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Knowledge and Participation in Capital Market Activities: The Ghanaian Experience

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Abstract

In recent times, increasing public knowledge, and building public confidence and participation in capital market activities have become central to capital market development. Without active and continuous participation, capital markets begin to lack products and liquidity. This study assesses the extent of knowledge about capital market activities, the relationship between this level of knowledge and participation in capital market activities, and the factors that promote capital market knowledge and participation in Ghana. The study uses Chi-square and descriptive analysis to explain the variables under investigation. The results reveal that majority of respondents have little knowledge about capital market activities, and that the level of knowledge about capital market activities significantly and directly relates to capital market participation. Schooling, media publications, social interactions, and one's occupation or profession are all major factors that appear to promote knowledge about capital market activities.

Keywords: Market Knowledge, Market Participation, Capital market, Financial development, Ghana.

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INTRODUCTION

For economists, capital can be divided into economic capital and financial capital. Economic capital includes land, labour, buildings, cars, tractors, equipment, etc. These are used in the production of goods and services for consumption or for other uses. Financial capital, in contrast, includes money, bonds, stocks/equity, options, treasury bills, etc. which are used to purchase economic capital (Webster, 2003). A country may be endowed with all of the major economic resources, but without adequate financial resources, these economic resources risk laying idle and having no positive effect on national development. Ghana, among other sub-Saharan African nations, is rich in certain natural resources (gold, diamond, bauxite, crude oil, etc.), but has to wait for foreign investors with the financial capital needed to harness these resources. The gap between the rich and the poor nations of the world is, in many ways, the efficiency with which the former have used their resources as a result of the efficient financial systems operated by these nations (World Bank, 1989).

The World Bank (1989) concurs that natural resources alone have not determined the wealth of nations. In Great Britain, for example, land and minerals represented 60% of the value of all tangible assets in 1688, but formed only 15% of these assets in 1977. In 1870, Australia, a country rich in natural resources, had twice the per capita income of, relatively natural resource poor, Switzerland. In recent times, Switzerland's per capita income has come to exceed Australia's by more than half. Resource-rich Argentina has also found it difficult to grow in recent years. Over the past three decades, Hong Kong, Japan, the Republic of Korea, China, and Singapore have been ranked among countries with the world's highest per capita income growth rate despite their relatively poor resource endowments. It thus seems natural to ask, what is it that is underpinning the rapid rate of development of countries which are less endowed with natural resources. As noted above, this trend and the rich nation-poor nation gap can be traced to the efficiency with which rich nations have accessed their economic capital via their financial capital.

Many proponents of economic development, including Chandavarkar (1992), Goldsmith (1969), and Gerschenkron (1962), are of the view that a well-developed financial system is a catalyst for economic growth and development. Such a system ensures the flow of funds from surplus spending units (those who spend less than their incomes) to deficit spending units (those who spend more than their incomes – households, businesses, investors and governments) in society. These different economic units are brought together through the financial systems and financial markets. A capital market is a market in which corporate equity and longer-term debt securities are issued and traded to raise capital for the growth of businesses and economy.

Some studies on the correlation between capital markets development and economic growth, including Garcia & Liu (1999), have shown that countries with well-established capital markets boast greater gross domestic growth than countries without them. This stems from the fact that capital markets enable governments and companies to raise the capital needed for growth, and provide households with investment opportunities that offer the best return rates. Standard models of finance and portfolio choice often assume that prospective investors who have adequate knowledge of financial market activities make rational asset allocation decisions to maximise their welfare in both the short run and the long run (Hamada, Sherris, & Hoek, 2006).

Studies on the determinants of financial markets awareness and participation, including Guiso & Jappelli (2004) and Brown & Taylor (2010), conclude among other things that awareness of stocks, bonds, mutual funds, and investment opportunities has a positive relationship with education, household incomes and wealth, long-term bank relations and social interactions. Unfortunately, despite the importance of the capital market, families in most developing nations are not inclined to buy securities in the capital market to improve their welfare and the market's development. Low market participation in turn negatively affects market liquidity and capitalization, proxies for capital market development (Toloie-Eshlaghy, Maatofi, & Dankoub (2011).

Ghana embraced the idea of establishing a capital market immediately after gaining independence in 1957. The idea didn't come to fruition, however, until 1989 as part of the overall macroeconomic adjustment programmes implemented with support from the World Bank and its affiliate, the International Monetary Fund (IMFF), after years of economic and political instability. The objectives of establishing a capital market were to: maximize government and business financing opportunities, provide investment opportunities for prospective local and foreign investors, contribute to poverty reduction and increases in employment opportunities, and prepare the way for the privatization of state-owned enterprises (www.gse.gh).

Despite the relative successes of the capital market in recent years, the capital market in Ghana is generally underdeveloped and illiquid, with only a few households participating and regular trading concentrated around only a few of the GSE listed securities (Bawumia, Owusu-Danso, & McIntyre, 2008; Agyeman, 2010). Given the anticipated roles of capital markets in the economic growth and development of Ghana, this study attempts to empirically investigate the level of knowledge and participation in capital market activities and the factors that influence participation (investment in capital market securities) and nonparticipation in capital market activities. This paper aims to positively influence the decisions of policy makers, market regulators, managers and operators of the market so as to promote its development for the long term benefits of the nation.

LITERATURE REVIEW

The Role of Finance and Capital Markets in Economic Development

Though there seems to be disagreement among development economists about the direction of causality between economic growth and financial development, and the best institutional and policy framework for financial development, economists agree that financial development promotes economic growth and development in the long run (Chandavarkar, 1992). Information asymmetry and the complex nature of the structures of an economy lead to information and transaction costs in financial markets and financial markets and institutions reduce these costs through trading, hedging and the pooling of risk.

The development hypothesis view of finance, which evolved from the works of Goldsmith (1969), Gerschenkron (1962), and Patrick (1966), suggests that in the early stages of economic development, governments should oversee the development of the financial sector by building institutions, determining interest rates, and directing credit allocation and policies. In other words, governments must build institutions well in advance of demand for their services and put intervention policies in place to regulate the activities of financial institutions and markets so that finance becomes a conduit for real sector development. This is also known as the supply-leading hypothesis view of financial development.

Other leading economists like Robinson (1952), and Levine (1997) support a demand-following hypothesis view of finance. This hypothesis suggests that financial development springs from the need for financial services by deficit spending units or business organisations looking to take advantage of investment opportunities as the real sector develops. In this view, the managers of an economy must ensure that the financial sector is developed over time to meet society's need for financial resources that in turn enable the taking advantage of investment opportunities that spring out of economic growth.

Pierre-Guillaume & Weill (2010) write that financial intermediaries' development, except financial depth, is generally associated with greater efficiency. They have found, however, that this relationship is conditional on the level of economic development. Hassan, Kabir, Benito, & Yu (2011) also cite a positive relationship between financial development and economic growth in developing countries.

In addition to disagreements about the direction of causality between financial development and economic growth and development, development economists disagree about the relationship between the financial structure of a country and economic growth. That is, whether it is the development of the banking sector or the development of capital markets that holds the key to economic growth and development.

Carlin & Mayer (2003) contend that there is a strong relationship between the structure of financial systems operated by countries, whether these are bank-based financial systems or a market-based financial systems, and economic growth. According to the World Bank (2002), at the end of the 19th century German economists were of the view that the German bank-based financial system had helped Germany to overtake the United Kingdom as an industrial power. Throughout the 20th century this debate has expanded to the United States and Japan. The conclusion reached to date suggests that the overall development of the financial system is indeed key to economic development, and that the role played here by individual financial sectors cannot be downplayed.

In addition to economic theory, researchers examining the role of capital markets in economic growth and development have reported a range of findings. Kadkhodaii (2000), (in Toloie-Eshlaghy, et al., 2011) writes that the growth of capital markets has helped to curb inflation, reduced unemployment, and provided a foundation for job creation through the growth of economic activities financed by the capital market. Garretsen, Lensink and Sterken, (2004), (in Brasoveanu, Dragota, Catarama, & Semenescu, 2008), report a causal relationship between economic growth and financial markets development. Here, a 1% increase in economic growth means a 0.4% increase in market capitalization/GDP ratio. Garcia & Liu (1999) support a significant correlation between economic growth and capital market development.

Osinubi (2000) cites the work of Alile (1997), and reports that the overall growth of an economy depends on how efficiently the stock market performs the allocative functions of capital. As the stock market mobilizes savings, concurrently, it allocates a larger proportion of it to the firms with relatively high rates of returns on investment and low levels of investment risk. As economies develop, more funds are needed to meet the rapid expansion. The stock market, therefore, serves as a conduit for the mobilization and allocation of savings among competing uses which are critical to the growth and development of the economy.

All seem to suggest that a well-functioning financial market, and for that matter the capital market, based on an efficient regulatory system, will accelerate economic growth.

Financial Literacy and Financial Market Participation

Standard models of finance and portfolio choice often assume that prospective investors have adequate knowledge about financial market activities and make rational asset allocation decisions to maximise their welfare in both the short and long term (Hamada, Sherris, & Hoek, 2006). Studies on determinants of financial market awareness and participation including Guiso & Jappelli (2004) conclude, among other things, that awareness of stocks, bonds, mutual funds, and investment opportunities in financial instruments has a positive relationship with education, household incomes and wealth, long-term bank relations and social interactions. On the implications of a lack of financial literacy on the financial decisions of prospective investors, Bernheim, Garrett, & Maki (2001), and Bernheim & Garrett (2003) (in Rooij, Lusardi & Alessie, 2007) conclude that those who were exposed to financial education in high school or in the workplace save more. Since savings lead to investment, it presupposes that, other things being equal, knowledge about financial market activities will lead to investments in financial assets.

Financial literacy enables individuals to save money towards their retirement and to earn income during their retirement periods. As investors invest in financial assets they increase their future wealth. At such a time that they are unable to work to earn regular incomes, the incomes from the financial assets serve as substitutes and reduce old age poverty. Lusardi & Mitchell (2008) write that those who are more financially literate are more likely to plan for retirement and as a result they accumulate more wealth. Despite this, Guiso & Jappelli (2008), Kimball & Shumway (2007), Lusardi & Mitchell (2006, 2007), and Lusardi & Tufano (2009) (in Calcagno & Monticone, 2011) confirm that consumer knowledge about basic financial principles and products is scarce and may not be sufficient to guarantee that households make sound financial decisions. Financially illiterate households are, for example, more prone to a lack of retirement planning, portfolio under-diversification, and excessive indebtedness.

Clark, d'Ambrosio, McDermed, & Sawant (2002) observe that the need for financial education to improve financial literacy was a recent and important policy issue facing the United States of America. Federal Reserve Chairman, Alan Greenspan (2002), commented that helping Americans understand basic concepts about budgeting and financial markets through financial education programmes will enable Americans to make more appropriate short and long-term saving decisions.

Rooij, *et al.* (2007) supports the view that knowledge about financial markets is important for household behaviour and capital market participation. In their paper on financial literacy and stock market participation, they find that a lack of understanding of economics and finance is a significant deterrent to stocks ownership. They cite the work of Cocco, Gomez & Maenhout (2005) who show that welfare loss from non-participation in the stock market can be sizable thus implying that the role of financial literacy should not be underestimated.

Brown, Ivkovic, Smith, & Weisbenner (2008) and Brown & Taylor (2010) establish a causal relation between an individual's decision to own stocks and the average stock market participation of the individual's community. They note that word-of-mouth communication has a strong effect on market participation in sociable communities. Thus, an individual's community members who invest in stocks can influence that individual's participation in the stock market. Individuals may, in other words, find it easier to learn how to buy stocks, or open a mutual fund or brokerage account by talking to their friends and relatives than through other mechanisms. This, although an informal form of education suggests that effective educational programmes, other things being equal, will promote stock market participation.

According to the peer-effects theory, the impact of individuals who interact with their neighbours and attend church (sociability) on stock market participation is stronger in states where stock markets participation rates are higher. Thus, any "social" investor finds the market more attractive to participate in when more of his peers participate in the market (Hong, Kubik, & Stein, 2004).

One may argue, however, that low financial literacy does not necessarily imply that households are bound to make poor financial decisions given the availability of financial advisers who can make appropriate investment decisions on their behalf. Alternatively, word-of-mouth education offered by acquaintances through social interactions may support rational investment decisions. As long as households can resort to the advice of experts and peers, external financial advice may act as a substitute for learning by one's self. It is also important to note that financial advice is also sought and required by knowledgeable investors, not only financially illiterate prospective investors.

Financial advisers themselves operate in imperfect financial markets and the fact that qualified investment advisers are available does not necessarily translate into high-quality decision-making on the part of an investor. Although not always the case, a financially literate individual has a better chance than a financially illiterate individual of discerning between a good investment and a bad investment. Inderst & Ottaviani (2009) add that the advice offered by financial advisers can be affected by conflicts of interest. When financial intermediaries are at the same time acting as advisers and selling financial products, they may sell products that do not match customers' needs. For Carlin (2009), what is of greater concern is the fact that investor ignorance may be exploited in retail financial markets as a source of market power by firms that increase the complexity of their financial products for strategic reasons.

Calcagno & Monticone (2011) further write that as financially literate investors have a better understanding of financial products and concepts, one might expect them to have an easier access to financial markets and this in turn suggests that they may have a lower need for financial advisers and hence lower cost of investing in financial market instruments. It is important here to reiterate that educating the public on the welfare implications of capital market participation does not necessarily have to be through formal means of education, but can also be through non-formal means such as word-of-mouth. In spite of the education on the benefits of investing in financial assets and the availability of financial assets, inculcating the culture of saving in individuals from infancy is key to whipping up individuals' interest in financial instruments.

The Capital Market in Ghana

The idea of establishing a stock exchange to kick-start capital market activities in Ghana dates back to 1961. This proposal did not, however, come to fruition until 1989 due to the country's political instability. In spite of the difficulties that surrounded its establishment, successive governments have acknowledged its importance given that a well-functioning capital market was seen as a catalyst for accelerating Ghana's economic growth and development. As noted by Sowa (2003), after a woeful performance in the 1980's, Ghana liberalised its financial system under the Financial Sector Adjustment Programme (FINSAP) as part of its overall 1988 macroeconomic adjustment programme (Economic Recovery Programme). This was done with the support of the World Bank and its affiliate, International Monetary Fund (IMF).

In February 1989 a ten member national committee, under the Chairmanship of Dr. G.K. Agama, the then Governor of the Bank of Ghana, was set up by the federal government. The work of the committee was to consolidate all previous works connected to the Ghana Stock Exchange project and to fashion modalities towards the actual establishment of the Exchange. The work of the committee led to the establishment of the Stock Exchange in July 1989 as a private company limited by guarantee under the Companies Code of 1963. It was given recognition as an authorized Stock Exchange under the Stock Exchange Act of 1971 (Act 384) in October 1990. The Council of the Exchange was inaugurated on November 12, 1990 and trading commenced on its floor the same day. The Exchange changed its status to a public company limited by guarantee in April 1994 (www.gse.com.gh). The objectives the Exchange include:

- Becoming a relevant, significant and efficient vehicle for mobilizing and allocating long-term capital for Ghana's economic growth and development;
- Providing the facilities and framework to the public for the purchase and sale of bonds, stocks, shares and other securities;
- Controlling the granting of quotations on the securities market with respect to bonds, shares and other securities of any company, corporation, government, municipality, local authority or other corporate body;
- Regulating the dealings of members with their clients and with other members;
- Co-ordinating the stock dealing activities of members and facilitating the exchange of information including prices of securities listed on the Exchange for their mutual advantages and benefit of their clients; and
- Co-operating with associations of stockbrokers and stock exchanges in other countries to obtain and make available to members information and facilities likely to be useful to them or to their clients.

Despite small market size, low market liquidity, and low market participation by the public, the capital market in Ghana was adjudged as the world's best performing market at the end of 2004 with a year return of 144 per cent in US dollar terms compared with a 30 per cent return by Morgan Stanley Capital International Global Index (Databank Group, 2004). The capital market in Ghana began with eleven (11) listed companies and three (3) licensed dealing members (LDMs). As of November 2010, the market boasted sixteen (16) LDMs and thirty-four (34) listed companies with a market capitalization of GH¢ 19,868 million (Daily Graphic, 2010). After the official listing of Tullow Oil PLC on the exchange on Wednesday July 27, 2011, the GSE was reported to be the third largest capital market in Sub-Saharan Africa, after South Africa and Nigeria, (Seidu, 2011).

METHOD

This study is both quantitative and qualitative in nature. This study is based in Accra, Ghana, where most capital market activities are concentrated. It uses primary data obtained through questionnaires for analysis. Questionnaires are the most commonly used instrument in gathering and measuring qualitative data because they present the same questions to all respondents thereby fostering a comparable basis for assessment. A total of three hundred and four (304) questionnaires, drawn from various segments of the literate and working Ghanaian population (teachers, administrators, student-workers, petty traders, and professionals in various sectors of the economy), were analysed. In reference to the work of Sandelowski (1996), Badu-Nyarko (2011) notes that the adequacy of sample size in qualitative research is relative. A sample size of ten (10) may be judged adequate for certain homogenous populations, while in others contexts, a sample size of ten (10) would be too small to achieve maximum variation of a complex.

Purposive and convenience non-probability sampling methods were used to select respondents for the study. Researchers gave the questionnaires to individuals who were within the categories of respondents sought and were willing to answer the questionnaires. These methods were chosen because they are convenient and less costly as they target respondents who can provide relevant information that will help address the issues under consideration (Trochim, 2006). This method of sampling is also used because the population is too large to include every individual in the study.

In an effort to refine the questions so as to improve respondents' understanding, fifty questionnaires were initially distributed to selected literate individuals for pre-testing of the questionnaire. Their suggestions were incorporated into the final questionnaires which was then distributed and used for analysis. The major ethical issues considered in the study were the consent and confidentiality of respondents' answers. The data was analysed using Chi-square (χ^2) and descriptive statistics including cross tabulation, frequency distribution, percentages, and tables (Key, 1997). The responses were coded and analysed using the Statistical Package for Social Sciences (SPSS) software, Version 19.

FINDINGS AND DISCUSSIONS

Knowledge about Capital Market Activities among Respondents

Table 1 outlines respondents' knowledge of capital market activities. Table 1 shows that two hundred and thirteen (213) respondents, 70.1% of the total three hundred and four (304) respondents, indicated that they had knowledge of capital market activities. On the contrary, ninety-one (91) respondents, representing 29.9% of the respondents, answered that they had no knowledge about capital market activities. This means that majority of respondents have knowledge about capital market activities.

Table 1: Knowledge about Capital Market Activities

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Yes	213	70.1	70.1	70.1
	No	91	29.9	29.9	100.0
	Total	304	100.0	100.0	

The Level Knowledge about Capital Market Activities among Respondents

Table 2: Cross Tabulation of Knowledge about Capital Market Activities and Level of Knowledge about Capital Market Activities

			Level of knowledge about capital market activities		Total
			Little knowledge	Much knowledge	
Knowledge about capital market activities	Yes	Count	162	51	213
		% within Knowledge of capital market activities	76.1%	23.9%	100.0%
Total		Count	162	51	213
		% within Knowledge of capital market activities	76.1%	23.9%	100.0%

Table 2 is a cross tabulation of knowledge about capital market activities and the level of knowledge about capital market activities among respondents. Table 2 indicates that one hundred and sixty-two (162) respondents, 76.1% of the two hundred and thirteen (213) respondents who have knowledge about capital market activities, indicated that they have little knowledge about capital market activities. Fifty-one (51) respondents, 23.9% of the two hundred and thirteen (213) respondents who have knowledge about capital market activities, indicated that they have much knowledge about capital market activities. These results suggest that although a lot of respondents have knowledge about capital market activities, they do not have a great deal of knowledge about these activities. As noted by Calcagno & Monticone (2011), the low level of financial literacy in many countries puts households are at risk of sub-optimal financial decisions. Individual respondents who have little knowledge about capital market activities in this study may thus not know the right kind of financial assets in which to invest, and as a result, may not purchase capital market securities.

Cross Tabulation of Level of Knowledge about Capital Market Activities and Investment in Capital Market Securities

Table 3a is the cross tabulation of the level of knowledge about capital market activities and investment in capital market securities. Two hundred and thirteen (213) respondents out of the three hundred and four (304) total respondents indicated that they had knowledge about capital market activities. Of these two hundred and thirteen (213), one hundred and sixty two (162) respondents indicated that they had little knowledge about capital market activities. Fifty-eight (58) respondents, 35.8% of the one hundred and sixty two (162) respondents with little knowledge about capital activities, answered that they invest in capital market securities. One hundred and four (104) respondents, 64.2% of the one hundred and sixty two (162) respondents, do not invest in capital market securities. This means that majority of respondents with little knowledge of capital market activities do not buy capital market securities.

Of the fifty-one (51) respondents, of the two hundred and thirteen (213) respondents with much knowledge, twenty-nine (29), 56.9% of the fifty-one (51) respondents, invest in capital market securities. Twenty-two (22) respondents, 43.1% of the fifty-one respondents with much knowledge about capital market activities, do not invest in capital market securities. This means that a large percentage of people with much knowledge about capital market activities invest in capital market securities and a large percentage of respondents with little knowledge about capital market activities do not invest in capital market securities (Bell & Lerman, 2005).

To further establish the relationship between the level of knowledge about capital market activities and investment in capital market securities, a Chi-square test was performed and the results are shown in Table 3b. The Chi-square test statistic/calculated value (χ^2) of 7.120 is greater than the Chi-square table value (χ_b^2) of 3.84 at 5% level of significance. The p-value of 0.008 is less than 0.05 (the 5% level of significance). These results conform to the theory and empirical works of a number of researchers in this field. UNITAR/DFM (2005), Rooij, et al. (2007) and Bell & Lerman (2005) contend that increasing public knowledge and building public confidence in capital market activities is central to capital market development through broad participation in market activities.

To reiterate Calcagno & Monticone (2011), the quality of an investor's information depends on the investor's degree of financial literacy. Often an investor's financial knowledge reflects the amount of information an investment advisor has transmitted to him or her and this in turn influences the investor's decision to invest in capital market securities. Investors with lower financial literacy either invest by themselves (without any professional advice) and endure the attendant consequences or delegate their portfolio choice completely to advisers, suffering the agency costs of such decisions. In this case, where the agency cost is relatively high the prospective investor may decide not to invest in the security that is of interest to him or her, thereby reducing participation in market activities. Furthermore, Calcagno & Monticone (2011) cite Shapira & Venezia (2001), Mullainathan et al. (2010), and the European Commission (2009) in noting that in an imperfect financial market, the mere availability of qualified investment assistants will not necessarily translate into high-quality decision making by prospective investors.

Table 3a: Cross Tabulation of Level of knowledge about Capital Market Activities and Investment in Capital Market Securities

			Investment in Capital market Securities		Total
			Yes	No	
Level of knowledge about Capital Market Activities	Little knowledge	Count	58	104	162
		% within Level of knowledge about capital market activities	35.8%	.64.2%	100.0%
	Much knowledge	Count	29	22	51
		% within Level of knowledge of capital market activities	56.9%	43.1%	100.0%
Total		Count	87	126	213
		% within Level of knowledge about capital market activities	40.8%	59.2%	100.0%

Table 3b: Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.120	1	.008		

Based on the above findings, the null hypothesis, that the level of knowledge about capital market activities does not influence participation in capital market activities, is rejected and the alternative hypothesis, that the level of knowledge about capital market activities significantly influences capital market participation or investment in capital market securities, is accepted. Therefore, those with much knowledge about capital market activities are more likely to participate in capital market activities than those with little knowledge. It is thus imperative that capital market regulators, managers and investment advisors intensify their capital market activities educational campaigns. There is also a strong case to be made for incorporating capital market courses in the curricula of senior high school and tertiary institutions. Adequate knowledge acquired by prospective investors together with the advice given by investment advisors will enable prospective investors to make prudent decisions concerning the type of asset in which to invest. All other things being equal, this is also likely to increase market participation and the long term development of the capital market.

Factors Contributing to Knowledge about Capital Market Activities

In addition to assessing knowledge about capital markets and the impact of this on the likelihood to invest, this study seeks to determine the factors that contribute to respondents' knowledge about capital market activities. Results here are expected to help regulators, managers, and operators in the market to choose the educational programmes that will best increase peoples' knowledge about capital market activities. The factors are shown in Table 4.

As shown in Table 4, two hundred and seven (207) respondents answered the question on the factors that contributed to their knowledge about capital market activities. Six (6) of the 213 respondents who indicated that they had knowledge about capital market activities did not answer the question on the factors that contributed to their knowledge. It may be that they are not aware of the factors that contributed to their knowledge.

Table 4: Factors Contributing to Respondents' Knowledge about Capital Market Activities

	Factors	Responses		Percentage of Cases
		N	**Per cent**	
1.	At school/Level of education (Schooling)	107	42.2%	51.7%
2.	Through media reports and publications and educational programmes organized by Ghana Stock Exchange and investment companies (Media reports and publications).	119	46.9%	57.5%
3.	Through relatives/friends who invest in capital market securities/place of residence/.place of work/ acquaintances (Social interactions)	16	6.1%	7.9%
4.	My occupation/profession (Occupation or profession)	12	4.7%	5.8%
	Total	254	100%	122.7%

In Table 4, we see that the most important factor that influences respondents' knowledge about capital market activities is media publications and reports by market regulators, manager, and operators. One hundred and nineteen (119) respondents, 46.9% of the 254 respondents, or 57.5% of the two hundred and seven (207) respondents indicated that their knowledge about capital market activities came through media reports and educational programmes organized by the regulators, operators and managers of the capital market. This means that these educational and media programmes are impacting positively on peoples' knowledge about capital market activities. More work does, however, need to be done. Market regulators, operators, and managers of the market need to intensify education around the assets they sell. As Guiso and Jappelli (2004) write, the extent to which consumers or investors are aware of available financial assets depends on the incentives of asset suppliers to spread information about these assets.

The second major factor that contributed to respondents' knowledge about capital market activities was schooling/level of education. One hundred and seven (107) respondents, 42.2% of the two hundred and fifty four (254) respondents, or 51.7% of the two hundred and seven (207) respondents, acquired knowledge about capital market activities through the courses at school and the reading of books and other publications as they climbed the academic ladder. By teaching capital market courses in senior high schools, universities, polytechnics, and professional institutions, a significant part of the population becomes aware of the role of the capital market in the lives of individuals and in national development. The importance of this second factor is supported by Bernheim, Garrett and Maki (2001), and Bernheim and Garrett (2003) (in Rooij, et al., 2007), who are of the view that those who were exposed to financial education in high school or in the workplace save more. In other words, as people acquire more knowledge about capital market activities through schooling they are more likely to invest in capital market securities.

Sixteen (16) respondents, representing 6.1% of the 254 respondents, or 7.8% of the 207 respondents answered that they acquired knowledge about capital market activities through relatives, friends, places of residence, colleagues at places of work , social interactions, or acquaintances. This is supported by the findings of Brown et al. (2008) who studied the causal relationship between an individual's decision to own stocks and the average stock market participation of the individual's community. They found that word-of-mouth communication had a stronger effect on market participation in more sociable communities. Here, community members who invested in stocks were able to influence an individual's level of knowledge about and participation in the stock market.

The peer-effects theory suggests that the impact of individuals who interact with their neighbours and attend church (sociability) on stock market participation is stronger in states where stock market participation rates are higher. Thus, any "social" investor finds the market more attractive to participate in when more of his peers participate in the market (Hong, et al. 2004).

Guiso and Jappelli (2004) write that social learning is an additional channel through which potential investors may come to be informed about investment assets. While social learning may limit the production of financial information by assets suppliers, it increases the probability that individuals become financially aware. Although an informal means of educating people, this suggests that educating one prospective investor about capital market activities has the potential to positively impact a large number of people through social interactions.

Finally, some respondents indicated that their knowledge about capital market activities was influenced by their occupations or professions. This was true for twelve (12) respondents, 4.7% of the 254 respondents, or 5.8% of the 207 respondents.

Reasons for Investing in Capital Market Securities

The study also sought to find out from respondents with knowledge of capital market activities and who invest in capital market securities, the reasons that influence their decisions to invest. Table 5 captures these reasons.

Table 5: Reasons for Investing in Capital Market Securities

	Reasons	Responses		Per cent of cases
		N	**Per cent**	
1.	Dividends and capital gains	67	47.5%	57.3%
2.	Investment preference	20	14.2%	17.1%
3.	To preserve my capital investment	25	17.7%	21.4%
4.	For retirement planning	18	12.8%	15.4%
5.	To be a part owner of a company	11	7.8%	9.4%
	Total	**141**	**100.0%**	**120.5%**

For sixty-seven (67) respondents, 47.5% of the one hundred and forty-one (141) respondents or fifty-seven point three per cent (57.3%) of the one hundred and seventeen (117) respondents earning dividends and capital gains was the main motivation to invest. However, many respondents complained that most companies whose securities they have bought rarely pay dividends and that they are disappointed that they invested in the securities of those companies. As part of the effort by firms to encourage shareholding in business firms, the Cal Bank Ltd (CBL) reported the proposed dividend payment by a number of firms between March 2013 and June 2013. This was published on eStock Analysis on Tuesday, March 19, 2013.

The second major reason for investing in capital market securities was to preserve investors' capital investment. Twenty-one point four per cent (21.4%) of the one hundred and seventeen (117) respondents, or twenty-five (25) respondents, representing 17.7% of the one hundred and forty-one (141) respondents, invested in capital market securities to preserve their capital investments. The third most important reason respondents invested in capital market securities was because they considered this approach an investment preference. This group constituted 17.1% of the respondents or twenty (20) responses, representing 14.2% of the total responses. The fourth reason respondents purchased capital market securities was to enable them to plan for their retirement. Eighteen (18) respondents, 12.8% of the 141 respondents, or 15.4% of the total respondents invested in capital market securities to secure their retirement. Only eleven (11) respondents, 7.8% of the 141 respondents, or 9.4% of the respondents invest in capital market securities with the aim of being part of the companies whose securities they buy.

In sum, respondents invest in market securities to earn dividend or capital gain, to preserve capital investments, as an investment preference, as a security for retirement, and to be part owners of the companies whose securities they buy.

Reasons Respondents Do Not Invest in Capital Market Securities

Respondents were asked to state the reasons why they do not invest in capital market securities. Table 6 summarises the options given to respondents.

As shown in Table 6, two hundred and eight (208) respondents provided reasons for not investing in capital market securities. One major reason for nonparticipation in the capital market was that respondents preferred to save with banks and invest in Treasury bills. This was true for fifty one point nine per cent (51.9%) of respondents. In other words, one hundred and eight (108) respondents representing 40.6% of the two hundred and sixty six (266) responses noted the above-mentioned reason.

On February 27, 2013, Graphic Online covered the press conference held by the minority group in Ghana's Parliament on the true state of the Ghanaian economy. The group reported that according to the Bank of Ghana's Monetary Policy Committee reports, government of Ghana's securities had more than doubled within a period of twelve months. The 91-day Treasury bill rate rose from 10.7% in December 2011 to 22.4% in June 2012, and to 23.1% by December 2012. The 182-day bill increased from 11.1% in December 2011 to 22.0% in June 2012, and 22.7% in December 2012. The 1-year fixed note went up from 11.3% in December 2011 to 22% in June 2012 and 22.9% in December 2012. The high rates on these securities have made them more attractive than shares for potential investors.

The public sector, with attractive and risk-free securities, often crowds out the business or private sector in the credit market. The high rates on government debt securities also push up interest rates for private company securities. Many companies find it difficult to compete with government securities. If they are able to match or exceed the government rates, companies can find themselves experiencing severe financial stress as they attempt to make the high interest rate payments. This in turn means that companies can find it quite difficult to raise the capital needed in the capital market to finance their activities which in the long run reduces the growth of businesses, lowers the number of listings, and lowers the amount of market capitalization and market liquidity. Since the development of the banking sector is said to complement the development of the capital market, surplus spending units could be educated to channel some of their savings into purchase of capital market securities.

The second reason respondents gave for nonparticipation in capital market activities was low incomes. Twenty four per cent (24%) of the two hundred eight (208) respondents chose this reason. In other words, fifty (50) respondents, representing 18.8% of the two hundred and sixty-six (266) respondents chose this reason. This suggests that given increased incomes backed by effective awareness creation programmes on capital market securities, appropriate investment advice and the right incentives, a lot of prospective investors could be lured into purchasing capital market securities.

This supports the work of Vissing-Jorgensen (2002) who reports that there is a higher trading frequency for high wealth households. Even if incomes of respondents were to increase, respondents' participation will on one hand depend on the legal protection they are offered by the capital market. Georgarakos & Inderst (2011) also write that for households with higher financial capability, only the perception of legal protection in financial markets matters for stock market participation.

Table 6: Factors that Contribute to Nonparticipation in Capital Market Activities

	Reasons	Responses		Per cent of Cases
		Number	Per cent	
1.	Risky to hold	47	17.7%	22.6%
2.	Low incomes	50	18.8%	24.0%
3.	Preference for saving with banks and investing in Treasury bills	108	40.6%	51.9%
4.	Lack of interest and ignorance about the workings of the securities	18	6.8%	8.6%
5.	Preference for real estate	28	10.5%	13.5%
6.	Preference for insurance products	15	5.6%	7.2%
	Total	**266**	**100.0%**	**127.9%**

The third main reason for nonparticipation in capital market activities is the riskiness of holding capital market securities as compared to money market securities. Forty-seven (47) respondents selected this reason. This represents 17.7% of the 266 respondents and 22.6% of the two hundred and eight (208) respondents. A great deal of effective public education must be carried out to deal with this perception of riskiness and the resulting negative perception held by some prospective investors. It should be noted that what people perceive is influenced by how they select information to process. Everyone interprets information differently and one's interpretation of information is influenced by factors such as his or her knowledge, upbringing, feelings and attitudes. Wanyana (2011) is of the view that the way an investor behaves in the financial (stock) market depicts his perceived risk attitudes about the available stocks hence affecting the trading of stocks and investor portfolio selection.

The fourth reason for nonparticipation in capital market securities was the desire for investment in real estate/landed properties. These properties appreciate in value on an almost daily basis in major cities across the country. This group formed thirteen point five per cent (13.5%) of the respondents who indicated that they did not invest in capital market securities. In other words, twenty-eight (28) respondents, representing 10.5% of the two hundred and sixty-six (266) respondents, did not invest for this reason.

Millions of dollars are being made by private enterprises in the real estate sector in Ghana. Over the last decade, the Ghanaian economy has experienced an influx of foreign investors due to the discovery of oil and a more stable political environment. Demand for luxurious residential and commercial homes has increased and building more executive units in the prime areas of regional capitals has helped to meet the needs of both foreigners and high income earning Ghanaians. A report from the Ghana Investment Promotion Council (GIPC) indicates that the real estate industry is an alluring sector for foreign investors as it promises high returns. The capital market does stand to gain from this group of investors if real estate developers, companies investing in landed properties such as Elite Kingdom Investments, Regimanuel Real Estate Development, Devtraco Plus, Comet Properties Ltd, Edlorn Real Estate Development and others can be encouraged to list on the Ghana Stock Exchange (GSE). This will help to draw new investors into the capital market and reduce land litigations and their attendant effects. It is promising to note that the Ghana Stock Exchange (GSE) has approved the application for the provisional listing of Comet Properties Limited, a member of Ghana Real Estate Developers Association (GREDA).

The fifth reason for nonparticipation in the capital market is a lack of interest in capital market securities and ignorance about the workings of the capital market. Eighteen (18) respondents, representing 6.8% of the 266 respondents, chose this option. This represents 8.6% of the 208 respondents. With this group more public education and social interaction may help them to participate in the capital market.

The sixth reason for nonparticipation in capital market activities is respondents' preference for insurance products. Fifteen (15) respondents, constituting 5.6% of the 266 respondents gave the above reason. This represents 7.2% of the total respondents who did not invest in capital market securities. Behavioural models suggest that economic agents are concerned with avoiding unacceptable adverse scenarios purchase low risk investments, such as life insurance policies, and then invest in riskier assets as they become more confident, such as stocks and mutual funds, to obtain higher economic returns. Since most insurance companies invest in capital market securities, these companies could be encouraged to invest more of the individual savings in insurance policies in the capital market.

CONCLUSION

In this study, the majority of respondents were knowledgeable about capital market activities. Unfortunately, the majority of these respondents had only a little knowledge about capital market activities and did not invest in capital market securities.

Based on the Chi-square test results we rejected the null hypothesis that the level of knowledge about capital market activities does not affect investment in capital market securities or participation in capital market activities. We, therefore, accept the alternative hypothesis that the level of knowledge about capital market activities has a significant and direct relationship with capital market participation. Those with a great deal of knowledge about capital market activities are more likely to participate in capital market activities than those with little knowledge or those with no knowledge. This supports the report of UNITAR/DFM (2005), and Rooij, et al. (2007) who found that increasing public knowledge and building public confidence in financial literacy and capital market activities is central to capital market participation and development.

The four (4) main factors, in order of importance, that were found to influence respondents' knowledge about capital market activities were: schooling/level of education, media reports and publications about investments by market regulators, managers, and operators, social interactions, and one's occupation or profession.

Respondents gave six (6) reasons for their nonparticipation in capital market activities. In order of importance these were: preferences for saving with banks and investing in treasury bills, low incomes of respondents, riskiness in holding capital market securities, preference for real estate and landed properties, lack of interest in capital market securities and ignorance about the workings of the capital market, preference for insurance products. The reasons that respondents did invest in capital market securities included earning dividends and capital gains, preserving their capital investments, as an investment preference, for retirement planning, and to be a part owner of the companies whose securities they buy.

Increasing the level of knowledge about capital market activities through public education will, other things being equal, increase public interest and participation in capital market activities. Providers of capital market securities have a strong incentive to spread better information when households express a desire to own such assets and when the cost of providing information is reasonable. Evidence from empirical studies suggests that the deeper, broader, and better functioning of financial markets can lead to higher economic growth in a country. It is thus imperative that national development planners put in place strategies for enhancing participation in capital market activities and the development of the capital market in Ghana.

Recommendations

In reference to the findings of this study, it is recommended that capital market courses be taught in educational institutions including senior high schools and tertiary institutions. This will ensure that knowledge about capital market activities better permeates society.

The training of lawyers in capital market issues will ensure investor protection and help boost public confidence in capital market activities.

Prospective investors should be encouraged to buy securities on a monthly basis from their monthly incomes through their employers and deposit management financial institutions. Monthly contributions could be deducted directly from workers salaries and paid to investment companies or fund management companies for the purchase of securities on behalf of subscribers.

Companies listed on the GSE must pay dividends at reasonable intervals so as to attract prospective investors into the market. Employers of listed companies must encourage employees to sacrifice some of their benefits to enable the companies to pay attractive dividends to motivate prospective investors to participate in the capital market.

Furthermore, the BoG must make it mandatory for banks unable to meet BoG's capital requirement policy to raise the additional capital from the capital market. This will encourage further public participation in the capital market. These banks will not only have easier access to long term capital by going public, but will also experience improvements in their financial position and enhanced status in the community.

The Parliament of Ghana, in collaboration with market regulators, managers, and operators, should pass a law that mandates all multinational corporations operating in Ghana to list on the GSE or raise capital in the capital market to attract investors into the market to increase market capitalization and depth so as to positively impact economic growth in Ghana.

The capital market seems to be over concentrated in Accra and it may be beneficial to decentralise its operations to draw in more participants from other regional and district capitals across the country.

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