

**ASHESI UNIVERSITY COLLEGE**

**HOW THE GHANA STOCK EXCHANGE (GSE) CAN BE IMPROVED**

By

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**DECLARATION**

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: .....

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I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.

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Date: .....

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## **ABSTRACT**

Governments in Africa have eulogized free markets and the role of the private sector in economic growth and development. The private sector requires an enabling environment to thrive and flourish, thus the need for a vibrant capital market to improve the private sector's access to capital. In lieu of this, the Ghana Stock Exchange (GSE) has enabled businesses in Ghana and the government to raise long-term capital and helped investors to obtain liquidity, fair capital safety and diversity of investments. It has also been one of the best performing stock exchanges in the world.

That notwithstanding, there are numerous challenges hampering the development of the GSE. Therefore, this study explores how to improve the GSE by identifying the challenges impeding the development of the GSE and finding ways to deal with such challenges. The method used was to survey investors on the GSE and also interview the key players in the industry.

It was found that the GSE is generally illiquid and not efficient. The number of listed securities on the Exchange is woefully inadequate. Also, most of the listed companies have very limited float of shares available for trading and their financial performance has been abysmal over the years. The cost of listing is generally very expensive and most of the brokerage firms are concentrated in Accra. Analyzing the results, massive education, incentives for listing, government use of the GSE for divestiture and bond issue for infrastructure are discussed as possible solutions.

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background to the Study**

The global economy today has been shaped and re-shaped by the international financial, economic and trade systems. Such systems have promoted privatization, market-based pricing, free trade and capital market liberalization. Until the 1980s, most governments in developing countries held the view that the allocation of scarce economic resources could be served better by the state. However, the poor performance of the public sector, massive corruption and negative economic growth has influenced a re-evaluation of the state-led development strategy.

In the last two decades, the most dominant theme in development strategies in Africa, especially Ghana, has been the promotion of free markets and a decrease in state intervention in many aspects of the economy. International organizations like the World Bank, IMF and donor countries have eulogized the role of the private sector in economic growth and acknowledged the need to facilitate private sector development. The private sector requires the creation of an enabling environment to thrive and flourish. A key factor here is the healthy growth of the capital market, which in turn improves the private sector's access to capital. The development of the capital market is preceded by the development of the financial sector. The financial sector channels savings and investments to seekers of capital. Eventually, as savers search for higher returns and firms seek cheaper capital, the capital market evolves.

In Ghana, the financial sector is dominated by commercial banks, which have not been a reliable source of long-term financing. The short-term nature of the commercial banks' assets and liabilities as well as the regulatory reserve requirements renders them (banks) incapable and perhaps unwilling to supplying long-term capital. In this regard, the capital market is considered a better avenue for mobilizing domestic and international capital. Capital markets have the potential to meet the long-term capital needs of the private sector. They can ensure the efficient and sustainable funding for governments, corporations, banks, and large-scale or long-term projects.

It is of little surprise therefore that there has been a significant increase in the number of stock exchanges in Africa, with 13 new ones formed since 1989, bringing the total to 19 stock exchanges. These stock markets have made significant strides in their respective domestic markets. For instance, in 2008, over US\$17.5 billion (N2.6 trillion) was raised on the Nigerian Stock Exchange through new issues and mergers and acquisitions.

The economy of Ghana has seen sustained and unbroken economic growth since the early 1990's. With the recent oil find and the well-developed tenet of democracy, this growth is expected to continue in the decades ahead.

The banking system in Ghana has been expanding with the influx of many Nigerian banks. This has led to a growing culture of saving among Ghanaians as more and more people have easy access to banks. For instance, Ghana with a population of over 23 million currently has 27 banks compared to 24 banks in Nigeria for the over 140 million people. It is clear that the banks in

Ghana are now well placed to increase the current 1.2 million bank account holders and enhance savings. As a result, the citizenry are better placed to mobilize and generate funds needed for investment.

The ongoing boom in commercial property development, including high-rise office buildings and retail outlets in Accra, is certainly suggestive of an anticipated increase in consumer spending. The oil production expected by the end of 2010 will necessitate spending on fixed assets and investments for the country. With all these factors, investment is set to remain robust due to the gradual lowering of interest rates (reducing the cost of borrowing to invest) and increasing confidence in Ghana's macroeconomic stability. Also, the opening of the Accra Mall<sup>1</sup> indicates the evidence of booming consumer spending in Ghana; private consumption is a strong driver of growth.

One of the key areas for development and be in a position to bolster the economy is the capital market. How do these improvements and developments affect the capital market in Ghana?

The capital market is the market where long-term debt or securities are traded. The Ghana Stock Exchange (GSE) is the only stock exchange in Ghana. The securities traded on the exchange include equities and both corporate and government bonds. Currently, there are 35 companies listed on the GSE with 1 preference shares, 1 corporate bond and 3 government bonds. The listed companies include mining, brewery, banking, oil and manufacturing firms, all of which represent the key sectors of the economy.

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<sup>1</sup> The Accra Mall is a world class shopping centre in Ghana. It has 19,000m<sup>2</sup> of leasable space and parking for 800 cars. It holds over 70 retailers including banks, restaurants, large department stores and a cinema.

The GSE has since 1990 been gradually facilitating the development of the capital market in Ghana. The GSE has put in place facilities for businesses and the government to raise long-term capital and for investors to obtain liquidity, fair capital safety and diversity of investments.

In spite of this, there are numerous challenges hampering the development of the GSE and for that matter, the capital market in general. This study seeks to explore how to improve the Ghana Stock Exchange by identifying the challenges impeding the development of the GSE and finding ways to deal with such challenges.

In 2008, the Nigerian Stock Exchange (NSE) had 213 listed companies and a valuation of about US\$80 billion, as compared to GSE's 34 listed companies worth US\$15.5 billion. The GSE traded 545.8 million shares valued at GH¢380.35 million; the highest in GSE's history. It returned a gain of 58% as against the NSE's 46% loss. This outstanding performance of the GSE in the midst of the credit crunch made it one of the best performing exchanges.

**Table 1.1 Summary of Market Performance in 2008**

<b>Detail</b>	<b>Ghana - GSE</b>	<b>Nigeria - NSE</b>
All-Share Index Gain	58%	-46%
Number of Listed Companies	35	213
Number of Listed Securities	42	299
Market Capitalization	\$14,188.44m	\$80,600.00m
Total Value Traded	\$341.25m	\$20,100.00m
Average Weekly Value Traded	\$6.82m	\$402.50m
Average Daily Value Traded	\$1.36m	\$80.50m
Total Volume Traded	545.80m	193,140.00m
Average Weekly Volume Traded	10.92m	3,878.31m
Average Daily Volume Traded	2.18m	775.65m

Source: NSE and GSE Annual Review 2008

From table 1.1, it is evident that Average Daily Volume Traded of 775.65 million shares on the NSE far exceeds the Total Volume Traded of 545.80 million shares on the GSE. It can also be seen that the Average Weekly Value Traded of \$402.50m on the NSE far exceeds the Total Value Traded of \$341.25 million on the GSE. Hence, the incredible performance of the GSE sublimes ephemerally when one gauges Exchange using indicators like the number of listed companies, size of the market, liquidity, as well as efficiency, participation of a large pool of investors and nature of the exchange. These challenges and constraints may explain why the Ghana Stock Exchange, in spite of its extraordinary performance in 2008, was mocked by a Bloomberg article. The article stated that *"vendors hawking handbags and fruit along downtown Accra's Liberia Road are busier than the traders five stories upstairs on the Ghana Stock Exchange"*<sup>2</sup>. Other experts like Don Elefson<sup>3</sup> also commented that *"It's hard to call it a stock market because of the liquidity levels...Ghana's a little market that gets forgotten"*.

In addition to these challenges, the government interferes unduly with the affairs of the Exchange. For instance, for the first six months of 2009, at the time when a lot of listed banks wanted to undertake right issues to meet the new minimum capital requirement of the Bank of Ghana, there was no Board at the SEC to give the final approval to the issue. The new government had dissolved the Board without replacement. It took lots of pressure from the market players for the government to replace the Board of SEC.

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<sup>2</sup> Ghana's 'Forgotten' Stock Market Beats World Equities, <http://www.bloomberg.com/apps/news?pid=20601084&sid=aa.ukPe0.v1U>

<sup>3</sup> Don Elefson is an emerging market specialist at Harding Loevner Management in Somerville, New Jersey

## **1.2 Research Problem**

In spite of the importance of previous studies, until now the majority of research has focused on developed countries' financial markets. Therefore, the subject of financial markets in developing countries still needs lengthy analysis and more research attention. Hence, the importance of this study stems from it being an empirical attempt in this direction to fill the gap in literature. The study explores ways of developing the GSE by trying to find what the challenges are and how to solve them.

The available literature on the subject that concentrates on the less developed countries mainly focus on how such developing countries in general can work toward reforms and deepen their financial systems, through the expansion of capital markets in order to improve their ability to mobilize resources and efficiently allocate them.

To the best of my knowledge, there is hardly any published work in Ghanaian and international literatures that focuses exclusively on how to improve the Ghana Stock Exchange. Previously published research on the Ghana stock market has primarily focused on specific aspects of the GSE in attempt to bridge the knowledge gap in the GSE and address some practical issues with the GSE like upgrading the trading, clearing and settlement processes. The former group has generally employed historical approach to expand on relevant literature concerning the Ghanaian stock market. For example, the work of Mensah (1997) is relevant for development of the financial markets and institutions in Ghana. The latter addressed varying operational issues

ranging from automation (Acheampong, 2008) to clearing and settlement (Wallenius, 2009).

Studies, like Kibuthu (2005) have suggested ways of dealing with the numerous legal, technical and operational issues in order to attain the level of the more developed markets. Though the study is relevant, no two stock markets are exactly the same, no matter how similar they appear to be. Therefore, one cannot assume that the same solution may necessarily work for all emerging markets as the study hypothesizes. While the breakthroughs of other markets could prove very useful guidelines for other emerging markets, it is crucial to evaluate each market distinctively by focusing on its unique market conditions and challenges and tailoring the appropriate solution to meet their specific needs.

The issue of how to improve the Ghana Stock Exchange by finding out the challenges facing the GSE and how to deal with them has generally been missing in prior study. In response to this gap, this study looks at how the GSE can be improved. The study seeks to explore by interacting with the stock market industry players in Ghana to gain understanding of the challenges impeding the growth of the GSE and solicit their views on how to address them.

### **1.3 Research Objectives**

The main objectives of the study are to:

1. Identify the challenges hampering the growth of the GSE and how to deal with such challenges

2. Investigate how to enhance liquidity and efficiency of the GSE
3. Find out how to increase participation of both investors and companies on the GSE

#### **1.4 Research Questions**

The questions to be explored in this study are as follows:

- i. What challenges do investors face when buying/selling shares?
- ii. What challenges do the investment banks face in trading shares?
- iii. Why are most companies not using the GSE to raise long-term capital?
- iv. What can be done to encourage more companies to list on the GSE?
- v. In what way can the liquidity and efficiency of the GSE be improved?
- vi. What is the level of participation of Ghanaian investors on the GSE?
- vii. How can the participation of key industry players like individual and institutional investors (domestic and foreign) be enhanced?
- viii. The role of the government in the overall improvement of the GSE.

#### **1.5 Significance of the Study**

This study will add to the body of knowledge about the subject matter by making a specific case for Ghana on how to further develop the GSE. By focusing on progress and achievements chalked by the GSE since its inception as well as interacting with the industry players, the study will attempt to identify the challenges facing the Ghana Stock Exchange in its quest to become a world-class exchange. It will also discuss the improvements needed to accelerate the development process. The findings of

the study will inform and enhance the various roles of the key players of the capital market in Ghana.

### **1.6 Scope and Limitations of the Study**

Capital market is a broad term that is used to describe the sale and purchase of medium-term and long-term securities. The trade can take place over-the-counter or on an organized exchange. For the purpose of this study, the GSE will be the focus. The study is built on the premise that, the development of the GSE will lead to the overall development of the capital market in Ghana.

### **1.7 Methodology**

This research is exploratory in nature. It explores ways to improve the Ghanaian capital market with special focus on the GSE. The study generated ideas by sampling the views of the stock market players. Secondary data was accessed through the GSE using information sources like press releases, databases of listed equities, half year and annual reports. Interviews and a survey conducted by questionnaire were the main tools used to collect primary data. Here, a purposive sample of industry players was drawn from the SEC, the GSE and the investment banks and interviewed. A convenient sample of investors on the GSE was also surveyed. As an explorative study, face-to-face interviews were employed to gain broader spectrum and insight of possible answers and also allow for discussion with respondents to solicit their opinions.

## **1.8 Outline of Thesis Report**

This thesis report consists of five chapters. Chapter 1 describes the background, research question and purpose of this research. Research methodology as well as the scope and limitations of the study are also discussed in this chapter. Chapter 2 evaluates related and relevant literature. It looks at the challenges facing the GSE and evaluates what studies on the GSE studies have recommended as against what the Exchange has actually done to improve the situation.

Chapter 3 describes the methods used in carrying out the study. It also sheds light on the limitations of the research methods and tools used to attain the results. Chapter 4 discusses the finding of this work. The data is collected is organized and analyzed in this chapter using various statistical tools and methods. The results found are then discussed thoroughly and the implications of such findings are explained. The final chapter, Chapter 5 gives answers to the research questions by providing suggestion needed to improve the level of GSE on the bases of the findings.

## **CHAPETR 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews related literature and other materials relevant to this study. It highlights the history and the performance of the Ghana Stock Exchange (GSE) over the years. The chapter looks at the challenges facing the GSE. Finally, it reviews the link between stock market developments and economic growth and also looks at the efficiency of the GSE.

#### **2.2 Underlying Assumption**

This study explores how to improve the Ghana capital market with a special focus on the GSE. It explores how the GSE can take full advantage of various opportunities and deal adequately with its challenges. The implicit assumption of the objective of the study is that the domestic capital market can and should be developed. Hence, the topic "How the Ghana Stock Exchange (GSE) Can Be Improved". The study also assumes that the advancement of the GSE will lead to the improvement of the capital market.

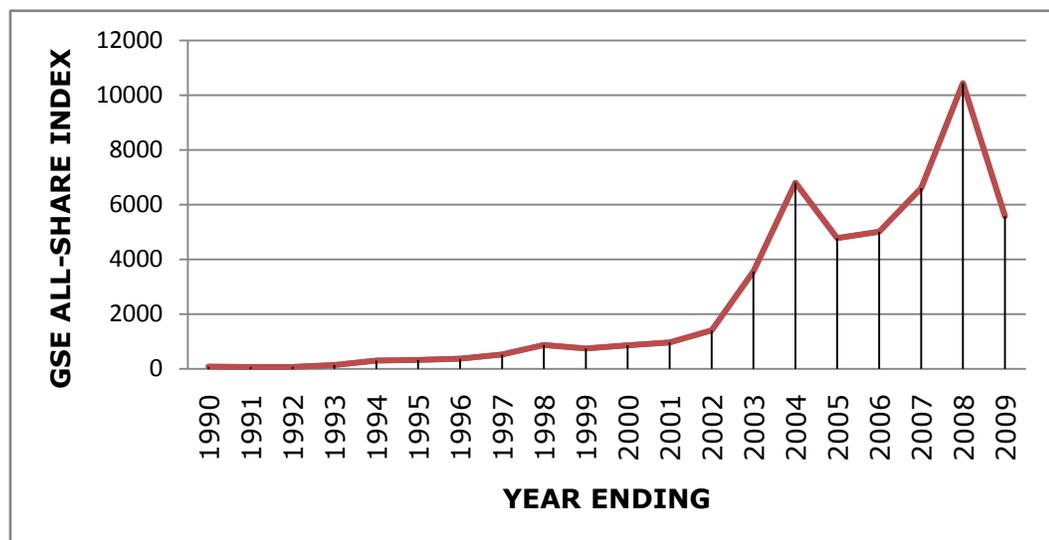
#### **2.3 Stock Exchange**

Di Giorgio and Di Noia (2001), suggest that it is difficult for the average person to grasp what constitutes the stock exchange industry as the bounds dividing the various types of financial institutions are becoming increasingly blurred. For the purpose of this study, a stock exchange is defined as an "organized and regulated financial market where securities (bonds, notes, shares) are bought and sold at prices governed by the forces of demand and

supply<sup>4</sup>. Stock exchanges basically serve as primary markets where corporations, other incorporated bodies and governments can raise capital by channeling savings of the investors into productive ventures. It also serves as secondary market where investors can sell their securities to other investors for cash, thus reducing the risk of investment and maintaining liquidity in the system.

## 2.4 Performance of the GSE

The GSE All-Share Index, a measure of the general performance of the stock exchange, has increased from 77.25 points in 1990 to around 5,572.34 points at the end of the December 2009. In 2008, the index recorded an all-time high level of 10,431.64 points in spite of the global financial crisis.



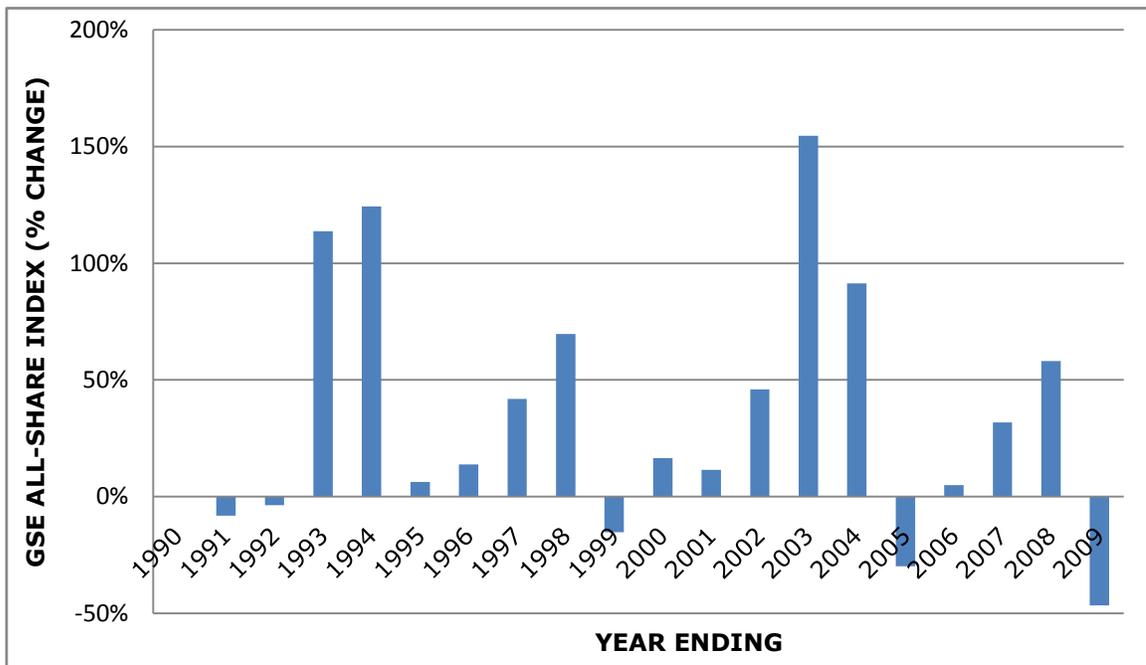
**Source:** The data is adapted from the GSE Market Statistics from 1990-2009

Figure 2.1 GSE ALL-SHARE INDEX LEVEL (1990-2009)

The Ghana Stock Exchange has been in existence for two decades. It is no doubt that the Exchange has been one of the best performing stock market

<sup>4</sup> <http://www.businessdictionary.com/definition/stock-exchange.html>

among all emerging market and the world at large. For instance, the GSE emerged the 6<sup>th</sup> best performing emerging stock market posting an impressive return of 114% in 1993. In 1994, the GSE was voted the best performing market amongst all emerging markets by Birinyi Associates, a research Group in USA with its gain of 124%.



**Source:** The data is adapted from the GSE Market Statistics from 1990-2009

Figure 2.2 GSE ALL-SHARE INDEX (Percentage Changes: 1990-2009)

In 2008, the Ghana Stock Exchange was the World’s best performing stock exchange. The year 2008 saw a very bullish market on the GSE. Irrespective of the global financial crisis, the GSE gained 58%. In 2009, GSE was one of the worst in performers in the world losing 47%.

## **2.5 Challenges Facing the Ghana Stock Exchange**

The spectacular performance of the GSE since its inception does not mean that the GSE is advanced like the New York or the London Stock Exchange. From related literature, two types of constraints have hampered the development of Ghana stock market. The first one relates to the political and macro-economic set-up and the second one concerns the exchange specifically. Ghana's macroeconomic policies over the last two decades have been characterized by volatile and generally high inflation, high interest rates and large exchange rate swings. Commenting on the poor performance of the GSE in 2009, Ekow Afedzie<sup>5</sup> explained that high inflation and interest rates are the "greatest" challenge facing the bourse. These factors prevent investors from having a clear-cut visibility of the macro environment in the medium to long term. Investors, generally, are ready to put up with diversifiable risks, but they are unwilling to look at markets characterized by political and macro-uncertainties.

According to Benimadhu (2003), among the exchange specific issues affecting stock markets in Africa are low level of liquidity, few listed companies and the small size of the exchange as well as efficiency. This study assumes that the stock exchanges in Africa face the same challenges. Other factors which has stifled the development of the GSE relates to the absence of a strong and active domestic investor base, led by institutional investors such as pension funds and insurance companies. Clearing, Settlement and Trade systems as well as trading infrastructure are also

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<sup>5</sup> Ekow Afedzie is the Deputy Managing Director of the Ghana Stock Exchange

lagging behind world class stock market. Until 2009, the GSE operated manual trading, clearing and settlement systems.

To verify these challenges, this study investigated the challenges facing the growth and development of the GSE by interacting with the market participants.

## **2.6 The Development of the Ghana Stock Exchange**

In order to deal with challenges facing the GSE, a number of propositions have been suggested by various studies. Yartey and Adjasi (2007) discuss policy options for promoting the development of the stock markets in Africa. To address the challenges of stock exchanges in Africa, they recommended robust electronic trading systems and central depository systems as being very crucial. The findings of their study are useful and may have re-enforced the need for an electronic platform and hence the automation of the GSE. However, it takes much more than automation and institutional developments to enhance liquidity. If the shares of a listed equity are not available, no matter how robust the electronic trading systems are, the level of liquidity would still be relatively low. To deal effectively with liquidity, there should be amongst other things the existence of a large pool of investors and relatively large float of shares.

Wallenius (2009) illustrates the securities clearing and settlement on the Ghana Stock Exchange in the light of international standards set for these processes. She compares and contrasts the clearing and settlement process on the GSE with other emerging market. She suggests that the

modernization of the clearing and settlement processes will lay a good foundation for the overall improvement of the stock exchange. Clearing and settlement refers to everything that happens after that initial declaration to cause the actual transfer of assets and ownership. The modernization of the clearing and settlement process would offer real opportunities to drive down transaction costs, shorten the settlement cycle and increase the volume of successful trades.

Acheampong (2006) provides evidence to support the need to automate daily trading on the GSE. He recognizes that though it will take a strong political will and significant financial commitment to automate the trading system, its cost will be outweighed by the increase in efficiency of the GSE. The GSE now uses an electronic trading platform which allows stockbrokers to trade from the floor of the Ghana Stock Exchange, their offices through and any location through a secured internet. There is an electronic clearing and settlement system operating alongside the trading system. The System allows for mutual settlement of trade on T+0 or T+1 basis. On settlement dates, shares are moved automatically to client's accounts in the depository system and the brokers settlement account debited<sup>6</sup>. There is also a securities and depository system which offers depository services to complement the Exchange's automated trading, clearing and settlement systems. The System allows investors to transfer, pledge and access security information in a more efficient manner<sup>7</sup>.

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<sup>6</sup> Structure and Function – GSE, <http://www.gse.com.gh/index1.php?linkid=4>

<sup>7</sup> *ibid*

It is expected that this revolution will make it easier for investors to trade in listed securities thereby boosting liquidity and reduce risk such as impersonation and forgery that were associated with the previous paper certification. In general, the electronic trading is expected to improve upon efficiency and enhanced liquidity in the market. The electronic technology has provided direct access to trading information in real-time available to investors across the globe via the Bloomberg Professional service.

Nevertheless, it's too early to conclude that the cost of automating will be outweighed by the increase in efficiency as postulated by Acheampong, especially when no extensive research has been conducted on the effect of the automation on the GSE.

## **2.7 Importance of Stock Exchange for Developing Economies**

The study explores ways to improve the stock exchange in Ghana. However, the issue of whether or not the improvement of the GSE and for that matter any stock exchange is beneficial to the economy as a whole has generated a lot of theoretical disagreements.

One school of thought holds a view that the development of the stock market is important in mobilizing savings, allocating of capital, exerting corporate control and easing risk management as well as boosting economic growth. Levine and Zervos (1997) investigated the relationship between economic growth and stock market development. They found a strong positive correlation between the stock market development and long-run economic growth after controlling for the initial level of per capita GDP, initial level of

investment in human capital, political instability and measures of fiscal and monetary policies as well as exchange rate policy. Although the study established a strong link between stock market development and economic growth, the results does not indentify a causal interaction between the two variables. Agarwal (1997) in his time series cross-section data for nine African countries showed that stock market development is correlated with investment and in turn with economic growth. Although the paper sheds light on the role of stock market development on economic growth, it also does not establish causality.

Both studies assert that the performance of the stock exchange plays a significant role in economic growth. The above studies imply that the stock market influences economic growth and vice-versa. Against this backdrop, overcoming the challenges facing the Ghana Stock Exchange will impact the Ghanaian economy at large.

Osei (2005) investigated the impact of stock market on economic growth in Ghana specifically. The empirical results indicated that stock market development *Granger-causes* economic growth in Ghana and the causation is unidirectional from stock market to economic growth. Thus, the study has revealed that the establishment of Ghana Stock Exchange (GSE) has impacted positively on economic growth since it became operational and therefore matters for economic growth in Ghana.

Granger-causality is a statistical concept of causality that is based on prediction. According to Granger causality, if  $x$  *Granger-causes*  $y$ , then past

values of  $x$  should contain information that helps predict  $y$  above and beyond the information contained in past values of  $y$  alone. Although Granger-causality cannot be interpreted as directly reflecting physical causal chains, for the purpose of this study, it suggests that stock market helps to predict economic growth.

An Africa Recovery report asserts that stock markets promote private enterprise expansion and thus stronger national economic growth. The report continued that "if you have stronger companies that have greater access to capital for their growing businesses ... then there is the potential for creating more sustainable jobs, which can also lead to a reduction in poverty".

In developing countries like Ghana, the banking sector rather than the stock exchange is the main source financing for business. Ghana is predominantly dominated by sole proprietors and small-medium enterprises. Such businesses are more comfortable borrowing from the banks. The findings of Bokpin and Isshaq (2008) also suggest that the size of the Ghanaian stock market is not yet significant to impact on financing choices of firms in Ghana. It is important to note that the development of the stock market will undeniably create more jobs.

The second school of thought holds a contrary view on the contribution of stock markets. Lucas (1988) as quoted by Osei (2005) regards the increasing growth in financial sector as unimportant for small economies like Ghana. This implies that small African economies should not devote further scarce resources and efforts to promoting them at this point, since there are many

weightier problems to address in Africa: high poverty levels, inadequate social services and undeveloped infrastructure.

Demirguc-Kunt (1996) challenges the liquidity of the stock market to long-term growth. He pointed out that increased liquidity may deter growth since stock market liquidity encourages investor myopia, adversely affecting corporate governance and thereby reducing growth. Some authors take an extreme position and argue that stock markets are likely to harm economic development due to their susceptibility to market failure, which is often manifested in the volatile nature of stock markets found in many developing countries (Singh,1997) as cited by Osei (2005).

Claessens et al. (2002) shows that in last two decades financial markets, especially stock markets have grown considerably in both developed and developing countries. However, they advocate that countries might be better off not focusing on developing full-fledged local stock exchange but rather concentrate on creating the conditions such as improving shareholders rights and quality of local legal system that allows corporations to issue and trade shares abroad efficiently.

## **2.8 Efficiency of the Ghana Stock Exchange**

Many studies have raised concerns about the efficiency of the Ghana Stock Exchange. Frimpong (2008) examines the weak-form EMH in the case of the GSE. The weak-form EMH was rejected for the GSE and he concluded that the GSE is weakly inefficient. Osei (2002) also tested the response to annual earnings announcements of the GSE. The study established that the market

was inconsistent with the EMH. The conclusion was that, the GSE was inefficient with respect to annual earnings information releases by the companies listed on the exchange.

Therefore, it can be inferred that a sizeable amount of stock prices on the GSE are either undervalued or overvalued as the market is generally inefficient. From the EMH, it will therefore not be a waste of time for interested experts to analyze the stocks. There is a chance for a hardworking analyst to consistently outperform the market averages. The inefficient Ghana stock market also has important implications for investors, both domestic and international. Knowledge of profitable arbitrage opportunities serves to attract investors to diversify from more efficient markets to invest on the GSE bourse to increase their returns.

If the GSE is not efficient, then the market prices of common stocks and similar securities are not accurately priced and tend to deviate from the true discounted value of their future cash flows. Hence, the market forces drive share prices above or below their true value. Though investors can profit from such inefficiencies, the companies whose shares are consistently underpriced are adversely affected. Many shareholders judge the performance of their companies by the appreciation of share prices. It is very discouraging for managers when the price of their shares is constantly underpriced by the market which most often is the case on the GSE. Market inefficiencies may discourage other firms from listing on the GSE.

## **2.9 Key Building Blocks of a World Class Exchange**

The theoretical framework of this study is shaped by all the factors discussed above in this chapter. Yartey and Adjasi (2007) theorize policy options for promoting the development of the stock markets in Africa. For them, African stock exchanges basically need better technical and institutional development to address the problem of low liquidity. To address these challenges, they recommended robust electronic trading systems and central depository systems as being very crucial. For example, the Ghana Stock Exchange has to use computers and internet technology not only to increase the trading volume enormously but also change the behavior and expectations of investors.

Using New York, London and Hong Kong Stock Exchanges as models, Garcia and Liu (1999) identifies certain common and key characteristics of world-class exchange. Garcia and Liu (1999) found income level, banking sector development, domestic savings and investment, and stock market liquidity as important determinants of stock market development in emerging markets. The study identifies the key structural factors that contribute to the creation of world-class stock exchange. They do not imply an exhaustive review of all factors necessary for establishing a world-class exchange. Rather, their purpose is to highlight the essential broad institutional building blocks of a world-class exchange.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses the research methods adopted for this study and the rationale for the choice of the research approach. It describes how relevant data was collected and the method used to analyze the data. Finally, there is a discussion of the limitations of the chosen methods.

#### **3.2 Research Approach**

This is an exploratory study on how to improve the Ghana Stock Exchange. By the nature of this study, the researcher used a qualitative approach. The strength and weakness inherent in the GSE in terms of its nature, number of listed companies, size of the market and liquidity, as well as efficiency and participation of a large pool of investors was assessed by interacting with the stock market players. Based on the findings, the researcher sought their view on how to deal with such challenges to bring about the needed improvement.

#### **3.3 Data Types and Sources**

Both primary and secondary data was collected for the purpose of this study. The primary data was obtained from the key players in the stock market. The sample was made up of investors, SEC, GSE and the investment banks. Secondary data was also used and majority of the data was gathered from publications and the official website of the GSE. The advantage of using secondary data was that, it was fairly easily accessible and the data collection took less time. However, in Ghana, it can be very difficult to obtain

data for analysis and the data may not be free of charge sometimes. The researcher however used his previously established relationships with some brokerage firms to facilitate the collection of such data. Secondary data enabled the researcher to look at the research topic from different perspectives, thus enhancing a broad view on the subject.

### **3.4 Sampling Techniques**

For this exploratory study, it was not only theoretically sensible to use non-probabilistic sampling techniques but also very practical. The non-probabilistic techniques used were purposive sampling and convenience sampling. Here, Expert purposive sampling was used. The researcher assembled a sample of key stock market players. This approach was very useful in eliciting the views of the people who have the expertise and insight into stock markets' related operations. Convenience sampling was used to survey investors on the GSE because it was expedient for the study.

### **3.5 Sample Size**

The sample size included four groups of respondents. This will be made up of investors, investment banks, GSE, and SEC. Four (4) brokerage firms were selected. At each investment bank, five (5) investors were given questionnaires while one senior level manager from the Brokerage, Corporate Finance and Fund Management departments were interviewed. Furthermore, a top level official from the GSE and the SEC were also interviewed. This brought the total sample size to thirty-eight (38). The reason for including all these groups of respondents is that they all play crucial but distinct roles.

### **3.6 Data Collection Methods**

To achieve the objectives stated on pages 7 and 8, research techniques like interviews, observation and surveys were employed.

*Interviews:* The interviews were not strictly structured although there was a basic interview guide. Due to the exploratory nature of the study, it was important to keep the interview open.

*Survey:* Questionnaires were administered to investors on the GSE to solicit their views about the GSE.

*Observation:* The researcher was at the brokerage firms in an attempt to understand how investors were treated in terms of taking their purchase or sale orders and given investment advice.

### **3.7 Data Collection Process**

Appointment was booked and permission was sought for the surveys and interviews to be conducted. The respondents to the questionnaires were briefed about the purpose of the study and were assured of anonymity where necessary. The researcher himself administered the questionnaires and conducted the interviews in order to provide reliable data.

### **3.8 Methods and Tools for Data Analysis**

The study gave rise to non-numeric data. The non-numeric data was summarized and categorized based on similarities and the results were presented using tables.

### **3.9 Limitations**

This study attempted to shed more light and deepen the understanding of the issues impacting the growth and development of the GSE and how such challenges can be solved. That notwithstanding, the reasons outlined below may have affected the findings of the study.

For qualitative data collection to be more effective, it requires that field observation be done over a considerable number of hours spread over several days in order to ascertain an objective and accurate view of the true situation on the ground. Due to limited time, the researcher only spent two to three hours at the various locations. This implies that some critical factors may not have been captured or observed in those hours.

Some respondents did not complete the questionnaire. Also, some interviewees were reluctant to disclose some vital information because they were still unsure of their anonymity even though the researcher assured them of the confidentiality and the purpose of the research.

Both the sampling technique and the data collection process employed in this study are characterized by various shortcomings. Expert-purposive sampling and convenience sampling may have influenced the sample that was chosen. Hence, the selected sample cannot represent 100% the views of the respective stock market players.

## **CHAPTER 4**

### **RESEARCH FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

This chapter contains the analysis of the data collected for the study. It discusses the facts gathered and provides answers to the research questions on the bases of the findings. The objective of this research was to explore and identify the problems that have the growth of the Ghana Stock Exchange and also find out how to deal with such challenges.

The data for the study was obtained from a sample of 20 investors on the GSE, 16 senior management personnel of investment banks and 2 administrators from SEC and GSE. The investors answered questionnaires while the senior management personnel and the administrators were interviewed. The data obtained from the survey and interview sections was to help address the study objective and provide answers to the research questions. The main objectives of the study were to:

1. Identify the challenges hampering the growth of the GSE and how to deal with such challenges
2. Investigate how to enhance liquidity and efficiency of the GSE
3. Find out how to increase participation of both investors and companies on the GSE

The data gathered from the study were analyzed using descriptive statistics that are presented in tables and text forms.

## **4.2 Findings from Investor Survey**

This section gives the results of the survey of the investors on GSE.

### **4.2.1 Record keeping by investors**

The researcher sought to establish whether or not investors kept record of their incomes and expenses. People who keep proper records are more likely to manage their incomes and expenses well and invest. 42% of the investors kept records of their incomes and expenses. The majority (58%) however did not keep records. It can be inferred that most investors do not keep proper records. Hence, they do not manage their income well enough to be able to invest as desired.

### **4.2.2 Surplus income**

Respondents were asked how often they had surplus income during the last year after deducting all expenses before the next months' incomes arrived in order to determine the financial situation of their families. 16 out of the respondents sometimes (53%), very rarely (26%) and never (5%) had surplus income. The implication here is that most investors are perhaps not financially sound. It is a possible explanation for the poor participation of the Ghanaian investors on the GSE. If most people do not have surplus income, they cannot invest.

### **4.2.3 Most likely usage of additional income**

Not all the investors had surplus incomes. Therefore, the question wanted to establish what investors are mostly likely to do with an additional GH¢100-

GH¢500 to their regular incomes. The results showed that 53% of the investors indicated that if they had such a raise, they will invest it.

#### **4.2.4 Usage of everyday incomes**

The researcher sought to gain an insight into how investor generally manage or use their incomes irrespective of whether it was surplus or deficit. Forty seven percent (47%, n=9) of the investors try to save something and spend the rest of the money on everyday needs. This question has implications for the priority of the investor. For most people, no matter how sufficient or otherwise their income levels are, they choose first and foremost to save before spending the rest on their everyday needs. This confirms the earlier response that if they had a raise they will invest. Thirty seven percent (37%) spend on everyday needs and save the rest of their incomes whilst five percent (5%) of the respondent spend all their money and cannot save anything.

#### **4.2.5 Level of family monthly income and financial situation**

A questions asked investors about their income ranges. Most investors (42%) did not want to disclose their level of income. Surprisingly, the investors were comfortable choosing a statement that best describes their family's financial situation. 65% (11 out 17) of the investors surveyed either had no problems buying food and clothes or durable goods. 17% can hardly make ends meet while 17% can afford quite expensive things. Table 4.5 sheds more light on the financial situation of respondents.

Table 4.1 Level of Family Monthly Income and Financial Situation

		Level of family's monthly earnings				Total
		GH¢101 - GH¢500	GH¢1,001 - GH¢2,000	GH¢2,001 - more	I would rather not say	
Financial situation of family	Have enough money to buy food but buying new clothes regularly may cause financial difficulties.	0	0	0	3	3
	Have enough money to buy food and clothes. But purchase of durable goods like appliances is problematic.	1	2	1	0	4
	Have no trouble buying durable goods, but purchase of really expensive things like a car is hard.	1	1	3	2	7
	Can afford quite expensive things like apartment, car and many other ones.	0	1	0	2	3
Total		2	4	4	7	17

#### 4.2.6 Source of information about the GSE

The study established the various mediums by which investor's access information about the GSE. The means of accessing information is crucial for educational campaign. A significant number of investors (54%) get information from newspapers and websites. This means that the industry players can carry out their educational campaigns through the newspapers and the website. Fifteen percent get information from bank TV programs and eleven percent from bank officials.

#### 4.2.7 Challenges faced when trying to buy and sell securities

Out of the twenty investors who answered the question, fourteen respondents (70%) complained about the long time it takes to buy and sell

their securities. The long waiting period to buy and sell securities are correlated with other challenges mentioned by the respondents. Some complained of unavailability of the securities, low prices and limited options. Others mentioned that most brokerage firms are concentrated in Accra and therefore makes it difficult to transact business outside Accra.

#### **4.2.8 Experience with securities**

These groups of questions were used to establish the experience of investors with the various securities they invest in.

Table 4.2 Experience with Securities

	Security		Total
	Mutual fund	Shares	
Bought securities and regretted	3	10	13

Out of the total of 19 investors, 13 (68%) had bought securities which they regretted. Majority the disappointed investors had bought shares. This implies that 77% of the investors had regretted buying some shares.

#### **4.2.9 Improvement of the GSE and the way forward**

The respondents were asked whether or not they agreed that the GSE has performed modestly over the years, however, certain aspects of the GSE must be improved. All the investors unanimously agreed that the GSE must be improved. 46% strongly agreed while 54% agreed. These responses cannot overemphasize the improvement in certain aspects of the GSE.

The survey also asked the respondents what, in their opinion, can be done to improve the activities on the GSE. The following were the recommendations of the investors:

Table 4.3 Suggestion for improving activities on the GSE

<b>Recommendation for Improvement</b>	<b>Investors making the suggestion</b>	<b>Ranking as per most frequent</b>
More education about the stock market related issues	25%	1
Improvement of the GSE website	20%	2
More securities	19%	3
Creative ways of and selling i.e. margin trading, short selling	12%	4
Regular updates on listed companies	12%	5
Credit Rating Agencies	7%	6
Regular Statement of Investment holdings	5%	7

### **4.3 Findings from Interviews with Key Industry Players**

The main focus of the interviews conducted with the officers of SEC, GSE and the senior management personnel of the investment banks were the challenges facing the Exchange and how to deal with it.

#### **4.3.1 Impression of the performance of the GSE over the decade**

Everybody interviewed agreed that the GSE in terms of returns has been great on the whole though there have been ups and downs. This is in line with empirical data which shows that the GSE has gained 35.8% per annum

since inception. Like any typical exchange, there are always ups and downs. The performance of the GSE over the past decade was described as:

*...the performance of the GSE is not a steady trend. There have been ups and downs. A normal exchange's performance is cyclical- prices go up, the multiples become high and the market has to go down and so some prices have to be shed for this correction. There have been times where the return of the market has gained more than 100% and other times where it went into the negatives. Well, it's been ups and downs.*

That notwithstanding, many of the interviewees recognized the fact that the performance of the GSE could have been better.

#### **4.3.2 Major challenges facing the GSE**

The discussion with the investment bankers, GSE and SEC revealed the following challenges: liquidity, limited number of securities, small float of shares, non-performing companies, high cost of listing, outdated concept of doing business, concentration of investment banks in Accra, interest rate anomaly, non-existence of credit rating agencies, efficiency, lack of education and inadequate capitalization of Licensed Dealing Members.

#### **4.3.4 Attracting more Ghanaians and foreign investors to the GSE**

For the Ghanaian investors, 88% (n=16) of the respondents mentioned massive education. Sixty five percent (65%) talked about creating innovative products that helps the Ghanaian populace to get involved directly or

indirectly. 20% held that the investment banks can work through the wide network of commercial and rural banks in order to be easily accessible.

For the foreign investors, ninety seven percent (97%, n = 17) believe that the first thing to do is to get the fundamentals of the economy right. For them, the macroeconomic indicators should be made stable and favorable. Twenty (20%) answered increasing the number of listed securities as well as the float of the securities. Fifteen percent (15%) mentioned that the processes must be aligned to that of the developed market.

#### **4.3.4 View on the listing of Ghana Club 100**

The question sought the views of the players on the listing of the consistent members of the Ghana Club 100. All of the people interviewed emphasized that, the call must not only be limited to the Club 100 but also medium size companies. These were some of their views:

*...that will be welcome. It's a laudable concern. This is what will make the exchange more attractive, we need to have more options. That will be really cool. Club 100 companies are strong. That will be a good thing. That will definitely be cool; obviously Ghana Club 100 companies are sound companies...*

The views expressed above indicate that the key players of the GSE unanimously support the encouragement and persuasion of listing of the members of the Ghana Club 100 as well as other medium scale companies.

#### **4.3.5 View on regional integration of the exchanges**

On the issues of whether or not the GSE ought to consider the integration of the exchanges within the West African region, the respondent expressed divergent views. On one hand, some (65%) believe that this will be helpful. In their words *...this will be helpful considering the small size of the GSE. This will enhance consolidation as there will be more companies. Regional integration will make it easier for the brokers and dealers to trade across markets. It will give us more options. More securities, more liquidity, more investments. If the market was integrated, there will be a lot of activities...*

On the other hand, some (35%) were skeptical about any form of regional integration now. For them, integration may lead to capital flight and that regional integration will not solve the numerous challenges of the exchange but *"only dissolve the challenges in delusion in the bigger market"*.

#### **4.3.6 Role of the government in the overall improvement of the GSE**

The researcher asked the respondents what they expect the government to do to aid the overall improvement of the GSE. The respondents interviewed held different views and expectations of the government. These were some of the high points of their responses:

*...The government has to list its holding in all major companies. Put in incentives to get companies interested to list. The government can apply some force to push some companies. The government must reposition the GSE and set the macroeconomic indicators right. It must bring its privatization through the GSE. It's high time the government*

*issues bonds for specific infrastructure development. The government has to take care of the macro environment for companies to grow. The government has no direct role. Pass laws to list the companies that use our natural resource...*

An analysis of the various responses show that government is expected to

- i. List its holding in all major companies.
- ii. Put in incentives to get companies interest list.
- iii. Apply some force to push some companies.
- iv. Set the macroeconomic indicators right.
- v. Bring its privatization through the GSE.
- vi. Maintain a conducive macro-environment.
- vii. Issue bonds for specific infrastructure development.

#### **4.3.7 Dealing with efficiency and liquidity**

The interviews almost concluded that if the above mentioned challenges and recommendations are implemented, liquidity and efficiency will consequently be enhanced. To deal with the issue of illiquidity, some recommended trading in derivatives specifically, as this will enhance price discovery.

#### **4.4 Discussion of Findings**

The study sought to explore ways of improving the Ghana Stock Exchange and bring it to world-class standard. To achieve this, the challenges impeding the growth of the Exchange must be identified and dealt with.

#### **4.4.1 Challenges hampering the growth of the GSE**

The first objective of this study was to identify the challenges hampering the growth of the GSE and how to deal with such challenges. The challenges that were established based on the survey and interviews are:

- **Liquidity:** The relative ease with which people get in and out of the market is very low. Investors have to wait for a long time before they can sell out.
- **Limited number of securities:** The number of securities listed is not many, compared to the number of investors. The GSE currently has 35 equities, 3 bonds which rarely trade anyway. People do not have a lot of options on entering the market.
- **Small float of shares:** To compound the situation of limited number of securities, the bulk of issued shares are held by non-resident Ghanaian investors, institutional investors and parents companies who do rarely trade. The average floats of shares available for trade is about 25%. This makes the market very dormant and illiquid.
- **Non-performing companies:** To make matters worse, majority of the listed companies are not doing well at all in terms of profits and share price appreciation. Over the years, just about 12 companies consistently release exciting results and drive the market. This further limits investment options.
- **High cost of listing:** Most of the issuer and operators have complained that the cost of listing is generally very expensive in Ghana. The cost of going public is about 10%-15% of the IPO

proceeds. In advance countries it cost less than 1%. This comes with annual listing fees, massive disclosures and very strict regulation. Thus, many companies not using the GSE to raise long-term capital.

- ***Outdated concept of doing business:*** Most Ghanaian firms do not want to share their company. *“They prefer to own a rat rather than half of an elephant”*. The officer from SEC described this as “an outdated concept of doing business”. Most companies are borrowing costly from banks rather than using equity. This probably explains why most Ghanaian companies do not expand outside the borders of Ghana.
- ***Concentration of investment banks in Accra:*** Some preferred to view the exchange as ‘Accra Exchange’ not a Ghana Exchange since all the brokerage firms are concentrated here in Accra. Until the automation, people had to travel to Accra in order to buy or sell their securities. This obviously limited the participation of investors outside Accra. It may be interesting to note that cocoa farming communities alone receive over \$1 billion in revenues yearly. There is therefore a huge pool of untapped investments outside Accra.
- ***Interest rate anomaly:*** In Ghana, the government seems more focused on short-term bills as the short-term instruments have a higher yield than long-term instruments of comparable credit quality. This has resulted in an inverted yield curve. The inverted yield negatively affects the GSE as more investors buy the short-term bills rather than invest in long-term securities on the GSE.

- **Non existence of Credit rating agencies:** Credit rating helps to give a signal of what is good and relatively safe to invest in. Since independence, there has not been any credit rating agency in Ghana. As a result, domestic investors find it difficult to get information to assess the credit worthiness of borrowers. Until 2003, Ghana had not been rated by any international credit rating agency like Standard and Poor's (S&P). Hence, foreign investors could not have confidence to trade in Ghana's capital markets. Such agencies are still non-existent in Ghana.
- **Lack of education:** Most Ghanaians do not understand the whole concept of investing or buying shares on the GSE and very few also appreciate long-term investing. *"...because they do not know and understand how the market works, they do not get involved..."*
- **Efficiency:** The market's response to information is generally slow. Sometimes, the market does not respond to any kind of information at all. In other developed market, the stock market is a barometer of the economy. However, due to information inefficiency, the GSE does not necessarily reflect or mirror the economy.
- **Inadequate capitalization of LDM's:** The licensed dealing members (LDM's) of the GSE are not adequately capitalized to counter weight the huge foreign investments.

The findings of the challenges facing the GSE corroborate the literature that fashioned the study as the views expressed by the industry players above encompass the issues raised by both Ekow Afedzie and Benimadhu Sunil.

Though Benimadhu (2003) makes generalization about exchanges in Africa, the findings of this study confirms the challenges of low levels of liquidity, few listed companies and the small size of the exchange as well as its efficiency.

#### **4.4.2 Dealing with the challenges of the GSE**

The study also sought the views of the investors and market players on how to deal with the numerous challenges facing the Exchange.

The respondents encouraged the government, GSE and SEC to work together to encourage more companies to use the capital market to raise long-term capital and equity for growth and expansion. The government must use legislation to mandate especially companies that exploit our natural resources like the mining and oil firms to list. So far as they exploit our natural resource: resources that cannot be replaced once depleted, they must allow the indigenes to partake in their companies and share their profit.

The governments over the year have privatized more than 300 companies. However, only 22 were done through the Exchange. If the GSE is to serve its purpose and function to the fullest, the government must use the GSE and the GSE only for its future divestiture programs. This will get more companies listed on the GSE and enhance the level of activity.

Theoretically, equity is the cheapest source of financing. However, the cost of listing makes short-term and medium term borrowing from banks more attractive than listing. The GSE must lower the cost of listing to encourage the tall list of SME's to use the capital market to raise capital.

The government, SEC and the GSE have to put in incentives to get more companies interested in listing. When a company lists, it boosts the level of corporate governance in the country. By the level of their disclosure and the requirements fulfilled, they are less risky. Such listed companies can be given tax reliefs. Also, the processes and procedures for listing should be such that people will be attracted and not discouraged. The standards must not necessarily be lowered but made easier.

Ghanaian companies have to be re-oriented about the modern trends and tenets of doing business. Business men keep their companies to themselves. This explains why most Ghanaian owned companies do not expand outside Ghana. These concepts of doing business do not have any place in today's global economy. Business is about taking risk, sharing the risk and transferring the risk so you can take on more risk. Businesses in Ghana must be made to understand that you cannot do it all alone in this competitive global village. The more you are able to share the risk, the more you can take more risk and expand. Ghanaian companies must use the GSE to their advantage to raise the needed capital to expand beyond the borders of Ghana.

The GSE has automated its trading, clearing and settlement processes. Previously, settlement of transaction took place over t+3 period but now its t+1. The GSE must take the technology to the next level and allow online trading. Online trading empowers the average person with internet access and enough money to open an account to invest in the market without

dealing with a personal broker. Online trading makes the market more accessible.

Currently, the GSE regulation does not permit derivatives. To enhance liquidity, brokers can do the following:

- a. Margin Trading: This allows investors to borrow money from the brokerage firm to purchase stocks. It makes it possible to buy more stocks than one is able to normally.
- b. Short selling: This is the sale of a security that is not owned by the seller but that is promised to be delivered. The key here is that, the brokerage firm will lend you the security from its own inventory, from another one of the firm's customers. If the price drops, the seller can buy back at stock at a lower price and make profit on the difference.
- c. Market making: a market maker is a brokerage firm that stands ready with a firm ask and bid price. When one places an order to sell their shares, the market maker will actually purchase the stock even if it does not have a seller lined up. By so doing, they are literally making a market for the stock.

In order for the investment banks (brokerage firms) to be able to perform some of the roles above, it is critical for them to be adequately capitalized. No investment bank is listed on the GSE. The investments banks can also use the GSE to raise more capital to expand their scope of operations.

The government seems more focused on short-term bills. This has resulted in the inverted yield curve which negatively affects the GSE. Meanwhile, the trading of bonds on the GSE is almost non-existent. It is high time the government and municipalities begin to issue bonds for infrastructural development like road construction.

The average float of shares on the GSE is just about 25%. Majority of the shares of the listed companies are held by parent companies and the like. The GSE and SEC must amend their rule books to ensure that listed companies have not less than 40% of their issued shares available for sale.

The GSE must collaborate with credit rating agencies like S&P, Fitch and Moody's to rate the securities listed on the GSE. Credit rating helps to give a signal of what is good and relatively safe to invest in. It builds up the confidence of investors particularly the foreign investors.

The GSE, investment banks and the commercial banks must collaborate more. The commercial banks have many branches scattered throughout the length and breadth of the nation. The investment banks can use wide network of the commercial banks reach out to a wider pool of investors in the country. Investors should be able to place their orders via the commercial banks. The commercial banks can also create some sophisticated products and sell on the GSE. For instance, the banks can securitize some of the loan portfolios and sell on the Exchange.

The demutualization of the GSE is long overdue. Demutualization can be defined as a change in the legal status, structure and governance of an

exchange from a non-profit one to a profit oriented one. It involves a change in ownership, structure and a change in legal and organization form. The legal and organizational change normally entails the exchange becoming a typical profit making company with limited liabilities and abiding by company laws. This will help the GSE increase its capital, ensure good corporate governance and open up its ownership to the general investor public. In addition, undue governmental influence in mutual exchange as the GSE is now is likely to be absent.

Small and medium enterprises dominate the Ghanaian economy. Therefore, there is a need to establish a very strong alternative market for the numerous small and medium enterprises that cannot meet the stringent requirements of registration and listing on the main exchange- GSE.

#### **4.4.3 Enhancing liquidity and efficiency of the GSE**

The interviewees concluded that liquidity and efficiency will consequently be enhanced if the respective challenges are dealt with appropriately. In addition, some respondents recommended trading in derivatives specifically as this will enhance price discovery. Price discovery is key in any efficient market. Currently, the GSE regulation does not permit derivative trading. Some brokers also emphasized most of their colleagues do not fully understand how basic shares work. For them, the industry is just not ready for derivatives. This is what they said *...derivatives will enhance liquidity but I do not think we are ready. Some brokers do not even understand the market as it is right now. Even simple equities, we don't fully understand*

*how it works. Obviously, not all brokers are on the same page. If the broker cannot appreciate stocks, how can we start talking about derivatives...*

#### **4.4.4 Increasing participation of investors and companies on the GSE**

One of the objectives of this study was to find out how to increase the participation of investors on the GSE. Investors generally invest from their disposal or net incomes. The implication of the investor survey is that most investors are perhaps not financially sound. This may explain the poor participation of Ghanaian investors on the GSE. If most people do not have surplus income, they cannot invest. Also, there is limited participation because most Ghanaians do not know about the GSE or understand how the stock market works.

This result showed that what Garcia and Liu (1999) identified as common and key characteristics of world-class exchange was not actually present in Ghana. Garcia and Liu (1999) found income level, banking sector development, domestic savings and investment, and stock market liquidity as important determinants of stock market development in emerging markets. In this case, the low level of income undermines the participation of Ghanaians on the Exchange.

To attract more Ghanaian investors to the GSE, 88% (n=16) of the respondents mentioned massive education. Sixty five percent (65%) talked about creating innovative products that helps the Ghanaian populace to get involved directly or indirectly. 20% held that the investment banks can work

through the wide network of commercial and rural banks in order to be easily accessible.

Education is the key. People have to understand the activities of the GSE and how they can take advantage of it. The SEC, GSE, brokerage community and all other stakeholders must collaborate to reach out and educate both investors and prospective investors (general public) about investment related issues. The investors' survey showed that over 54% get information about the stock market through newspapers and websites. This can be exploited to carry out the educational campaigns. Effort must be made to incorporate investment related issues into the basic and secondary school curriculum. We need the Business and Economic Departments of the tertiary institutions in the country to incorporate capital market in their curriculum. The Ghana Law School must add the Securities Industry Law to its course outline. *"More people will buy and sell shares when they know and understand how it works..."*

For the foreign investors, ninety seven percent (97%, n = 17) mentioned that the first thing to do is get the fundamental of the economy right. For them, the macroeconomic indicators should be made stable and favorable and the currency must be held in place in order to create the right environment for foreign investors. Twenty (20%) suggested increasing the number of listed securities as well as the float of the securities.

Using New York, London and Hong Kong Stock Exchanges as models, Garcia and Liu (1999) identifies certain common and key characteristics of world-

class exchange. Garcia and Liu (1999) found income level, banking sector development, domestic savings and investment, and stock market liquidity as important determinants of stock market development in emerging markets. The study identifies the key structural factors that contribute to the creation of world-class stock exchange. They do not imply an exhaustive review of all factors necessary for establishing a world-class exchange. Rather, their purpose is to highlight the essential broad institutional building blocks of a world-class exchange.

#### **4.5 The Study and Existing Literature**

The research gave rise to very interesting and insightful findings. Most of the findings confirm the literature that guided and shaped the study. Though some previous studies had presented the challenges facing the Ghana Stock Exchange, the study sought to find out the challenges facing the GSE by surveying investors and interviewing the market players.

Ekow Afedzie had mentioned that high inflation and interest rates are the “greatest” challenge facing the bourse. The study revealed that the high interest rates spawned an inverted yield curve which affected the level of activity on the GSE. Benimadhu (2003) cited low levels of liquidity, efficiency, few listed companies and the small size of the exchange as the exchange specific issues affecting the growth of the stock markets in Africa. Even though the study makes huge generalization about African markets, the findings of this study shows that the GSE faces similar challenges and more.

Robust electronic trading as put forward by Yartey and Adjasi (2007) has already been implemented on the GSE. The market players are advocating for online trading to enhance liquidity.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter gives a summary of the findings of the research and the conclusions arrived at by the researcher. It also includes recommendations suggested by the researcher for dealing with the challenges of the GSE.

#### **5.2 Summary of findings**

Over the past two decades, the performance of the Ghana Stock Exchange has been spectacular. The good performance of the Exchange does not mean that the GSE is fully developed and matured. There are challenges that inhibit the growth and development of the GSE and thus hinder the GSE from making the needed contribution to the economy of Ghana as a whole.

This study was carried out to explore how the Ghana Stock can further be improved. It sought to identify the challenges that impede the development of the GSE as well as find ways to deal with such challenges.

Related literature and other materials relevant to this study were reviewed to understand what had already been done. The researcher reviewed the history and the performance of the Ghana Stock Exchange (GSE) over the years. Works about the major challenges facing the GSE were also evaluated. The study looked at recommendations for the growth of the stock exchange and also analyzed the link between stock market developments and economic growth and as well as the efficiency of the GSE.

The study was conducted by interacting with investors on the GSE as well as key players like the investment banks, SEC and GSE.

From the results of the study, common challenges identified facing both investors and the other players are liquidity, limited number of securities, small float of shares and concentration of investments banks (brokerage firms) in Accra. The other challenges include i) non-performing companies, ii) high cost of listing iii) outdated concept of doing business iv) interest rate anomaly v) non existence of credit rating agencies vi) lack of education vii) efficiency and viii) inadequate capitalization of LDM's.

To deal with the challenges above, the industry players suggested vigorous educational campaigns, putting in incentives to encourage more companies to list. They also suggested that the government must use the GSE for its divestiture programs and must stabilize the macroeconomic conditions.

### **5.3 Recommendations**

On the basis of the findings, the researcher recommends the following:

The demutualization and incorporation of the GSE should be the first priority of the Ghana Stock Exchange. This is recommended not only because it's the current trend in developed economies but also the benefits that comes with it. Conversion into a public limited company will encourage GSE to be governed and regulated properly. This will help the GSE increase its capital, ensure good corporate governance and open up its ownership to the general investor public. In addition, undue governmental influences are likely to be absent.

The GSE must set-up a separate market for different capital companies. There is an imminent need to establish an alternative market for the small and mediums scale enterprises that dominate the Ghanaian business.

The brokers and their clients can start margin trading, short selling and market making to help enhance liquidity on the Exchange.

#### **5.4 Significance of the Study**

This study will add to the body of knowledge about the subject matter by making a specific case for Ghana on how to further develop the GSE. By focusing on the progress and achievements chalked by the GSE since its inception as well as interacting with the industry players, the study has identified the challenges facing the Ghana Stock Exchange in its quest to become a world-class exchange. It also discusses the improvements needed to accelerate the development process. The findings of the study will inform and enhance the various roles of the key players of GSE.

#### **5.5 Future studies**

The aim of the study stated in chapter 1, identifying the challenges facing the GSE and suggesting how to deal with them, was achieved in this study. However, further research is needed in order to re-inforce views expressed in this study or challenge them or come up with something completely different. Primary research concerning challenges and way forward for the GSE and other emerging markets needs to be carried out by both academics and professionals as the area is so under-researched.

## REFERENCES

- Acheampong, E. K. O. (2006). Automating Trading on the Stock Exchanges for Emerging Markets: A Case study of the Ghana Stock Exchange. (Unpublished undergraduate dissertation, Ashesi University College)
- Agarwal, S. (1997). Stock Market Development and Economic Growth: Preliminary Evidence from African Countries. Retrieved January 29, 2010 from <http://www.jsd-africa.com/Jsda/spring2001/articlespdf/ARC%20-%20Stock%20Market%20Development%20and%20Economic%20Growth.pdf>
- Bauch, M. The Global Electronic Stock Market. *Investopedia*. Retrieved February 2, 2010 from <http://www.investopedia.com/articles/06/globalelectronicmarket.asp>
- Benimadhu S. (2003). Challenges facing African capital markets. Presentation at UNECA Forum. Johannesburg. Retrieved January 19, 2010 from [http://www.uneca.org/eca\\_resources/major\\_eca\\_websites/CMD/works hop/Challenges%20facing%20African%20Capital%20Markets%20-UNECAOct2003.ppt](http://www.uneca.org/eca_resources/major_eca_websites/CMD/works hop/Challenges%20facing%20African%20Capital%20Markets%20-UNECAOct2003.ppt)
- Biekpe, N. (1999). *The impact of regionalization in the African capital markets sector and the mobilization of foreign capital for sustainable development*. Retrieved February 21, 2010 from <http://www.un.org/esa/sustdev/documents/08beik.PDF>
- Bokpin, G. A. & Isshaq, Z. (2008). Stock market development and financing decisions of listed firms in Ghana. *African Journal of Business Management Vol.2, pp. 209-216*.
- Claessens S., Klingebiel D. & Schmukler S. C. (2002). Explaining the Migration of Stocks from Exchanges in Emerging Economies to International Centers. *World Bank Working Paper No. 2816, Washington: The World Bank*
- Demirgüç-Kunt, A. & Levine, R. (1996). Stock market development and financial intermediaries: stylized facts. *The World Bank Policy Research Working Paper Series, Vol. 10 pp.291-321. No 1462*.
- Di Giorgio, G., & Di Noia, C. (2001). *Financial regulation and supervision in the euro area: a four peak proposal*. Wharton Financial Institutions Center, Retrieved February 19, 2010 from <http://fic.wharton.upenn.edu/fic/papers/01/0102.pdf>

- Frimpong, J. M. (2008). Capital Market Efficiency: An Analysis of Weak-form Efficiency on the Ghana Stock Exchange. *Journal of Money, Investment and Banking, Issue 5*.
- Frimpong, J. M. & Oteng-Abayie, E. F. (2006). Modeling and Forecasting Volatility of Returns on the Ghana Stock Exchange Using Garch Models. *American Journal of Applied Sciences, 3(10):2042-2048*.
- Garcia, F. V. & Liu, L. (1999). Macroeconomic Determinants of Stock Market Development. *Journal of Applied Economics, Vol. 2 (1), pp. 29-59*.
- Ghana Has Too Many Banks. (2009, Oct 14). *Citifmonline*. Retrieved February 15, 2010 from <http://www.citifmonline.com/site/business/news/view/721/9>
- Ghartey, J. (2004). *Doing Business and Investing in Ghana: Legal and Institutional Framework*. Accra: Janel Publications Limited.
- Greenwood. J & Smith B. D. (1997). Financial Markets in Development and the Development Of Financial Markets. *Journal of Economic Dynamics and Control, Journal of Economic Dynamics and Control ,Vol 21, pp.145-181*
- Irving, J. Africa's struggling stock exchanges: Boost to economic development or "costly irrelevance"? *Africa Recovery, United Nations*. Retrieved February 28, 2010 from <http://www.un.org/ecosocdev/geninfo/afrec/vol14no3/afstocks.htm>
- Kew, J., & Bowers, E. (2008, Oct 30). Ghana's 'Forgotten' Stock Market Beats World Equities. *Bloomberg*. Retrieved January 28, 2010 from <http://www.bloomberg.com/apps/news?pid=20601084&sid=aa.ukPe0.v1U>
- Kibuthu, G. W. (2005). Capital Markets in Emerging Economies: A Case Study of the Nairobi Stock Exchange. Retrieved December 28, 2009 from <http://fletcher.tufts.edu/research/2005/Kibuthu.pdf>
- Levine, R. (1991). Stock Markets, Growth and Tax Policy. *The Journal of Finance, 46, 1445-1465*.
- Levine, R. & Zervos, S. (1997). Stock Market Development and Long-Run Growth. *The World Bank Economic Review, 10 (2) p. 323-339*.
- Mensah, S. (1997). *Financial Markets and Institutions: Ghana's Experience*. Retrieved March 18, 2010 from <http://www.semfinancial.com/publications/Financial%20Markets%20and%20Institutions.pdf> [accessed 12 January 2009]

- Osei, K. A. (2002). Asset pricing and information efficiency of the Ghana Stock Market. *African Economic Research Consortium, AERC Paper 115*.
- Osei V. (2005). Does the Stock Market Matter in Ghana? A Granger-Causality Analysis. *Bank of Ghana, WP/BOG-05/13*.
- Owusu-Frimpong, N. (2001). The causes and consequences of a poor-performing emerging stock market in sub-Saharan Africa: The case of the Ghana Stock Exchange. *Journal of Financial Services Marketing, 6, 122-132*.
- Shah, M. A. (2008). How the Karachi Stock Exchange (KSE) can be improved? Retrieved December 28, 2009 from [http://www.bth.se/fou/cuppsats.nsf/all/4f8a90983af802e8c125747c005f1cfc/\\$file/Master\\_Thesis\\_Report\\_Pdf.pdf](http://www.bth.se/fou/cuppsats.nsf/all/4f8a90983af802e8c125747c005f1cfc/$file/Master_Thesis_Report_Pdf.pdf)
- Wallenius, L. (2009). Securities Clearing and Settlement on Ghana Stock Exchange: A Study of an Emerging Stock Market. Retrieved December 28, 2009 from [https://publications.theseus.fi/bitstream/handle/10024/4271/Laura\\_Wallenius\\_%20UG%20DISSERTATION.pdf?sequence=1](https://publications.theseus.fi/bitstream/handle/10024/4271/Laura_Wallenius_%20UG%20DISSERTATION.pdf?sequence=1)
- Yartey, C. A. (2006). The stock market and the financing of corporate growth in Africa: the case of Ghana. *IMF Working Paper, Research Department, WP/06/201*.
- Yartey, C. A., & Adjasi, C. K. (2007). Stock Market Development in Sub-Saharan Africa: Critical Issues and Challenges. *International Monetary Fund Working Paper IMF WP/07/209. International Monetary Fund, Washington DC, African Department*.



5. How does your family usually manage your everyday incomes?

- We try to save something and spend the rest of the money on the everyday needs
- We spend money on the everyday needs and save the rest
- We spend all the money on everyday needs and cannot save anything
- We find it difficult to answer this question

6. From what sources do you get information about the Ghana Stock Exchange?  
Please tick as many as apply

- Newspapers
- Magazines
- TV programs
- Specialized web sites
- Bank Officers
- Brokers
- financial consultants/brokers
- Friends/acquaintances
- Other sources (Please specify).....

7. What securities do you invest in? (Please tick as many as apply)

- Mutual fund
- Unit trust
- Shares
- Government Bonds
- Corporate Bonds
- Other (Please specify).....

8. What problems/challenges do you face when trying to buy such securities?

.....

.....

.....

9. When you buy a security, how long do you hold on to them before selling off?

- Less than 3 years
- From 3-5 years
- From 6-15 years
- For a lifetime
- As and when it becomes necessary to sell

10. What problems/challenges do you face when trying to sell your securities?

.....

.....

.....

11. Have you bought any security within the last 5 years on the GSE which you regretted?

- Yes            No

***If yes, please answer question 12 and 13***

12. To be specific, what security was it?

- Mutual fund            Unit trust    Shares            Government Bonds  
Corporate Bonds    Other (Please specify).....

13. How did you deal with this?

- I did nothing  
I stopped buying financial instruments (sold the shares/bonds/mutual funds etc.)  
I submitted a grievance to the brokerage for not telling me much  
Other (Please explain).....

14. The GSE has performed modestly over the years. However, certain aspects of the GSE must be improved.

- Strongly disagree    Disagree    Neutral            Agree            Strongly agree

Please explain why.....  
.....  
.....

15. In your opinion, what can be done to improve/enhance the activities on the GSE?

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

16. Please rank your knowledge and understanding of investing on the GSE.

- No knowledge and understanding  
Unsatisfactory knowledge and understanding  
Satisfactory knowledge and understanding  
Excellent knowledge and understanding

17. What are your personal reasons for investing on the GSE? (Please tick as many as apply)

- For a rainy day, for unexpected expenses
- For retirement
- To leave something for children to inherit
- To speculate on the exchange
- To get income in the form dividends etc
- I like saving
- For another reason (Please specify).....

18. What sources of information do you pay attention to when choosing a financial instrument to invest in? (Please tick as many as apply)

- Information materials like financial statement, annual reports
- Recommendations of independent financial consultants or brokers
- Advice from friends and relatives
- Personal Analysis and evaluation
- Other sources (Please specify).....

19. If your family does not invest in any financial instrument, what is the reason?

- We don't trust brokerage firms
- We can't do this because of low income
- We don't see the point in investing
- We can't resist the temptation to spend
- For another reason (Please specify).....

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20. Respondent's gender

- Male
- Female

21. Please indicate your age group?

- Under 20
- 21- 30
- 31- 40
- 41- 50
- 51- 60
- 60 and over

22. What is your level of education completed?

- None
- Primary
- JSS
- Technical/Vocational Training
- SSS
- Polytechnic
- University
- Post-graduate
- I would rather not say

23. What is the level of your family's monthly earnings, wages/salary in your main job, including bonuses, vacation benefits, and other payments (after tax deductions).

- Up to GH¢100                       GH¢101 - GH¢500                       GH¢501 - GH¢1,000  
 GH¢1,001 - GH¢2,000                       GH¢2,001 - more                       I would rather not say

24. Which of the following best describes the financial situation of your family?

- Hardly make ends meet. We do not have enough money even for three square meals in a day.
- Have enough money to buy food but buying new clothes regularly may cause financial difficulties.
- Have enough money to buy food and clothes. But purchase of durable goods like appliances is problematic.
- Have no trouble buying durable goods, but purchase of really expensive things like a car is hard.
- Can afford quite expensive things like apartment, car and many other ones.

***Thank you for taking time to complete this questionnaire. Your cooperation is highly appreciated***

## **APPENDIX II**

### **Ashesi University College**

#### Interview Guideline

This is an exploratory study on how to improve the Ghana Stock Exchange. The results of this interview are solely for academic purpose. All information provided will be treated with utmost confidentiality.

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1. What are your impressions of the performance of the GSE over the past decade?
2. What do you think are the future prospects of the GSE?
3. What do you think are some of the major challenges facing the GSE currently?
4. How can more Ghanaians be attracted to the Ghana Stock Exchange?
5. How can more foreign investors be attracted to the Ghana Stock Exchange?
6. A lot of industry players have advocated for the listing of the Ghana Club 100 to enhance liquidity. What do you think about this?
7. What can be done to make the GSE more efficient and liquid?
8. Most African capital markets are still small and fledgling. Do you think integrating the exchanges in the sub-region would enhance liquidity?
9. What can the government do to aid the overall improvement of the GSE?

## **APPENDIX III**

### **List of Investment Banks Visited**

Databank Brokerage Ltd

EDC Stockbrokers Ltd

IC Securities Ltd

Strategic African Securities Ltd