Challenges of Frontier Stock Markets with Low Liquidity: A Case Study of Ghana Stock Exchange

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Abstract

Very few studies examined the antecedents of illiquidity in the finance literatures. This research investigates factors contributing to the problem of illiquidity, a common feature of frontier markets, on the Ghana Stock Exchange (GSE). The general objective of the research was to analyze the illiquidity phenomena—its origins, impacts, and potential remedies. More specifically, the research focused on the effect of illiquidity on stakeholders and identified measures in place to improve the condition. The research adopted a qualitative methodology research with unstructured phenomenological interviews, which enabled participants to share experiences, opinions and perspectives on the problem. Twenty-two participants representing the major stakeholders on the market were selected for the study, including: (i) registered brokers; (ii) listed companies; (iii) unlisted companies; (iv) government institutions; (v) regulatory agencies; and (vi) investors. The results indicated that there is lack of equity culture in Ghana, with bank loans and personal savings being primary sources of business funding. Macro-economic instability also affects businesses and investors. Government borrowing at high interest rates makes stock market less attractive. The study also revealed that market inefficiencies, lack of clear government policy direction and effective regulation also contribute to illiquidity. To deal with the problem, the experiment has recently introduced the Ghana Alternative Market (GAX) for SMEs, and the Ghana Fixed Income Market (GFIM). Based on the findings, it is recommended that the government tackles anti-equity culture through financial literacy programs or education, and establish financial incentives for listed companies. Government must control borrowing through prudent fiscal policies, maintain macro-economic stability, and implement effective policies and regulations that promote listing of State Owned Enterprises (SOEs), local private companies and foreign businesses on the GSE.

Keywords: Phenomenology; Liquidity; State-owned enterprises; Market macrostructure

Research Problem

A major challenge facing frontier and emerging stock markets is the problem of illiquidity. Stock market illiquidity has been shown to have significant impact on current and future rate of economic growth, capital accumulation, and productivity growth [1,2]. On the GSE, the problem of illiquidity can be described as chronic. Although there are thousands of limited companies in the country, the size of listed companies has remained between 30 and 35 for over two decades. In comparison, the Nigeria Stock Exchange (NSE) lists 200 equity stocks covering a wider range of industries. Since the market is not well researched [3], information on factors contributing to market illiquidity on GSE, and frontier markets in generally, is also limited in supply. This research highlights the challenges and risks faced by stakeholders (investors, traders, issuers, intermediaries and regulators), how market participants meet and adapt to the challenges and risks involved in trading in illiquid markets, and stakeholder perspectives on what factors of illiquidity need to be tackled to improve the performance of the GSE.

Purpose of the Research Study and its Significance

The purpose of the research study is to find out and understand better origins of illiquidity, its impact as well as measures hitherto taken and those that need to be taken in order to tackle the problem of illiquidity on the Ghana Stock Exchange. Frontier markets (including Ghana) have been described as attractive investment destination for investors. According to Stevenson frontier markets are similar to emerging markets but are less liquid and not well researched. In terms of economic development, Constable noted these markets are the least developed and are generally poor countries with growth potential to becoming emerging (e.g. Mexico, South Africa) and developed markets like the USA or UK. With the exception of South Africa, sub-Saharan African (SSA) economies are considered frontier markets, less attractive for investments compared to Asian countries like China and India.

The SSA region, previously identified with wars, poverty and without hope, is now attracting the investment community for all the good reasons. The region is expected to be the most populated, youngest and fast developing urban market in the world. At current growth rates, the population of SSA is expected to hit 2 billion by the year 2050, overtaking China and India projected at 1.4 billion and 1.6 billion respectively. Six of the ten fastest growing economies in the last decade were from Africa, and a quarter of the economies in the region grew by 7% or more in 2012.

Inflows from foreign investor funds into frontier markets reached $2.2 billion, in a period that some $720 million was disinvested from emerging markets. Ghana’s share of global investment funds has come by way of debt capital, selling US$1 billion 10-year Eurobond each in 2013 and 2015, respectively. Frontier markets are now noted to be less volatile than emerging and developed markets and demonstrate faster economic growth, have young growing population profile, strong macroeconomics, and improved market fundamentals compared with emerging markets; some characteristics that made investing in emerging markets appealing in the 1990s. Gaeta is of the view that, despite the region’s challenges, Africa provides huge investment opportunities over the long-term. For example, Nigeria continues to...
attract investors’ attention with increasing domestic consumption, a vibrant young population, market reforms and stock markets providing long-term capital for economic development and growth. Ghana is considered one of the fastest-growing economies within the frontier world, growing at average annual rate of 6 percent over the last six years and reaching all time high 15% in 2011. Financial mismanagement and corruption after the discovery of large deposits of oil has eroded recent economic gains and threatened the country’s financial stability.

Market commentators and investors often complain about inability to unwind positions in frontier markets quickly enough which could be costly. To compete effectively for investor funds as a preferred destination Ghana must quickly address the liquidity concerns of investors. This research will help to identify the basic problems affecting the market as a step to finding long-term workable solutions to this huge challenge facing the GSE. If it is too risky or costly to trade on the GSE, then trading activity will be low as investors look for alternative investment destinations. Below are some important potential benefits of the research:

Economic Activity: Chiarella, Flaschel, and Semmler argued that illiquidity can cause significant disruption to economic activity and possible bankruptcy for agents undertaking economic activities. Improving liquidity within the GSE will boost economic activity by providing long-term capital opportunities to listed companies in the form of equity to undertake profitable investments. Generally, equity investors look for high investment returns but are particularly attracted to markets where assets can be sold immediately when required [4]. Improving the liquidity of the GSE will make easy entry and exit for investors and reduce liquidity risks. Following recommendations from this research, changes are expected to be introduced on the GSE that will increase the size from the current 35 to over 50 in the next 5 years.

Literature Review and Theoretical Background

Research conducted on liquidity of frontier markets is generally rather scarce and this is particularly true for the markets in Africa. Given the differences in market microstructure and macroeconomic conditions, there are likely to be unique factors within the business environment of each country that affect the liquidity of the local market differently. Thus, there is the need to provide scientific basis for developing specific solutions in dealing with unique problems at different markets.

The theoretical foundation for market illiquidity has been linked to market imperfections. Market illiquidity is generally explained as evidence of market inefficiency. When prices are determined in a way that equates the marginal rates of return (adjusted for risk) for all producers and savers the market is said to be efficient in terms of resource allocation. The market that ensures reasonable cost for transferring funds is said to be operationally efficient. Moreover, a market in which prices fully reflect all available information is said to be efficient in terms of information distribution or availability. According to Butler operational and informational efficiency result in efficiency in capital or resource allocation which is more likely to occur in liquid markets with high volume of transactions.

Stock markets exhibit inefficiencies in many different ways. Market is inefficient where there is limited competition or participation, because unrestricted participation makes the incorporation of relevant information in asset price possible. Thus, absence of willing buyers and sellers due to prohibitive entry costs is a sign of inefficiency. Another sign of market inefficiency is high transaction costs (e.g. brokerage commissions, transaction taxes, and bid-ask spreads) which discourages participation in trading activities. Market inefficiencies are also evidenced in the form of information asymmetry or the condition that information availability to market agents varies depending on source or capacity to process such information. Investors trading on privately available information increase illiquidity costs for other investors that are not privileged to such information. For example, Jiang argued that inefficiency or illiquidity of the Chinese market provides arbitrage profit opportunities to sophisticated market agents. This suggests that differences in agents either based on size or information processing advantage creates imperfect market condition. Moreover, where market frictions impose funding constraints, agents are likely to have limited access to funding and therefore ability to participate in trading. Thus, there are many factors that contribute to the condition of illiquidity and therefore require collaborative effort of all market participants. Obtaining stakeholders’ perspectives on how various factors impact market participation is highly informative and desirable to dealing with deep-rooted problems that threaten the existence any stock exchange.

Liquidity is a broad term with different meanings. Generally, liquidity represents the number of bids and offers a market receives. More bids and offers is a sign of healthy market competition, which reduces the bid-ask spread and creates a more efficient market. Traders tend to refer to liquidity in the broader sense to include credit availability, funds flow, asset prices and leverage. Finance and economics literature also differentiates between asset, institutional and national liquidity. The liquidity of an asset is often described as the ability to trade that asset without affecting price significantly. Institutional or corporate liquidity refers to the ease with which organizations meet financial obligations when due. Thus, whereas market liquidity refers to ease of selling an asset, funding liquidity describes the ease of raising funds or the availability of credit. The availability of funding or credit is important factor for asset liquidity. Liquidity of secondary stock markets can significantly influence the success of initial public offerings as well as determine the cost and risk to underwriters and all other market makers. Generally, liquid stock markets are less volatile and require relatively lower transaction cost to trade in compared with illiquid markets. To achieve capital allocation efficiency and to reduce cost of capital markets are required to be liquid to attract more investors.

Within the bond and equity market literature, five particular aspects of liquidity are applied in characterizing markets, including: (1) tightness, (2) depth, (3) resiliency, (4) immediacy, and (5) breadth. Tightness dimension of market liquidity measures the cost of switching positions. For example, the cost involved in quickly disinvesting a portfolio of stocks. This is captured by the bid-ask spread, with liquid markets showing narrow spreads to discourage significant price changes whilst illiquid markets have wide spreads. Depth on the other hand refers to the effect of large trade volumes on price. Highly liquid markets have the capacity to incorporate large transactions immediately without significant changes in stock price, but investors in illiquid markets are likely to suffer loss from the same event. Selcuk and Yilmaz, explained resiliency as the duration involved in restoring market price to equilibrium after significant price movements, due to release of new information to the market or trades involving large volumes of stocks. Robust or resilient markets exhibit short durations but inefficient markets tend to be slow in returning to equilibrium price. Immediacy is a measure of the speed with which transactions are concluded, an indication of the effectiveness of trading, clearing
and settlement processes and the trading system in general. **Breadth** suggests the existence of large orders of high volume transactions with no material impact on prices. Thus market liquidity cannot be improved by focusing on a single dimension but rather dealing with all the inter-related dimensions con-currently.

Sources of market liquidity are generally classified into two main groups, namely: (1) Institutional factors - securities laws, regulation and supervision of dealers, accounting rules; (2) Environmental factors - macroeconomics, issuers’ creditworthiness. But one significant development in financial markets that led to improved market liquidity is the introduction of innovative financial products although VonHagen and Fender, argued these instruments diminish the effectiveness of monetary policy. The usefulness of financial products stems from greater improvements in techniques for managing risk. However, integrity and strength of innovative products, structures, markets and laws are all important characteristics that are needed to increase investor confidence. The availability of these financial products increases competition among credit intermediaries (e.g. commercial banks, securities firms) and likely to result in the reduction in cost of credit and market participation. Some derivative products are purposely designed to diversify both credit risk exposure and interest rate risks, providing the opportunity for investors to hedge risk or unwind positions on cashless basis. Furthermore, distribution of risk is achieved through syndication and securitization, enabling high numbers of market participants, both banks and non-bank lenders to provide credit as a syndicate. Clearly, innovative financial products in advanced economies have contributed immensely to market liquidity but these products are almost non-existent in frontier markets.

**Research questions**

The questions focused on identifying how market structures and the design of financial system impact liquidity. The following are the four (4) main research questions: (1) What are the macro drivers of illiquidity on GSE? (2) How do market microstructure of GSE impact liquidity? (3) How does current regulatory system affect liquidity? (4) What current products and services promote market liquidity?

**Methodology**

The research is qualitative in nature, which is appropriate for developing the understanding of meanings, experiences, behaviors, interactions and social contexts [5-7]. The research used the phenomenology approach, which focuses on participants’ experiences, opinions and interpretation of the subject matter under consideration. Phenomenologists focus on “understanding social and psychological phenomena from the perspectives of people involved” [8]. The direction of interviews depended on answers provided by participants on earlier questions. According to Hycner, imposing any form of method on a phenomenon compromises the integrity of a phenomenological study. Thus, data collection and research questions were adjusted according to responses obtained. Although questions were based on twenty-four variables identified in the literature to affect market liquidity [9,10], the wording and order of the questions differed from one respondent to another.

**Population and sampling strategy**

The population for the study covered all listed companies on the GSE, unlisted companies with potential for listing (mostly banks and state owned institutions) registered brokers, Government Departments, and private individuals. Thus, the population was made up of all stakeholders that have one form of experience or the other interacting with the stock exchange. The study adopted the purposeful sampling strategy, a popular selection method used for qualitative research. The usefulness of this method lies in the fact that those included in the sample are rich with information concerning the phenomenon that is being studied so that resources can be used efficiently. Cresswell and PlanoClark observed that the technique ensures that only individuals or groups that are knowledgeable or have experience with the phenomenon are selected. Besides, those included in the sample must be interested in the subject matter under investigation, be ready and willing to participate, and be freely available to share experience, opinion and make suggestions where appropriate. Thus, participants included in the sample were not selected based on probability sampling, but rather upon personal judgment that those institutions and individuals have the knowledge and experience regarding the phenomenon under investigation and will readily share perspectives, experience and opinions with the researchers.

A list of all listed companies, licensed banks and financial institutions and SOEs were available at the websites of GSE, the Central Bank and the State Enterprises Commission’s websites respectively. The lists also provided information on addresses, telephone numbers and website address for each individual company. The researchers made initial telephone calls, attempted to arrange interview dates with senior finance managers who were responsible for financing decisions but had just little success as many could not be reached. Interviews could only be arranged when the researchers visited the businesses premises of the participants in Ghana. Whereas some were ready to grant interview on the same day, others required advance notice of 24 to 72 hours. The interviews formed the primary unit of analysis.

**Research instrument**

There are numerous types of research instruments; however the type of instrument that was selected was based on the data collection procedure that would be adopted. For this study, the research instrument used was the interview. The literature revealed many types of interviews (Table 1).

The procedure also had an element of disguised snowball sampling. Whereas snowballing involves asking one participant to recommend other participants for interviewing, the researchers identified without requesting, the other stakeholders mentioned by earlier informants who became automatic potential interviewees.

To ensure the investigation was ethically conducted, the research used informed consent. Apart from providing copies of the official letter of introduction to participants, the researchers had to obtain the informed consent by further explaining: (1) why the participant was selected to be part of the research, (2) the purpose of the research and the procedure, (3) that interviews will be recorded as evidence of data collected, (4) that participation is voluntary and interviewee’s has the right to refuse answering any question regarded uncomfortable, and (5) how confidentiality of data collected will be ensured. This helped to allay the concerns of a few participants that had granted interviews.

| Types of interviews                  | Structured | Semi-structured | Unstructured |
|--------------------------------------|------------|-----------------|--------------|
| Open                                 | Focused    | Formal          |              |
| Informal conversation                | In-depth   | Partially structured |       |
| Fixed                                | Open-ended | Closed          |              |

**Table 1: Types of research interviews.**
to journalists and the information had been misrepresented in the news media. One of such candidates requested that a questionnaire be used instead of interview, but have not explained that the research made use of qualitative approach and that traditional data collection method is not appropriate, called on the deputy to sit in the interview as a witness. Similarly, another participant requested that an agreement was signed that made the researchers liable for any misrepresentation of data collected that adversely affected the reputation of the firm. However, this was dropped after the researchers pointed out that the letter of introduction had clearly stated the purpose of the research and there was no intention to deceive participants. Clearly, some organizations in Ghana are becoming concerned about journalist misinterpreting information provided by these firms during interview and putting incorrect information in the public domain. Apart from these, most participants quickly identified with the phenomenon under investigation and were willing to share experiences.

Boyd [11] suggested two to ten participants as enough or sufficient to reach saturation. Similarly, Creswell recommended conducting long interviews for a maximum of ten participants for a phenomenological research. However, because participants for this particular research were not prepared to commit long hours for interviews, 22 participants were interviewed to make up for the short duration as follows:

- 5 Registered brokers
- 3 Listed Companies
- 7 Unlisted companies, one of which was doing IPO
- 3 Government Institutions (The Central Bank, Ministry of Finance, and State Enterprises Commission)
- 2 Regulatory bodies (SEC, and GSE)
- 2 Investors (1 major institutional and 1 private investor)

Nine of the participants were selected from the banking sector because: (1) they are considered the most profitable businesses in Ghana with listing potential, and (2) floated shares from the sector are highly subscribed by the public. The analysis section will reveal why the banking and financial sector is considered the most profitable industry in the country. Thus, 22 interviews were conducted in 10 days, with average interview duration of twenty minutes. Data were collected from the above different group of stakeholders for the purposes of data triangulation so that responses could be contrasted and validated and to establish similarities in findings.

**Respondents/Data collection**

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Unstructured phenomenological interviews were conducted covering all the selected participants. Wimpenny and Gass [13] suggested unstructured interviews as the most appropriate means for eliciting the views or concerns of participants. It is a concept under phenomenology that requires the researchers to identify and set aside own preconceptions, assumptions, feelings, impressions or views during data collection [14]. Thus, the approach of interviewing took the form of conversation, where participants were given the opportunity to respond without the researchers’ influence. Since participants lived the phenomenon every day, the researchers ensured interviewees were encouraged to vividly describe the lived experience using everyday language devoid of constructs of the intellect, which is a form of bracketing. Field notes, mainly analytical memos and observational notes [15], was other data used. The study adopted the NCT model for data analysis by Seidel [16].

**Results**

Six broad themes emerged from the analysis of the interviews with the participants. These include: (a) lack of equity culture in Ghana, (b) macro-economic instability, (c) government borrowing on the money market, (d) attributes or characteristics of the market, (e) use of alternative sources of capital, and lack of effective government policy and regulation. Other themes arising from the interviews include: (1) lack of incentives for listed companies, (2) government involvement in corporate governance, (3) pension fund reforms, and (4) corruption.

**Discussion of results**

Lack of equity culture was identified as a major cause of illiquidity on the GSE. Many business owners hardly think about the capital market for many reasons, including: (a) lack of knowledge about equity capital, (b) unwillingness to lose control of what many business owners consider personal property, (c) desire to keep business information private or avoidance of public disclosure, and (d) the psychological satisfaction of owning everything. Ordinarily, business owners express concern about why companies built from personal resources, hard-work and dedication be shared with someone else? In many instances, ownership is transferred to other family members but very few such businesses survive after the death of the owner. The market also suffers from the lack of equity culture on the demand side, in that investors are not used to equity investments. Most private investors only know of financial instruments with positive returns but do not understand and unwilling to invest in instruments whose prices move up and down.

The research findings indicate unstable macro-economic environment has serious impact on the liquidity of the GSE. This finding provides further evidence that suggest inter-relationship
between macro-economic variables and the combined effect on market liquidity [17]. To survive economic downturn, companies cut down on size of employees, this leads to falling household income, spending and savings levels. Shortfall in government revenue from taxation (corporate and personal) means budget deficit which must be financed through domestic and foreign borrowing. Excessive government borrowing has crowded out the private sector as bank lending rates remains above 30%. Both government sector borrowing and taxation have the same effect of decreasing private sector spending [18]. High government borrowing means capital market is deprived of investors’ funds, contributing to the illiquidity on the market.

The research also finds evidence of inefficiencies, contributing to the illiquidity on the market. These factors have been described by Vayanos and Wang as imperfections. The market is also dormant in that there is no reaction to the release of corporate information. Moreover, the market is very small to accommodate huge funds, particularly foreign investors ready to invest in the market. Besides, the market experiences very low level of free float, which is considered an important indicator of market liquidity [19]. This means investors do not find stocks at the required quantities to buy. Trading infrastructure, number of participants and listing requirements and regulations are some of the attributes of the market that make the market illiquid.

The results confirm previous findings which suggested that poor corporate governance contributes to illiquidity [20]. Lack of adequate disclosure and the presence of information asymmetry have been identified as causes of market illiquidity [21], conditions that also affect investor confidence on the GSE. Corruption in Ghana, a sign of deep-rooted and fundamental economic, political and institutional failings also contribute to market illiquidity on GSE. These factors affect listed companies differently but generally affect the level of activity taking place on the stock market.

Findings from this research also point to evidence of lack of regulatory enforcement and effective policy. The SEC has no clear measures in place for dealing with companies that do not satisfy the 25% level of float listing rule on the exchange. Moreover, multinationals operating in the country is not interested in listing because decision to list on the local exchange is at companies’ own discretion. Regulations on the GSE are also considered stringent by small companies with limited resources. Lack of commitment on the part of government to privatize SOEs on the stock market is considered a major setback for improving market liquidity on the GSE.

The exchange has introduced new investible and marketable products as alternative to equity to increase market liquidity. Firstly, the Ghana Alternative Market (GAX), for which there is no listing or application fees, except annual fees of GH¢2,000. This product is intended to provide SMEs with access to long-term capital for growth and expansion by removing many of the listing rules that apply on the primary market. This should support the development of the private sector which is mainly populated with SMEs. Secondly, the Ghana Fixed Income Market (GFIM) for trading fixed income instruments and other appropriate securities determined by stakeholders on the secondary market has five main objectives: (i) ensure greater market efficiency, (ii) bring about improved price discovery on the market, and (iii) help improve liquidity of the capital market, (iv) increase the level of transparency in the trading of fixed income securities, and (v) help develop fixed income securities trading to globally acceptable standards. Lack of understanding on how equity markets work among the disenfranchised majority of the population required that products that are well understood were created on the market. Because local investors are comfortable with investment instruments that have guaranteed returns and principal investment, GFIM is expected to help increase participation and liquidity on the market. On the other hand, derivatives are considered too complex to be introduced on the local capital market at this time.

Conclusion and Practical Recommendations-Summarized

Based on the research findings, the study makes the following recommendations:

- Efforts must first be directed at changing the cultural orientation and mindset of the people pertaining to business ownership and investment. Programs aimed at increasing financial literacy and investor education must first begin with the government, because commitment at government level is crucial for the success of the stock market. Financial literacy must be made an integral part of education from secondary school level. Programs focused on educating business owners must be encouraged at local and community levels, and companies supported to make the transition to the stock market by addressing fears and basis of resistance to change.

- Government needs to focus on dealing with the macro-economic challenges facing the country. Increased economic stability and productivity will likely help resolve the problem with government borrowing, increase investor confidence and make share ownership a more attractive investment option. This will also make the market an attractive investment destination for foreign investors.

- Government must establish clear policies and regulations that improve market liquidity. This means bringing SOEs to the market instead of selling to strategic investors not interested in listing. Listing SOEs is the most important evidence of government support and commitment to improving the stock market, and an example for the private sector to do same. Government will also make great savings from the sale of SOEs which have become symbols of corruption, inefficiencies and mismanagement. Moreover, listing on the local stock market must be a major requirement for issuing or renewing operating licenses to all foreign banks and multinationals doing business in the country.

- Government must provide direct and indirect incentives for listed companies and investors on the exchange. For instance, capital gains and dividends must be exempt from the newly introduced 1% withholding tax on investment income to encourage equity investment. To make up for the shortfall in tax revenue, money market investment income tax must be increased. Another form of incentive will be to waive duties and taxes for raw materials and equipment imported by listed companies. Listed companies, particularly SMEs, must be given preferential treatment for the award of government contracts.

- Funding schemes must be instituted to support research. Many companies lack the resources to conduct research that increases the availability of investment information on the market. Government must support approved research institutions with grants to facilitate provision of information.
Conclusions and practical recommendations - Detailed

Below is the summary of the major themes of findings after having analyzed the answers obtained via interviews:

**Lack of equity culture:** Apart from structure and organization, the success of a market depends on willing sellers and buyers. The study found that Ghanaians are not used to long term investing in the form of equity. On the supply-side, participants indicated companies are not interested in accessing the market because of various reasons, including: (1) lack of knowledge, (2) owners’ unwillingness to lose control, (3) avoidance of public disclosure, and (4) psychological satisfaction of owning everything. On the demand-side of the market, investors are unfamiliar and uncomfortable with instruments that produce uncertain returns; investors only know of government paper or money market instruments. According to Ben-Ami, emerging markets exhibit lack of equity through the preference of other tangible assets. Jong and Semenov attribute differences in activity levels within stock markets to norms and values that form basis of behavior in society. Statman explained that the cognitive and emotional approach to investing in any society is informed by common experience of the people. In Ghana, this problem does not affect only investors and companies, but also government that instituted the exchange. Failure to deal with the investment culture in the country meant the market was established on a very weak foundation and therefore was unlikely to attract the participants with adequate knowledge to appreciate the benefits provided by the capital market.

**Effect of macro-economic factors:** Interviewees indicated that the performance of stock market depended on the general economy within which the exchange is operating. Ghana’s macro-economic indicators depict an economic on a continuous decline. Lack of electric power to run industrial machinery means falling domestic production, increasing unemployment, heavy reliance on imports, and depreciating currency. Increases in taxation rates and the introduction of new forms of taxes have significantly impacted the already shrinking household incomes, leaving most families with no savings. Yartey observed that macroeconomic stability positively influence investors and firms to get involved in the market, which increases level of activity and liquidity. Thus the recent macroeconomic instability could be an important determinant affecting the liquidity of the GSE. A sustained improvement in macroeconomic conditions is expected to boost market stability and stock market liquidity.

**High government borrowing on money market:** Participants indicated government borrowing as another most important factor influencing the liquidity of the market. Macro-instability and weak economy means government depends on borrowing to support persistent budget deficit. Government attracts the domestic investing public by offering very high interest rates on short-term financial instruments, besides the activities on Eurobonds markets. The country’s debt-GDP ratio in 2015 was reported as 72%. Checherita and Rother observed that public debt only have positive impact on economic growth when that results in increased private savings, public investment, and an improvement in total factor productivity and long-term nominal and real interest rates. However, in the case of Ghana, Judith Tyson of the Overseas Development Institute argued that borrowings have been spent in a rather frivolous manner. Banks prefer investing in government securities with risk-free high returns, rather than lending to corporate client or individuals. Most importantly, government activities ended up crowding out the private sector. High bank lending rates and harsh economic conditions negatively affect performance of listed companies as cost of operations goes up. These factors therefore reduce participation of investors in the exchange, adversely affecting liquidity.

**Attributes of the stock market:** Certain attributes of the market is considered to have adverse effect on the liquidity of the market. Market macrostructure theory is applied in the examination of how the functioning of a market affect transaction costs, prices, quotes, volumes and trading behavior. For the unlisted companies, either the market is not active enough to help raise the capital needed or that getting listed will not impact performance positively. For the investor, there is the likelihood of receiving no dividends or capital appreciation. Moreover, the unresponsiveness of the market to corporate news and events makes the market unattractive to investors. Besides, participants noted the market is very small and have low float and therefore unable to accommodate foreign investors with huge funds to spend. Again, the low participation on the market means difficult entry and exit, which adversely affect liquidity. Furthermore, eighteen of the first twenty-five years of the market’s establishment were operated within a manual environment with long delays and often missed opportunities for investors who waited for months to have evidence of ownership. Finally, listing requirements and regulations were identified as another major reason why unlisted companies will not come to the market.

**Alternative sources of capital to the stock market:** Many companies traditionally depend on bank loans as sources of funding for operations. Banks in Ghana do not subject corporate clients to stringent requirements and tests before granting credit facility. Recent investigation into access to capital market by SMEs identified regulation as the reason these companies still depend on bank loans as primary source of funding. The level of disclosure and in-depth transparency required by the capital market is often frowned on by private companies, which benefits banks and strengthens the relation between the private companies and the banker. This makes switching to the capital market a daunting task, contributing to the illiquidity on GSE.

**Government policy and regulation:** Many aspects of government policy and regulation have been cited as cause of illiquidity on GSE. Firstly, government disposal of shareholdings in multinationals result in wholly-foreign-owned businesses. Besides, government has no policy that requires the foreign businesses to get listed. Secondly, lack of effective government policy to list SOEs indicated as another reason of illiquidity. Some participants expressed concern that government seem to be interested in operating businesses instead of providing the enabling environment for the private sector. Thirdly, interviewees pointed out that politicians are interested in controlling SOEs for personal reasons. For instance, politicians appoint cronies to manage SOEs and sell the companies to investors only when there are personal gains involved. Participants are calling on government to immediately privatize SOEs, particularly, enterprises in the energy sector on the stock exchange. A study covering 19 developed economies indicate share issue privatization has a positive effect on local market liquidity. The sale of Ghana Telecom to Vodafone was cited as an example of government privatization policy that failed to benefit the capital market by improving the liquidity of the exchange. Fifthly, interviewees reiterated the need for government to institute incentives for listed companies and investors, which was recommended in previous research. Participants noted that listed companies are required to pay listing fees and comply with costly regulation requirements to remain on the exchange. Furthermore, the introduction of withholding taxes on dividends and capital gains is described as a disincentive for investors,
which could lead to capital flight. Lastly, government involvement in governance issues of listed SOEs is believed by some participants to be the cause illiquidity on the market.

**Position of unlisted banks on getting listed:** Given the attractiveness of the banking sector, the Vice-President of Ghana called on all licensed banks in the country to get listed. However, because there is currently no government policy with regards to foreign banks going to the market, the researchers investigated why three years after this call no foreign bank has come to the market. Included in the participants for the study were five unlisted banks, consisting of one local and four foreign unlisted banks. The local bank interviewed has plans to obtain listing status in five years. However, none of the four foreign banks indicated the intention to come to the market, mainly because the foreign banks are well capitalized and have no interest raising additional capital. But the participants representing the foreign banks stated the option of listing on the local bourse is never ruled out. This finding gives support to the suggestion made by some participants that government must make listing of foreign banks a requirement for renewal of operating license.

**Effect of illiquidity on stakeholders:** Illiquidity on the capital market affects stakeholders differently. Brokers and dealers indicated revenue is dependent on the volume and value of trading. Given there are currently 21 registered brokers competing on the market for a share of total trading commission, business have had to offer services covered under operational licenses. Participants indicated there is no ready market for selling stocks, which could take several months. Foreign investors with large funds to invest in the market often do not find shares in the desired quantities.

**Recommendation for Further Research**

The selection of participants for this study imposes a limitation on the findings since there are non-financial businesses that must be covered. Thus, the need arises for further investigation to complement this study and provide broader understanding and perspectives on illiquidity on the market. Based on the research findings, three (3) areas are suggested for further investigation. Firstly, study the differences in illiquidity on the capital market knowledge and possibility of listing, between different sectors of the Ghana economy. Secondly, the impact of stock market listing on financial and non-financial performance of listed and unlisted companies in Ghana must also be investigated. That study must provide empirical evidence on whether obtaining listing status on the exchange provides any practical benefits for a company. Finally, the potential benefits and challenges of privatizing state-owned enterprises on the Ghana Stock Exchange must also be studied.

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