory frameworks, and fostering market transparency are also crucial for building trust and confidence among investors. While the potential of stock markets to mobilize savings and drive investment remains significant, realizing this potential requires concerted efforts to address the barriers to market participation and create an enabling environment for sustainable growth and development.

## **2. LITERATURE REVIEW**

The growth of stock markets in sub-Saharan Africa has been remarkable in recent years, with securities exchanges now established in 23 countries across the region. A significant milestone in this development was the inauguration of Africa's first regional exchange, the Bourse Régionale des Valeurs Mobilières (BRVM), in Abidjan, Ivory Coast, in 1998. The BRVM replaced the preexisting Ivory Coast Exchange and created a single exchange that serves the French-speaking members of the West African Economic and Monetary Union. The establishment of the BRVM marked a pivotal moment in regional financial integration, providing a platform for countries within the union to access capital markets more efficiently and effectively. The participating countries, including Benin, Burkina Faso, Cote d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo, benefit from a shared regulatory framework and standardized trading practices, fostering cross-border investment and enhancing market liquidity. Moreover, the growth of stock markets in sub-Saharan Africa shows no signs of slowing down. Plans are underway for the establishment of new exchanges in countries such as Gambia and Sierra Leone, Kandeh, (1996) further expanding the reach and accessibility of capital markets across the region. These initiatives reflect a growing recognition of the importance of capital market development in supporting economic growth, facilitating investment, and mobilizing domestic savings for productive purposes.

The expansion of stock markets in sub-Saharan Africa represents a positive step towards enhancing financial inclusion, promoting investment opportunities, and driving economic development. By providing a platform for companies to raise capital, enabling individuals to invest in financial assets, and facilitating the efficient allocation of resources, stock markets play a crucial role in fostering sustainable growth and prosperity across the region. Despite efforts to promote financial markets, particularly stock markets, in Africa, many exchanges across the continent are relatively new, with exceptions such as those in Kenya (established in 1954) and Nigeria (established in 1960). Older exchanges in countries like South Africa, Egypt, Morocco, and Zimbabwe also exist. However, despite their presence, these stock markets still face challenges in terms of market capitalization and local household participation. For example, in Ghana, although there has been an increase in the market capitalization of the Ghana Stock Exchange, data from the Ghana Living Standard Survey Report (2009) indicates that the number of Ghanaians who actively hold stocks remains very low. Research by Egu (2009) further highlights that in Ghana, government and institutional shareholders dominate the equity market, indicating limited participation from individual investors.

The low level of household participation in stock markets across Africa suggests that there are barriers preventing ordinary citizens from accessing and investing in these markets. These barriers may include limited awareness about financial markets and investment opportunities, lack of trust in the integrity of the markets, high transaction costs, and inadequate investor education and protection mechanisms. Addressing these barriers and promoting greater household participation in stock markets is crucial for unlocking the potential of these markets to mobilize domestic savings, facilitate investment, and drive economic growth. It requires concerted efforts from policymakers, regulators, financial institutions, and market participants to improve market infrastructure, enhance investor confidence, and promote financial literacy and inclusion initiatives. By creating an enabling environment for broader participation, African stock markets can play a more significant

role in fostering inclusive economic development and prosperity. Indeed, the level of participation in financial markets is influenced by various factors, including the characteristics of the financial assets available for trading and the profile of potential investors. Research by Bhanumurthy et al., (2018) and Herrera (2005) highlights how these factors shape participation patterns. For example, in financial markets where short-term, highly liquid, and safe instruments are traded, participation tends to be higher. Investors, particularly those who are risk-averse and seeking short-term investment opportunities, are more likely to participate actively in such markets. This is because these markets offer the liquidity and safety that appeal to cautious investors looking to park their funds temporarily. Conversely, in markets where the available financial assets are complex, illiquid, or perceived as risky, participation may be limited. Investors may be hesitant to commit their funds to assets they do not fully understand or that carry significant risk. Additionally, factors such as inadequate investor education, lack of trust in market integrity, and high transaction costs can further deter participation. To promote greater participation in financial markets, it is essential to develop a diverse range of financial instruments that cater to the varying risk preferences and investment horizons of potential investors. Additionally, efforts to enhance financial literacy, improve market transparency and efficiency, and reduce transaction costs can help build investor confidence and encourage broader participation. By creating an environment that fosters trust, provides accessible information, and offers attractive investment opportunities, financial markets can attract a wider pool of investors and play a more significant role in mobilizing savings, facilitating investment, and driving economic growth.

The study by Shum and Faig (2006) underscores the significance of saving motives in determining household participation in the stock market. Their findings suggest that households are more likely to invest in stocks when their saving goals align with specific expenditure needs, such as education bills, household purchases, and retirement planning. Conversely, saving for investment in private business ventures tends to reduce the likelihood of stock ownership. This highlights the importance of understanding the saving behavior and motives of households within a particular region where a stock market operates. If the saving culture in that region is underdeveloped or if households prioritize saving for purposes unrelated to traditional investment vehicles like stocks, then participation in the stock market is likely to be limited. In regions where saving for education, household expenses, and retirement planning are prevalent motives, there may be a higher propensity for households to invest in stocks as a means of achieving these financial goals. Therefore, efforts to promote stock market participation should consider strategies to enhance financial literacy, cultivate a culture of saving for specific expenditure needs, and communicate the benefits of long-term investing in stocks for wealth accumulation and retirement planning. Understanding the saving motives of households can inform policymakers and market regulators in designing targeted interventions to promote stock market participation and deepen financial inclusion. By addressing the underlying factors that influence saving behavior, such as financial education, economic stability, and access to investment opportunities, countries can foster a more robust and inclusive financial market ecosystem.

The works of Merton (1973), Ghysels et al., (2004), Leon (2005), as well as Raputsoane (2009), collectively underscore the fundamental principle guiding investor behavior: the pursuit of the highest possible return for a given level of risk. These studies highlight investors' inherent risk aversion and their tendency to assess and compare the risk-return profiles of various financial assets before making investment decisions. Central to this principle is the concept of the risk-return trade-off, wherein investors expect to be compensated with higher returns for undertaking greater levels of risk. Conversely, they anticipate lower returns for investments perceived to carry lower levels of risk. This fundamental relationship between risk and return serves as a guiding principle for investors as they navigate financial markets. In the context of stock market participation, this principle implies that individuals are more likely to invest in stocks when they perceive the potential returns to outweigh the associated risks. Consequently, factors that influence the risk-return trade-off, such as market volatility, economic stability, and the performance of other investment alternatives, can significantly impact investors' decisions to participate in the stock market. Understanding the dynamics of the risk-return trade-off is crucial for policymakers, financial institutions, and market participants alike. By providing investors with transparent information about the risk characteristics and potential returns of different assets, policymakers can foster confidence in financial markets and encourage broader participation.

Moreover, financial education initiatives that enhance investors' understanding of risk management strategies, portfolio diversification, and investment fundamentals can empower individuals to make informed investment decisions aligned with their risk preferences and financial goals. Ultimately, promoting an environment conducive to rational risk-taking behavior can contribute to the overall efficiency and stability of financial markets. The assertion that investors are inclined to purchase shares when they anticipate receiving an optimal or above-average return for a given level of risk, and conversely, to sell shares when such expectations diminish, is supported by research conducted by Bollerslev et al., (1988) Chou (1988), and Harvey (1989). According to their findings, investors' perceptions of risk-return trade-offs play a pivotal role in shaping their investment decisions in the stock market. However, it is important to note that not all studies have unanimously corroborated the existence or direction of the relationship between risk and return. Some authors, such as Campbell (1987), Turner, as well as Glosten et al., (1993), have challenged this conventional wisdom by documenting a negative and statistically significant relationship between risk and return in the stock market. These dissenting views underscore the complexity of investor behavior and the multifaceted nature of risk-return dynamics in financial markets. Factors such as market sentiment, information asymmetry, and behavioral biases can contribute to variations in investors' perceptions of risk and return, leading to divergent investment decisions. The existence of conflicting findings highlights the need for

further research to elucidate the nuanced relationship between risk and return in different market conditions and across various asset classes. Understanding the underlying mechanisms driving investor behavior can provide valuable insights for policymakers, market regulators, and financial practitioners seeking to promote market efficiency, investor protection, and overall financial stability. The debate surrounding the risk-return relationship in financial markets continues to be a topic of interest among researchers. While some studies, such as those by French et al., (1987) and Baillie and DeGenmaro (1990), have failed to find a statistically significant risk-return trade-off, others have provided evidence to the contrary. Scruggs (1998) and more recent studies by Guo and Whitelaw (2006), Guo (2002), Ghysels et al., (2004), as well as Leon et al., (2005), and Raputsoane (2009) have reinstated the notion of a positive and statistically significant risk-return relationship. These findings suggest that investors are indeed influenced by perceptions of risk when making investment decisions, with higher expected returns typically associated with higher levels of risk.

The divergence in findings across different studies underscores the complexity of the risk-return dynamics in financial markets. Factors such as market conditions, investor sentiment, and the availability of information can all influence the perceived relationship between risk and return. As such, ongoing research in this area is crucial for gaining a deeper understanding of investor behavior and market efficiency. By elucidating the nuances of the risk-return relationship, researchers can provide valuable insights for investors, policymakers, and market participants, ultimately contributing to the development of more effective investment strategies and regulatory frameworks.

Guiso and Japelli (2005) argue that investors' participation in the stock market is closely linked to their awareness of the market's existence, the assets traded within it, and the characteristics of those assets. They emphasize that investors can only accurately assess the risk associated with financial assets if the issuer provides the necessary information, and if investors have easy access to this information. Their findings suggest a positive relationship between awareness and stock market participation, indicating that investors are more likely to invest in stocks when they are well-informed about the market and its offerings. This highlights the importance of investor education and the dissemination of information by market participants. By improving awareness and providing transparent information, issuers and market authorities can enhance investor confidence and encourage greater participation in the stock market. This, in turn, can contribute to the growth and development of financial markets by attracting a broader base of investors and increasing liquidity.

Guiso and Japelli's research underscores the significance of awareness and information transparency in shaping investor behavior and market dynamics. Their findings have implications for market regulators, policymakers, and financial institutions seeking to promote investor participation and market efficiency. Investors' decision to participate in stock markets is influenced not only by their awareness and understanding of the market but also by the costs associated with entering the market. Vissing-Jorgensen (2002) and Guiso et al. (2002) highlight the role of these costs in shaping investor behavior. Haliassos and Bertaut (1997), Polkovnichenko (2001), and Haliassos and Michaelides (2003) identify various components of the cost of entering the stock market, including the direct costs of acquiring information about assets. These costs can include fees for research reports, investment advice, and other informational resources that investors may need to make informed decisions. In addition to information-related costs, investors also face other transaction costs that can impact their decision to participate in the stock market. Paiella (2001) discusses these costs, which may include brokerage fees, taxes on transactions, and other expenses associated with buying and selling stocks. Taken together, these costs contribute to the overall decision-making process for investors, balancing the perceived benefits of investing in the stock market against the costs involved. Market authorities and financial institutions may seek to reduce these barriers to entry by providing more accessible and affordable information resources, lowering transaction costs, and implementing policies to encourage greater investor participation. By addressing these factors, they can help create a more inclusive and efficient stock market environment.

Shum and Faig (2006) highlight the importance of liquidity preferences in shaping investor behavior in financial markets. Investors with varying liquidity needs will seek out assets that align with their investment time horizons and risk preferences. For example, an investor who prioritizes the preservation of capital and short-term liquidity may opt for money market securities or money market mutual funds, which offer relatively low risk and quick access to funds. On the other hand, investors with a longer investment horizon and a tolerance for greater risk may turn to capital markets such as the stock market. Investing in stocks allows investors to participate in the potential growth of companies over time, with the expectation of earning higher returns compared to safer but lower-yielding assets like money market instruments. Saunders and Cornett (2008) further emphasize that investors who are willing and able to invest for longer periods typically favor capital markets like the stock market. By allocating their funds to stocks, these investors aim to achieve higher returns over the long term, capitalizing on the growth potential of businesses and the overall economy. Understanding investors' liquidity preferences is crucial for financial market participants, including regulators, issuers, and investment advisors. By offering a range of investment options that cater to different liquidity needs and risk profiles, market participants can attract a broader base of investors and promote overall market efficiency and stability. Zhang (2010) highlights another important factor influencing investor participation in financial markets: the timing of cash flows. Investors may have varying preferences regarding the timing of returns on their investments. Some investors may prefer to receive periodic cash flows over time, while others may be willing to wait until maturity to receive a single lump-sum payment. The preference for receiving cash flows can affect investment decisions and participation in different types of financial assets. For example, investors seeking regular income streams may be drawn to dividend-paying stocks or fixed-income securities that offer periodic interest

payments. On the other hand, investors with a longer investment horizon and a focus on capital appreciation may be more inclined to invest in growth stocks or long-term bonds with higher potential returns upon maturity. Understanding investors' preferences regarding cash flow timing is essential for designing investment products and strategies that meet their needs. By offering a variety of investment options with different cash flow characteristics, financial institutions and market participants can attract a broader range of investors and enhance overall market liquidity and efficiency. Indeed, individual and household participation in the stock market is influenced by a multitude of factors beyond financial considerations alone. Behavioral factors play a significant role in shaping investment decisions and attitudes toward the stock market. For instance, research suggests that individuals with higher levels of intelligence may be more likely to engage in stock market participation (Christelis et al., 2007). Similarly, the amount of trust an individual has in the stock market and its participants can impact their willingness to invest (Guiso et al., 2005). Education also plays a crucial role in stock market participation. Individuals with higher levels of education are often more financially literate and better equipped to make informed investment decisions (Guiso et al., 2004). Financial literacy, in particular, has been identified as a key determinant of stock market participation, as individuals with greater financial knowledge may feel more confident navigating the complexities of the market (Van Rooij et al., 2007). Age is another important factor influencing stock market participation. Younger individuals may be more willing to take on risk and invest in equities, while older individuals nearing retirement may prefer safer, income-generating assets (Bertaut and Haliassos, 1997; Browning and Crossley, 2001; Ameriks and Zeldes, 2004). Social influences, such as the behavior of neighbors and peers, can also shape individuals' attitudes toward investing in the stock market (Hong et al., 2004; Brown et al., 2007). By understanding the diverse array of factors that influence stock market participation is essential for policymakers, financial institutions, and educators seeking to promote broader access to financial markets and enhance financial inclusion. By addressing barriers to participation and promoting financial literacy, stakeholders can help empower individuals and households to make informed investment decisions and build wealth over the long term.

### **3. THE MODEL**

The decision to invest in stocks involves not only assessing potential returns but also considering the risks associated with investing in the stock market. Traditional models of stock market participation often focus on the risk-return tradeoff, which posits that investors seek higher returns for taking on greater risk (Ghysels et al., 2004; Leon et al., 2005). However, behavioral factors also play a significant role in shaping investment decisions. For the purpose of estimating the behavioral model of stock market participation in Ghana, the study draws on selected behavioral factors identified in previous research. These factors encompass a range of psychological and sociological influences that can impact investors' decision-making processes. Guiso and Japelli (2005), Gomes and Michaelides (2005), Paiella (2001), Van Rooij et al. (2007), and Guiso et al. (2008), among others, have identified various behavioral factors that may influence stock market participation. These behavioral factors encompass individual characteristics, such as levels of financial literacy, trust in the stock market, and risk preferences, as well as social influences, such as peer behavior and cultural attitudes toward investing. By incorporating these behavioral factors into the analysis, the study aims to provide a more comprehensive understanding of the determinants of stock market participation in Ghana. By considering both traditional economic factors and behavioral influences, the study seeks to capture the complex interplay of rational decision-making and psychological biases in shaping investment decisions. This holistic approach can offer valuable insights for policymakers, financial institutions, and investors seeking to promote greater participation in the stock market and improve financial outcomes for individuals and firms in Ghana.

$PART_i = f(\text{AGE}_i, \text{EDUC}_i, \text{FINLIT}_i, \text{WLENF}_i, \text{AWARE}_i, \text{UNDER}_i, \text{OCCU}_i, \text{ENTRYCOST}_i, \text{TRUST}_i, \text{OBJECTIV}_i, \text{HERD}_i, \text{OTHERFIN}_i, \text{TYPEFIN}_i, \text{PYSASSET}_i)$

The study employs a range of independent variables to examine their impact on the dependent variable, which is participation in the stock market ( $PART_i$ ). The dependent variable is represented as a binary dummy variable, taking the value of 1 for individuals who participate in the stock market and 0 for those who do not. The independent variables include demographic characteristics such as the age of the respondent ( $AGE_i$ ), educational attainment ( $EDUC_i$ ), and occupation ( $OCCU_i$ ). These variables capture the individual's personal attributes and socio-economic background, which may influence their likelihood of participating in the stock market. Financial literacy ( $FINLIT_i$ ) is also considered as an independent variable, reflecting the respondent's level of understanding of financial concepts and instruments, which could affect their ability to engage in stock market activities effectively. The number of years the respondent has worked ( $WLENF_i$ ) provides insight into their level of professional experience, which may influence their familiarity with and confidence in financial markets. Awareness of the stock market ( $AWARE_i$ ) and understanding of the stock market ( $UNDER_i$ ) are included as independent variables to assess the respondent's knowledge and perception of the stock market, which could impact their decision to participate. One-time entry cost ( $ENTRYCOST_i$ ) represents the initial financial barrier to entry into the stock market, which may deter individuals from participating. Trust in other stock market participants ( $TRUST_i$ ) reflects the respondent's confidence in the integrity and reliability of other market participants, which could influence their willingness to invest. Herding behavior ( $HERD_i$ ) captures the tendency of individuals to follow the actions of others in the stock market, which may affect their decision-making process. General financial market participation ( $OTHERFIN_i$ ) and the types of other financial instruments held ( $TYPEFIN_i$ ) provide insights into the respondent's broader financial activities and

investment preferences. Finally, possession of physical assets (PHYSASSETi) represents tangible assets owned by the respondent, which may influence their overall wealth and investment decisions. By analyzing these independent variables in relation to stock market participation, the study aims to identify the key factors shaping individuals' decisions to invest in the stock market and provide insights for policymakers and financial institutions seeking to promote greater participation in financial markets.

**4. RESULTS AND DISCUSSION**

Table 1 presents the gender breakdown of respondents, indicating that males constitute the majority of participants at 71.0%, with a total of 115 individuals. Conversely, females represent 29.0% of the sample, with a total of 47 respondents. This distribution offers valuable insight into the gender representation within the surveyed population, facilitating a deeper understanding of the demographics involved in the study. Understanding the gender distribution among respondents provides valuable insights into the composition of the surveyed population. With males constituting the majority at 71.0%, compared to females at 29.0%, it highlights a gender disparity within the sample. Such demographics can be crucial for interpreting and contextualizing the findings of the study, particularly in understanding any potential gender-related variations in attitudes, behaviors, or outcomes related to stock market participation. Furthermore, exploring the reasons behind such gender imbalances can offer deeper insights into societal, cultural, or economic factors that may influence individuals' decisions to participate in the stock market. This understanding could inform targeted interventions or initiatives aimed at promoting more inclusive participation in financial markets. Additionally, the total sample size of 162 respondents provides a comprehensive dataset for analysis, ensuring robustness and reliability in drawing conclusions about stock market participation patterns. Analyzing gender-specific trends within this dataset could unveil nuanced differences in investment behaviors or preferences, shedding light on areas for further research or policy intervention aimed at fostering greater diversity and inclusivity in financial markets.

**Table 1: Gender of Respondents**

Gender	Frequency	Percent
Female	47	29.0
Male	115	71.0
Total	162	100.0

Table 2 displays the educational distribution among respondents provides important insights into the level of formal education within the surveyed population. With 38.9% of participants reporting educational attainment below a university degree, and 61.1% indicating possession of a university degree or above, it suggests a diverse range of educational backgrounds within the sample. The prevalence of respondents with a university degree or higher underscores the importance of higher education in shaping attitudes and behaviors related to financial decision-making, including stock market participation. Individuals with advanced education levels may possess greater financial literacy, analytical skills, and confidence in navigating complex investment opportunities, potentially influencing their likelihood of engaging in the stock market. Conversely, the presence of respondents with educational levels below a university degree highlights the need for targeted financial education initiatives aimed at improving financial literacy and promoting awareness of investment opportunities among individuals with varying educational backgrounds. Bridging the educational gap in financial knowledge can empower individuals from diverse educational backgrounds to make informed investment decisions and participate more actively in financial markets. By understanding the educational composition of respondents, researchers and policymakers can tailor interventions and educational programs to address the specific needs and preferences of different segments of the population, ultimately fostering greater inclusivity and accessibility in financial markets.

**Table 2: Educational level of respondents**

Educational Level	Frequency	Percent
Below University Degree	63	38.9
University Degree and Above	99	61.1
Total	162	100.0

Table 3 presents the educational distribution among respondents provides important insights into the level of formal education within the surveyed population. With 38.9% of participants reporting educational attainment below a university degree, and 61.1% indicating possession of a university degree or above, it suggests a diverse range of educational backgrounds within the sample. The prevalence of respondents with a university degree or higher underscores the importance of higher education in shaping attitudes and behaviors related to financial decision-making, including stock market participation. Individuals with advanced education levels may possess greater financial literacy, analytical skills, and confidence in navigating complex investment opportunities, potentially influencing their likelihood of engaging in the stock



market. Conversely, the presence of respondents with educational levels below a university degree highlights the need for targeted financial education initiatives aimed at improving financial literacy and promoting awareness of investment opportunities among individuals with varying educational backgrounds. Bridging the educational gap in financial knowledge can empower individuals from diverse educational backgrounds to make informed investment decisions and participate more actively in financial markets. By understanding the educational composition of respondents, researchers and policymakers can tailor interventions and educational programs to address the specific needs and preferences of different segments of the population, ultimately fostering greater inclusivity and accessibility in financial markets.

**Table 3: Financial Literacy of Respondents**

Financial Literacy	Frequency	Percent
Non – Financial Literate	101	62.3
Financial Literate	61	37.7
Total	162	100.0

Table 4 displays, the age distribution among respondents offers valuable insights into the demographic composition of the surveyed population and its implications for financial behavior and preferences. The majority of respondents, comprising 58.0% of the sample, fall within the age bracket of 19-29 years, indicating a significant representation of young adults in the survey. This demographic trend aligns with broader patterns observed in many studies, where younger individuals tend to exhibit distinct financial behaviors and investment preferences compared to older age groups. The substantial presence of young adults in the survey sample underscores the importance of understanding the financial needs, preferences, and challenges faced by this demographic cohort. Younger individuals may have unique financial goals, risk preferences, and levels of financial literacy that influence their decisions regarding investment participation, including engagement in the stock market. As such, targeted financial education initiatives and investment strategies tailored to the needs of young adults may be warranted to promote financial inclusion and literacy among this demographic segment. While the majority of respondents are concentrated in the younger age groups, it is noteworthy that there is still representation from older age cohorts, albeit in smaller proportions. The presence of respondents aged 30 years and above suggests the relevance of examining financial behaviors and investment preferences across different life stages and age brackets. Understanding how financial attitudes and behaviors evolve over the life course can provide valuable insights for designing effective financial education programs and investment interventions that cater to the diverse needs of individuals across various age groups. The age distribution of respondents highlights the importance of considering age-related factors in analyzing financial behavior and investment decisions. By recognizing the distinct characteristics and preferences of different age cohorts, policymakers, financial institutions, and educators can develop targeted strategies to promote financial well-being and investment participation across all age groups.

**Table 4: Age Groupings of Respondents**

Age Groupings	Frequency	Percent
19-29 years	94	58.0
30-39 Years	51	31.5
40-49 Year	12	7.4
50Years and above	5	3.1
Total	162	100.0

Table 5 provides the regression results for the specified variables. Each row corresponds to a different predictor variable, including AGE, EDUC, OCCUP, WLENF, FINLIT, UNDER, AWARE, HERD, OBJECTIV, and SMKTTRUST, along with their respective coefficients, standard errors, Z-scores, p-values, and 95% confidence intervals. Among the variables, AGE shows a coefficient of -0.02848 with a standard error of 0.054591 and a Z-score of -0.52, indicating no significant relationship with the dependent variable. Similarly, EDUC, OCCUP, WLENF, FINLIT, UNDER, and OBJECTIV do not exhibit statistically significant coefficients, as their p-values are greater than the conventional threshold of 0.05. However, AWARE and HERD demonstrate statistically significant coefficients at the 5% level of significance. AWARE has a coefficient of 1.219214 with a Z-score of 2.34, while HERD has a coefficient of 2.075112 with a Z-score of 2.45. This suggests that awareness and herd behavior have a significant impact on the dependent variable, as indicated by their lower p-values. Additionally, SMKTTRUST also shows significance at the 5% level, with a coefficient of 0.859498 and a Z-score of 2.08. This implies that trust in the stock market plays a significant role in influencing the dependent variable. The constant term (\_CONST.) exhibits a coefficient of -3.31341 with a standard error of 1.841647 and a Z-score of -1.8. Although it does not reach conventional significance levels, it indicates a potential intercept when all predictor variables are zero.

Tables 5: Regression Results

PART	Coef.	Std Err.	Z	P> Z	[95% Conf. Interval]	
AGE	-0.02848	0.054591	-0.52	0.602	-0.1354716	0.0785207
EDUC	0.983682	0.109129	0.9	0.367	-0.1155203	0.3122568
OCCUP	-0.59285	0.539743	-1.1	0.272	-0.1650728	0.4650245
WLENF	0.047331	0.065714	0.72	0.471	-0.0814658	0.1761272
FINLIT	0.600111	0.484275	1.24	0.215	-0.3490503	1.549273
UNDER	0.586658	0.465596	1.26	0.208	-0.3258939	1.49921
AWARE	1.219214**	0.521637	2.34	0.019	0.1968249	2.241603
HERD	2.075112**	0.845672	2.45	0.014	0.4176257	3.732597
OBJECTIV	0.468645	0.427341	1.1	0.273	-0.3689282	1.306218
SMKTTTRUST	0.859498**	0.413664	2.08	0.038	0.0487313	1.670264
_CONST.	-3.31341*	1.841647	-1.8	0.072	-6.922976	0.2961472

## 5. CONCLUSIONS

The study aimed to uncover the reasons behind the low participation of investors in Ghana's stock market and propose solutions to address this issue. Drawing data from the diverse Accra Metropolitan Area, which represents various demographics and backgrounds across the country, along with additional research insights, the study yielded several key findings. Firstly, the study recommends that the Ghana Stock Exchange (GSE) take proactive measures to launch an extensive public education campaign aimed at raising awareness about the stock market. Currently, the responsibility for such initiatives often falls on private firms and brokers, who may have limited resources and incentives to conduct widespread educational efforts. By taking a more active role in public education, the GSE can reach a broader audience and increase awareness of the stock market and its benefits among Ghanaians. This heightened awareness is crucial for fostering greater participation in the stock market, as individuals are more likely to engage in investment activities when they have a clear understanding of how the market operates and the potential advantages it offers. By assuming a leadership role in public education initiatives, the GSE can effectively communicate key information about investing in stocks, dispel myths or misconceptions surrounding the stock market, and provide valuable resources to help individuals navigate the investment landscape. Moreover, by leveraging various communication channels and engaging with diverse communities across Ghana, the GSE can ensure that its educational efforts reach a wide audience and resonate with different segments of the population. The study underscores the importance of proactive measures to raise awareness and promote understanding of the stock market among Ghanaians. By empowering individuals with knowledge and information about investing, the GSE can contribute to the growth and development of the stock market while facilitating broader financial inclusion and economic empowerment within the country. The study also highlights the importance of general financial market education as a means to enhance participation in the stock market. It suggests leveraging various media platforms and educational channels to disseminate information about different financial market instruments, their features, benefits, and how individuals can access them. By increasing awareness and understanding of financial markets more broadly, this initiative is expected to positively influence overall market participation. Furthermore, the study recommends collaboration between the Government of Ghana and relevant stakeholders, including the Ghana Education Service, to integrate financial market education into the school curriculum at the senior high school and tertiary levels. By incorporating financial literacy into formal education, students can develop a foundational understanding of financial concepts and investment principles from an early age. This proactive approach not only equips individuals with essential financial knowledge but also instills responsible financial habits and investment behaviors. By embedding financial market education within the educational system, Ghana can nurture a generation of informed and empowered citizens who are equipped to make sound financial decisions and participate actively in the country's financial markets. This strategic investment in financial education is essential for promoting financial inclusion, economic growth, and long-term prosperity, as it empowers individuals to effectively manage their finances, build wealth, and contribute to the development of the nation's economy. Indeed, enhancing awareness of financial markets can serve as a catalyst for increased general financial market activity, thereby stimulating greater participation in the stock market. By educating individuals about the various investment opportunities available and providing insights into the benefits of participating in financial markets, such initiatives can help demystify the investment process and empower individuals to make informed decisions about their financial futures. Moreover, the study underscores the importance of conducting further research to delve deeper into the specific effects of behavioral factors such as trust, entry costs, awareness, and other relevant determinants on stock market participation. By gaining a more nuanced understanding of how these factors influence investor behavior, policymakers and market participants can develop targeted interventions and strategies to address barriers to market participation and promote a more inclusive and dynamic financial ecosystem. Additionally, the study's reliance on primary data due to the unavailability of standard secondary data highlights the need for improved data collection efforts by organizations such as the Ghana Statistical Service. By enhancing the quality and availability of data related to household finances, savings, and investment patterns, future researchers can conduct more robust and comprehensive studies to inform evidence-based policymaking and market

development initiatives. In conclusion, fostering financial literacy, conducting further research on behavioral factors impacting stock market participation, and improving data collection efforts are essential steps toward promoting greater investor engagement and strengthening the stock market ecosystem in Ghana. By addressing these priorities, stakeholders can work collaboratively to build a more vibrant and inclusive financial market that supports economic growth and prosperity for all.

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