

Johnson, Barbara; Kotey, Richard Angelous

## Article

### The influence of small and medium enterprises (SMEs) listing on the Ghana alternative market (GAX) : prevailing factors

#### Provided in Cooperation with:

Dimitrie Cantemir Christian University, Bucharest

*Reference:* Johnson, Barbara/Kotey, Richard Angelous (2018). The influence of small and medium enterprises (SMEs) listing on the Ghana alternative market (GAX) : prevailing factors. In: Academic journal of economic studies 4 (4), S. 142 - 156.

This Version is available at:  
<http://hdl.handle.net/11159/2883>

#### Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

#### Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

<https://zbw.eu/econis-archiv/terms-of-use>

#### Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

## The Influence of Small and Medium Enterprises (SMEs) Listing on the Ghana Alternative Market (GAX): Prevailing Factors

Barbara Johnson<sup>1</sup>, Richard Angelous Kotey<sup>2</sup>

<sup>1</sup>Prudential Stock Brokers Limited, Ghana, <sup>1</sup>E-mail: [bjohnson@prudentialsecurities.com.gh](mailto:bjohnson@prudentialsecurities.com.gh)

<sup>2</sup>Department of Finance, University of Ghana Business School, Ghana, <sup>2</sup>E-mail: [rakotey002@st.ug.edu.gh](mailto:rakotey002@st.ug.edu.gh)

### Abstract

Ghana Alternative Market was set up for SMEs and startups, who usually did not meet the requirements of the main stock exchange, to be listed and have access to equity financing. However, it has not been successful at getting SMEs listed, recording only 4 listings since its inception. This motivated the study to access factors that affect SMEs listing on the Ghana Alternative Market. Using a quantitative approach, we sampled 50 SMEs, 21 Brokers and 3 SMEs already listed on the GAX. We found that over half of the SMEs had some information about the GAX. However, their knowledge with regards to the benefits of listing on the GAX as well as what they require to list is very limited. Also the findings revealed that SMEs had a difficulty accessing stock market operators as well as stock market information. LDMS showed commitment to the development of the GAX, however their efforts at getting SMEs on board has been passive. SMEs sampled also showed that they are willing to swap from alternative funding sources to the GAX when their concerns are addressed. They also stated that the relevant stakeholders should provide more information and education about the GAX in order to make it a viable option for them.

### Key words

Alternative Stock Market, Ghana Alternative Market (GAX), Determinants

JEL Codes: D53, E44, G15

© 2018 Published by Dimitrie Cantemir Christian University/Universitara Publishing House.

(This is an open access article under the CC BY-NC license <http://creativecommons.org/licenses/by-nc-nd/4.0/>)

## 1. Introduction

It has been well documented the significant contributions small local businesses make to the economy. Enterprises which are small and medium-sized in nature (SMEs) are regarded as improvers to the economy through the role they play in the stimulation of domestic demand through the creation of jobs and new ideas (Shinozaki, 2014). According to Dalberg Global Development Advisors (2011), small businesses are a fundamental part of the economic fabric in developing countries, and they play a crucial role in furthering growth, innovation and prosperity. Because SMEs are seen as drivers of the economy, much needed attention is being given to them in most countries (Feeney and Riding, 1997). More governments are providing assistance to encourage growth in the SME sector (Carsamer, 2009). For instance, in the U.S.A., small and medium sized businesses receive loans, legal assistance and export counselling from the government. The U.K. government also plays a similar role of providing support to small businesses. Another example is the Institute of Economic Affairs in Korea, who together with the Korea Development Institute have put forth a policy geared towards assisting SMEs to develop in order to realize their full potential (SME Agency, 2008, as cited by Akorsu and Agyapong, 2012).

SMEs are particularly important economic contributors to developing and under-developed economies. Frimpong (2013) in his article "SMEs as the Engine of Social and Economic Development in Africa", explained that in developing economies, SMEs are generally the highest job providers, surpassing the number of jobs the local governments provide. In Tanzania, SMEs contributes more than a third of GDP. The statistic is similar in other sub-Saharan African countries; it's been said that small businesses account for about 70 percent of the GDP of African countries like Ghana, Nigeria, Togo and the like. Normally, SMEs tend to dominate the retail, manufacturing and exports sectors. For example in the manufacturing sector of Nigeria, SMEs constitute 70%, which is more than half of the market (Abor and Quartey, 2010). Even in much developed countries like South Africa, SMEs represent about 91% of formal businesses and their contribution to GDP is also estimated to be between 52 and 57% (Ntiamoah *et al*, 2014). SMEs are not left out in export revenues as well; small businesses account for about 25% and 35% of the OECD and Asia exports respectively.

These efforts notwithstanding, SMEs face a number of challenges, with restricted access to finance at the apex. Access to finance poses a major difficulty, hindering their growth and sustenance. Shinozaki (2014), identifies a gap between the demand of SME finance and its supply. In 2010, the formal SME finance gap was valued by the International Finance Corporation (IFC) and McKinsey and Company to be between US\$700 billion to US\$850 billion, which represents 21%–26% of the total formal SME credit outstanding in developing countries. The total gap in terms of unsatisfied financing demand in developing countries will be over US\$ 2 trillion if informal SMEs and small scale enterprises are included.

### 1.1. Problem statement

At the launch of the World SME Forum in May 2015, in Istanbul, Mr. Ali Babacan, Turkey's Deputy Prime Minister at the time, emphasized the vital role of the SME sector towards employment, innovation and world economy. He then reiterated the obstacles that financing small businesses face and the need for alternative sources of financing particularly capital market financing as a means of growing the SME sector (World Federation of Exchanges, 2015). There is no doubt that SMEs hold a relevant position in the development of economies globally. However, SMEs globally are saddled with financial restrictions and obstacles that hinder their growth (Dalberg Global Development Advisors, 2011). The banks are not particularly of good use to the small businesses in this regard; the banks can only lend at short term and charge higher interest rates. Aside that, banks require collateral and employ credit risk rating schemes in giving out loans. Most small businesses, by virtue of their internal structures and documentation, size and efficiency, and pure information asymmetry, are rated poorly by banks disqualifying them from loan access (Finance and Markets Global Practise Group, 2015).

Against this backdrop, SME Exchanges have emerged as an alternative to Bank Lending to provide equity financing for small businesses that cannot compete with the big companies in the main stock exchanges. Equity financing can help SMEs get beyond some of the constraints associated with bank financing due to its longer term and no-collateral nature so as to enable SMEs expand and become competitive. Alternative stock markets have been set up in a number of jurisdictions to meet the financing needs of SMEs. This has been received with mixed feelings. Though the stock markets for SMEs have been successful in developed economies, it has not achieved the same success in developing economies. Ghana, has an alternative stock market, however, like in other developing economies, the Ghanaian alternative stock market (GAX) isn't meeting its objectives and very few businesses have listed since its formation. The question we are asking is why?

### 1.2. Research purpose

In the light of the above, the overall objective of the study is to ascertain what factors may be inhibiting SMEs listing on the GAX. The specific objectives include: (1) To assess the extent of awareness of the GAX and its benefits among SMEs; (2) To assess the level of involvement of Licensed Dealing Members in development of the GAX; (3) To assess the efforts put in by the Ghana Stock Exchange and Securities and Exchange Commission in promoting the GAX; and (4) To reveal the real benefits achieved by GAX listed firms.

### 1.3. Relevance of the research

The outcome of the study will provide owners of SMEs information on the availability of other financing options and the advantages that accrue to a firm that lists on the GAX, thereby putting in measures to make their firms eligible to list on the stock market. The study will guide policy makers such as the Ghana Stock Exchange, Securities and Exchange Commission and Ghana Securities Industry Association as well as SMEs related organizations to develop a framework which will help improve SMEs access to funding by listing on the GAX. The study will also make suggestions that will improve awareness creation of the GAX among SMEs.

### 1.4. Scope of the study

The study will cover mainly the four companies that have listed on the GAX since its establishment as well as 50 Small and Medium Sized firms located in the Accra metropolis. The Accra metropolis is chosen because the researcher is constrained due to unavailability of time and resources.

### 1.5. Limitations of the study

The findings of the study were limited to fifty SMEs in Accra even though the conclusions of the study were generalized. Also, lack of time and financial constraints influenced the outcome of the study. The study could have extended to other SMEs in other regions of Ghana to make the findings more representative.

## 2. Literature review

### 2.1. SMEs access to finance

A World Bank Group study has suggested that most formal jobs in emerging markets are found in the SME sector. However, more than 50% of these firms are unable to grow as a result of unavailability of finance. The study further indicated that there are between 365-445 million micro, small and medium enterprises in developing countries of which 25-30 million are formal SMEs, 55-70 million are formal micro enterprises and 285-345 million are informal enterprises.

According to another report by International Organization of Securities Commissions (IOSCO, 2015) SMEs are major players towards economic growth and transformation and are responsible for sustainable and balanced economic growth, employment and social stability through value creation. However, they face stifling financial blockades which policy makers globally have found difficult to deal with. The report further indicated that these challenges have been worsened after the 2008 financial crises due to strict measures introduced by banks to guard against risks. African Banker, a business magazine featured a report by the World Bank which indicated that Small and Medium enterprises are responsible for over 60% of job creation in developing countries. Their contribution to GDP is about 51% in developed countries and about 16% in less developed countries, suggesting the need for SMEs to grow. The lack of long-term equity finance is a stumbling block to the growth of SMEs in Africa.

Ayadi and Gadi (2013) also stipulated the difficulty SMEs encounter in obtaining credit as compared to larger firms was as a result of lack of quality collateral as well as lack of transparency on their credit worthiness. The costs and risks of providing financial services to small scale businesses seem too high for commercial banks. The credit provided by Microfinance institutions, on the other hand, is inadequate and unable to meet the capital requirements of SMEs (Dalberg Global Development Advisors, 2011). The contribution of SMEs to the economy of Ghana is enormous; nevertheless, this sector is greatly constrained with regards to finance to support working capital and raw materials. Parker et al (1995). Also, 38% of SMEs in Ghana are greatly constrained due to lack of credit facilities (Aryeetey and Ahene, 2005). Abor and Biekpe (2006) also cited unavailability of finance as the main limitation small businesses in Ghana face. UNIDO (2002) also have indicated that SMEs have very little informal support from personal savings and business angels and this situation affects SMEs ability to adopt modern technology.

## 2.2. An overview of SME exchanges

An SME Exchange is a stock market created for the purpose of trading the shares or securities of SMEs who may be too small to get admitted to the main bourse. SME Exchanges present an avenue to smaller firms to raise funds, to facilitate their growth (such as expansion, innovation, investment in technology and research) and get listed as public companies. A stock exchange set aside solely for SMEs gives visibility to the firms that list and affords investors the opportunity to identify and invest in such emerging, high growth SMEs (S-Cap, 2014). Throughout the world, exchanges or trading platforms dedicated solely for SMEs have become a common phenomenon. They have come to be known as Alternate Investment Markets (AIM) or Growth Enterprises Market (GEM) or Alternative stock markets. A number of them include United Kingdom's Alternative Investment Market, (AIM) Canada's TSX Venture Exchange (TSXV), Australia's Australian Securities Exchange (ASX) and U.S.A.'s NASDAQ Capital Market (Finance and Markets Global Practise Group, 2015; Sarthi Capital Advisors, 2014).

A difficult challenge observed in the development of SME Exchanges in emerging market economies (EMEs) is the small sizes of SMEs but some have been successful. A number of them include GreTai Securities Market in Taipei and Warsaw Stock Exchange's (WSE) New Connect in Poland, Hong Kong's Growth Enterprises Market (GEMS), and Japan's Market of High-growth and Emerging stocks or MOTHERS (ibid). The Asian Development Bank (2014), has said that the equity markets for Small and Medium Enterprises in Asia was not growing because most businesses tended to rely on bank centered financial products as a means of finance. Asia has its equity financing venues for SMEs attached to its main bourse. Also, the Shenzhen Stock Exchange (SZSE) in China has been structured into three tiers which consist of the main Stock Exchange, SME Board and a venture board. The Market for Alternative Investment (MAI) established as an SME exchange under the Securities Exchange of Thailand (SET). Similarly, the Korea Exchange (KRX), the Bombay Stock Exchange (BSE), Bursa Malaysia and Singapore Exchange (SGX) have launched KONEX, BSE SME, MESDAQ and Catalist respectively targeting small businesses to issue their shares on these markets.

Stock exchanges are seen as vital in the financing ecosystem however, there has been a low success rate in developing SME markets in various jurisdictions (WFE, 2015). Globally, equity markets are regarded as a potential source of funding for small businesses and therefore several countries are making attempts to improve SMEs access to capital markets. The World Federation of Exchanges (2015) in a report indicated that despite the difficulty in the development of capital market for SMEs, various jurisdictions (both developed and emerging) have established separate SME boards. Peterhoff, Romeo and Calvey (2014), have also instigated that several SME exchanges found in the world have achieved some success. The likes are London's Alternate Investment Market, Europe's Alternext, Canada's TSX Venture, Hong Kong's HK GEM, South Africa's AltX and Japan's Market of High Growth and Emerging Stocks. Each of the markets named above have developed speedily and kept a considerable amount of listed companies.

### 2.3. SME exchanges in Africa

Fifteen African countries have created alternative markets to help small and medium sized businesses get access to long term capital since 2002. In 2013 alone, Ghana, Nairobi, Nigeria and Dar es Salaam stock Exchanges created growth markets. Over 200 small businesses have listed across Africa. This includes thirty three companies in Morocco, two companies on the Botswana Venture Capital Board, Forty three companies on Mauritius Development and Enterprise Market and thirty two companies in Egypt (African Banker, 2016). The Ghana Alternative Market has four listed SMEs.

Table 1. List of SME exchanges in Africa

SME BOURSE	COUNTRY	TARGET	Number of Listed Firms
Botswana	BSE Venture Capital Market	Dedicated to startup ventures	2
Egypt	Nile Stock exchange (NILEX)	Growing SMEs in the Middle East and North Africa	33
Ghana	Ghana Alternative Market (GAX)	Start-ups and existing enterprises	4
Kenya	Growth Enterprise Market Segment (GEMS)	Divided into the Main and Alternative Investment Segments, accommodating SMEs with revenue of up to 500,000 Kenyan shillings and fewer than 10 employees and those with revenue between Ksh 500,000 and Ksh10 million and 10 to 50 employees	4
Malawi	MSE AltX	Smaller, younger limited liability companies	No company listed
Mauritius	Development & Enterprise Market (SEMDEM),	SMEs and newly set-up companies with a sound business plan and demonstrated good growth potential	46
Morocco	Casablanca Stock Exchange (BVC) Alternative	Local and West African SMEs can list on the main bourse, BVC	No separate SME Board
Nigeria	Securities Market (ASeM)	Specifically designed for emerging businesses	9
Rwanda	Rwanda Stock Exchange (RSE)	Waives capital requirements for SMEs wishing to list on the main bourse. RSE. SMEs simply required to make disclosures in a prospectus	No separate SME Board
South Africa	AltX	Africa's first alternative stock exchange for SMEs	56 (16 companies suspended)
Tanzania	Enterprise Growth Market (EGM)	A nine-month public awareness campaign began in September to entice SMEs to the EGM. Few companies, mainly in telecoms and banking, have shown interest to date	5
Tunisia	Tunis Stock Exchange Alternative Market	Efforts are under way to address obstacles preventing SMEs from listing on the Alternative Market	12
Uganda	Growth Enterprise Market Segment (GEMS)	More suitable for SMEs than the unsuccessful Alternative Investment Market Segment (AIMS)	No Separate SME Board
Zambia	Lusaka Stock Exchange (LuSE)	A SME tier exists on the main bourse	No separate SME Board
Zimbabwe		Zimbabwe Stock Exchange (ZSE) currently is working on operating rules for a secondary SME bourse	No separate SME Board

**Source:** Researcher's construct. Data from AfricaTLF.com

### 2.4. Ghana Stock Exchange (GSE)

The government of Ghana set up a national committee in February 1989 made up of ten members under the chairmanship of Dr. G.K. Agama, Bank of Ghana's governor at the time. The committee were tasked to combine any earlier effort towards the establishment of the stock exchange and also to chart a path towards the definite establishment of the stock exchange. The committee worked hard to ensure that the Stock Exchange came into fruition in July, 1989. It was first established as a private company limited by guarantee under the Companies Code of 1963 and later, in October, 1990, it was fully recognized as an official Stock exchange under the Stock Exchange Act of 1971 (Act 384). The exchange was set up to be a relevant, effective and efficient instrument in mobilizing and allocating long-term capital for Ghana's economic

development and growth (Ghana Stock Exchange, 2015). Currently, the Exchange has admitted forty-four listings comprising 37 companies on the main bourse, one depository share, one preference share and four SMEs on the GAX. Factors considered before admission is granted include profitability, capital adequacy, spread of shares, efficiency of management, and years of existence.

## 2.5. Ghana Alternative Market (GAX)

The Ghana Alternative Market (GAX) was established in 2013 to provide an avenue for small and medium enterprises with potential for growth. The GAX requires a sponsoring broker, directly or indirectly to underwrite the minimum offer, thus, 20% of the offer, so as to prevent unsuccessful listings on the GAX. Also, a fund has been established to provide support to the companies by way of fully or partly absorbing the cost associated with the listing process. This is a revolving fund and upon successful completion of listing, the funds are paid back without interest charges. Non record of historical profits by potential companies is accepted but they must show ability to make profit at the end of the third year after listing.

Table 2. SMEs listed on the GAX

Name of SME	Date of listing	No. of shares	Share price (Ghc)	Total value (Ghc)	Share offer %	Underwriters	Minimum underwriting Amount
Samba Foods Ltd.	24/03/2015	3,475,453	0.72	2,502,326	58.16%	Unisecurities Ghana Limited and SIC-Brokerage Limited	50% (5% discount)
Hords Limited	28/07,2015	80,000,000	0.05	4,000,000	69.06	Gold Coast brokerage	Full Amount (0.25% fee)
Meridian-Marshalls Holding Company Limited (MMH)	2/7/2015	25,000,000	0.10	2,500,000	25%	Cal brokers	20%
INTRAVENEOUS INFUSION LIMITED (IIL)	9/12/2015	153,307,500	0.08	12,264,600	9.30%	Databank Brokerage Limited and Cal Brokers Limited	40.8% (5% discount)

Source: Researchers' construct. Data from their respective IPO prospectus

Since the inception of the GAX, four SMEs have listed. These include SAMBA Foods Limited, HORDS Limited, Intravenous Infusions Limited and Meridian Marshall Holdings.

Table 3. Reason for Share offer

Name of SME	Activity	Amount (GHS)
Samba Foods Ltd.	Purchase of Equipment	1,117,650.00
	Expansion of existing infrastructure	325,000.00
	Working Capital	435,300.00
	Pay off existing loan facility	522,050.00
Hords Ltd.	Payment of Loans	1,314,029
	Purchase of new factory	1,057,971
	Working Capital and Retooling	450,000
	Floatation expenses	178,000
	Payment to existing shareholder	1,000,000
Meridian-Marshalls Holding Company Limited (MMH)	Construction of Multi-purpose Classroom	1,500,000
	Computer and Accessories	428,750
	Furniture	302,925
	Learning Materials	143,325
	Floatation Expenses	125,000
INTRAVENEOUS INFUSION LIMITED (IIL)	Refurbishment of factory building	800,000
	Plant and machinery	1,890,000
	Motor Vehicles	630,000
	Computer and Accessories	76,500
	Non-Capital cost	88,867,500

Source: Researchers' construct. Data from their respective IPO prospectus

### 3. Methodology of research

The Quantitative research method approach was employed in measuring the level of awareness and knowledge of the GAX and its benefits among SMEs and their willingness to list their firms as well as obstacles which may be preventing them from getting on board. The same method was employed to measure the extent of involvement of Licensed Dealing members in the development of the GAX. To undertake this study, the researcher relied on primary and secondary data. Interviews were conducted and questionnaires administered to the respondents after which the data was collected, extracted and analyzed. The information derived from secondary sources was obtained from publications, books as well as newspaper articles on SMEs and SME Exchanges.

#### 3.1. Population and sampling

The sampling technique used was a non-probabilistic sampling method where participants of a study were purposely chosen. The SMEs included in the study were those who were either nominated or had received an award at any of the SME Awards (organized by Imagine 8 Company Limited). We used this list because firms' nominated usually employed between 2 and 200 staff and made an annual turnover of between GHS45000 and GHS90, 000. These firms meet the criteria for listing on the alternative stock exchange. Also, the representatives from the GSE, SEC and LDMS were chosen specifically because they are players in the capital market and are in the position to make meaningful contributions with regards to the topic. Three out of four SMEs which have listed on the GAX, as well as representatives of Ghana Stock Exchange, Securities and Exchange Commission and Twenty one LDMS formed part of the population.

### 4. Analysis

#### 4.1. SMEs data analysis

##### *Demographics*

Forty eight SMEs in total responded to our questionnaire. The findings below represent this sample. Majority of the SMEs were in the manufacturing and retail sector. And more of them have been in business for about 5 years. However, one respondent had been in business for more than 30 years and another was a startup. Majority of our respondents had between 15 to 30 employees with few having 30 to 50 employees (4 SMEs) and 50 to 100 employees (7 SMEs).

Table 4. Table of Results

Statistic	Responses	Frequency	Percent
Area of Business	Manufacturing	11	22.9
	Retail/ Wholesale	10	20.8
	Agriculture	4	8.3
	Agro Processing	4	8.3
	Construction	6	12.5
	Marketing	3	6.3
	Others	10	20.8
Age of Business	Start-Up 0 year	1	2.1
	Between 1-3 years	9	18.8
	Between 3-5 years	16	33.3
	Between 5-10 years	9	18.8
	Between 11-20 years	9	18.8
	Between 21-30 years	3	6.3
	Over 30 years	1	2.1
Size of Business (by employees)	Less than 15	13	27.1
	Between 15-30	14	29.2
	Between 30-50	4	8.3
	Between 50-100	7	14.6
	Over 100	10	20.8
Size of Business(GHS'000)	No response	2	4.2
	Less than 90	6	12.5
	Between 100-200	10	20.8
	Between 200-500	7	14.6
	Between 500-1000	7	14.6
	Over 1,000	16	33.3

Statistic	Responses	Frequency	Percent
Profit before Tax	No response	4	8.3
	Less than 50	11	22.9
	Between 50-100	10	20.8
	Between 100-300	4	8.3
	Between 300-1000	7	14.6
	Over 1,000	12	25
Ownership structure	Sole proprietor	7	14.6
	Partnership	8	16.7
	Company	33	68.8
	Total	48	100

We found out that majority of the respondents' total assets was over 1 million cedis. In examining their profit before tax, we found that majority of our respondents make profits above 1 million cedis. The least of them make profits of about 100,000 to 300,000 cedis. With regards to the ownership structure, more of the SMEs had registered their business as a company (67%), followed by partnership (17%) and sole proprietorship (15%). When asked about their sources of raising funds, the source with the highest response was loans representing (35%) showing the SMEs have demand for bank loans.

#### *Access to finance*

When the SMEs were asked to list the perceived challenges they face in assessing funds through the channels they listed, a lot of them declined to answer not being sure of the challenges. For those who answered, high interest rate was their major challenge (25%). Followed by challenges in getting the required money they need from those sources, long processing requirements, inability to meet payment deadlines after loan has been given.

Table 5. Table Results

Statistic	Responses	Frequency	Percent
	Personal Savings	22	31.90%
	From friends and relatives	6	8.70%
	Trade credit	9	13.00%
	Loans	24	34.80%
	Other sources	8	11.60%
	Total	69	100.00%
What are the challenges of the options above to your business and potential growth?	Am not sure	22	45.8
	Long processing to secure funds	4	8.3
	Interest rate charges	12	25
	Not enough funds	8	16.7
	All the above	1	2.1
	Not able to meet payment deadline	1	2.1
Would you prefer to raise more money for your Business?	Yes	44	92
	No	3	6
	No response	1	2
Which financing option will you prefer or will be suitable to support your business?	No response	2	4.2
	Long term financing	38	79.2
	Short term financing	8	16.7
How do you prefer to raise money for the business?	No response	4	8.3
	Debt (or Loans)	17	35.4
	Equity	24	50
	BOTH	3	6.3
Why do you prefer Debt / Equity?	I don't really know	20	41.7
	It's the best option i know of	4	8.3
	With debt, i don't have to give out ownership	7	14.6
	I prefer debt because equity is hard to obtain	5	10.4
	I prefer equity because it reduces liability	11	22.9
	Debt financing is tax deductible	1	2.1
Does your preference of Debt/ equity affect	Am not sure	5	10.4



your preference of the GAX?	YES	14	29.2
	NO	29	60.4
Will the GAX meet your financing needs?	I DONT KNOW	8	16.7
	YES	18	37.5
	NO	22	45.8
Comparing the GAX to the other sources of finance you are familiar with, which method of finance meets your needs the most?	Am not sure	7	14.6
	GAX	6	12.5
	Other sources of finance	35	72.9
Please explain why it meets your needs the most	I don't Know	18	37.5
	Not enough information about the GAX	4	8.3
	Easy access to funds from other sources compared to GAX	19	39.6
	High entry requirements for GAX	4	8.3
	Do not want to share my profits	3	6.3
Are SMEs willing to switch to the GAX as your main means of financing your business?	Not sure	13	27.1
	YES	25	52.1
	NO	10	20.8
	Declined commenting	43	89.6
If no, please state why	Because the amount raised will be insufficient	1	2.1
	Because the funding we receive from other means is sufficient for us	4	8.3

Forty four out of the total SMEs said they needed additional funding highlighting their financial need. More of them would prefer long term financing to short term. Twenty four out of forty-eight of the SMEs preferred equity to raise money other than debt. This finding is surprising as the norm has been that small businesses preferred to borrow money short term. With relating financing preference to GAX listing, more than half of the SMEs (60%) said their preference for equity had no effect on their desire to get listed.

#### *SMEs perception about GAX*

More of the respondents believed that the GAX could meet their financial needs albeit the number wasn't up to half of the total number. However majority of them preferred to look elsewhere for finance to meet their needs rather than the GAX because that was convenient for them. They state that getting funding from the GAX is complex and there isn't much information out there hence their choice of looking elsewhere. Majority of them indicated their readiness to switch to the GAX when conditions are made favourable.

#### *SMEs knowledge about the GAX*

Twenty five of the SMEs indicated they had heard of the GAX but only few (8 SMEs) of them knew a bit about it. When we asked the SMEs about the listing requirements on the GAX, 33 of them (69%) did not know. Only few of them knew the benefits of listing. Many of them did not know if the requirements were favourable or adequate for them. This is explained by the fact that 45 of the respondents (94%) indicated they had not attended any program or forum about the GAX. Only 3 SMEs had attended such a program. Of those who had heard about the GAX, online sources were the most stated source followed by radio and TV sources. Next are newspaper and other sources like talks from GSA representatives.

Table 6. Table Results

Statistic	Responses	Frequency	Percent
Do you know of the Ghana Alternative Market (GAX)?	YES	25	52.1
	NO	23	47.9
Do you know when it was established?	YES	8	16.7
	NO	40	83.3
Did you attend any sensitization program about the GAX before its establishment?	YES	3	6.3
	NO	45	93.8
Have you attended any educational forum informing you about the GAX, its listing requirements and benefits after its establishment?	YES	3	6.3
	NO	45	93.8
How did you hear about the GAX?	Never heard of it	22	45.8
	Radio	4	8.3

Statistic	Responses	Frequency	Percent
	TV	3	6.3
	News paper	4	8.3
	GSE representatives	3	6.3
	Online sources	9	18.8
	Other sources	3	6.3
Do you have any information about the listing requirements for SMEs on the GAX?	No response	1	2.1
	YES	14	29.2
	NO	33	68.8
Do you think the requirements are adequate?	I don't know	21	43.8
	YES	13	27.1
	NO	14	29.2
Do you know what and for whom the GAX was set up?	No response	7	14.6
	YES	17	35.4
	NO	24	50
Do you know the benefits of listing your business on the GAX?	No response	10	20.8
	YES	13	27.1
	NO	25	52.1
In your opinion, do you think SMEs are fully aware of the GAX and its benefits to their business?	YES	2	4.2
	NO	46	95.8

### *Knowledge about Stock Markets*

Twenty two of them said it wasn't easy to access stock market operators like brokers. And few of them said having access to stock market information was difficult for them. About 85% of the SMEs, consisting of 41 respondents had never approached a market operator in order to be listed. Also, when the SMEs were asked to list any perceived challenges they think makes it difficult for them to access the GAX or Stock market, about 90% of the respondents did not respond to the question. Four of them said the problem was the requirements were cumbersome whilst one attributed it to limited information.

### *SMEs interest in listing on the GAX*

When the respondents were asked if their decision of listing would change when the perceived challenge were mitigated, 17 of them said they will whilst 11 of them maintained their stance of not listing. A number of them didn't respond. However, when asked what will motivate them to list on the GAX, 12 of them said easy access to funds will. The rest declined to answer. Next, when asked what would make the GAX favourable for them to list, they listed the following; access to funds had the most responses, followed by availability of professionals and accountancy services or support will make the GAX better. The rest stated access to GAX-SME listing support fund and other reasons. When asked what they think could be done to make the GAX more functional and effective, nineteen of them (40%) said making information available and educating SMEs was the first thing to do whilst one respondent (2.1%) said improved regulations could help. The rest did not comment. But when asked whether tax incentives could make them change their decision of not listing, 35 of them said yes it will, whilst 5 of the respondents said no.

Table 7. Table Results

Statistic	Responses	Frequency	Percent
Have you ever considered listing on the GAX?	I don't know	3	6.3
	YES	3	6.3
	NO	42	87.5
Do you have easy access to stock market operators (GSE, SEC, Brokers)?	No response	5	10.4
	YES	21	43.8
	NO	22	45.8
Do you have easy access to stock market information?	No response	5	10.4
	YES	21	43.8
	NO	22	45.8
Have you ever approached any stock market operator for the purpose of listing on the GAX?	No response	3	6.3
	YES	4	8.3
	NO	41	85.4
What are the challenges you faced or perceive to face if (or when) you try to approach a market	I DONT KNOW	43	89.6
	TOO MANY REQUIREMENTS	4	8.3

Statistic	Responses	Frequency	Percent
operator? Please state	LIMITED INFORMATION ABOUT THE GAX	1	2.1
If these challenges are solved, will you use the GAX as source of long term financing?	I don't know	20	41.7
	YES	17	35.4
	NO	11	22.9
What are some of the things that will motivate you to list your firm on the GAX?	I don't know	36	75
	EASIER ACCESS TO FUNDS	12	25
What will Make the GAX Better	EASIER ACCESS TO FUNDS	11	52.40%
	Access to GAX-SME listing support fund to help firms list of the GAX	1	4.80%
	Access to professionals and accountancy services or support	8	38.10%
	Other reasons (good regulation, political stability, etc.)	1	4.80%
	Total	21	100.00%
	No response	28	58.3
What, in your opinion, what will help make the market functional or effective?	INFORMATION AND EDUCATION	19	39.6
	IMPROVED REGULATIONS	1	2.1
	I don't know	8	16.7
Will a tax incentive attract your firm to list?	YES	35	72.9
	NO	5	10.4

#### 4.2. Brokers Data Analysis

##### *Demographic Data*

In total 20 brokers responded to the study. The findings below are based on this sample. More (40%) of the brokerage firms were over 16 years old. The least of them were between 1 to 5 years old. We found also that more of brokers were aged between 31 to 40 years whilst a few of them were in their 20's. In all, the numbers of males were 4 times higher than the number of females.

##### *Brokers Perception about GAX*

All of the brokers thought the GAX was a viable initiative whilst an overwhelming majority agreed that the GAX was sufficient in meeting the financing needs of SMEs. 17 of them (85%) believed the listing requirements were adequate.

Table 8. Table Results

Statistic	Responses	Frequency	Percent
How long has the brokerage firm been operating?	1 – 5 years	4	20
	6 – 10 years	5	25
	11 – 15 years	2	10
	Over 16 years	8	40
	No response	1	5
How old are you?	20 – 30 years	5	25
	31 – 40 years	14	70
	Over 41 years	1	5
Gender	Male	16	80
	Female	4	20
Is the GAX is a viable initiative?	Yes	20	100
	No	0	0
Will the GAX be able to meet the financing needs of SMEs in the country?	Yes	18	90
	No	2	10
What are your thoughts on the requirements for listing on the GAX?	They are adequate	17	85
	They are a little stringent	3	15
	Yes they protect the investor	16	80
Do the requirements ensure provision of long term funds whilst protecting the investor?	No they do not protect the investor	3	15
	No response	1	5

Statistic	Responses	Frequency	Percent
Do you think efforts by GSE and other stakeholders towards promoting the GAX and its benefits are adequate?	Yes	7	35
	No	13	65
Have you or your firm ever marketed the GAX to SMEs?	Yes	18	90
	No	1	5
	No response	1	5
If Yes, how many SMEs have you marketed GAX to?	Less than 5	8	40
	between 6 and 10	8	40
	more than 21	3	15
	No response	1	5
Is the 20% minimum underwriting enough to meet SMEs needs assuming a low public patronage of an offer?	Yes	7	35
	No	12	60
	No response	1	5
If No, what percentage will be appropriate?	40%	4	20
	50%	7	35
	No response	9	45
Will a tax incentive for both investors and SMEs help develop the GAX?	Yes	18	90
	No	1	5
	No response	1	5
Will the introduction of market making activity help solve liquidity problem on the GAX?	Yes	20	100
	No	0	0

Majority of the brokers (16 in all) agreed that requirements could protect the investor whilst 3 of them did not agree to that. One of them declined to comment. But more than half (65%) did not agree the GSE and other stakeholders were promoting the GAX adequately. On their part, majority of the brokers (90%) said they did engage in marketing of the GAX to about 21 SMEs. On the issue of the 20% minimum underwriting, 60% of them said it was not enough whilst the rest did. About half of them agreed the minimum underwriting by licensed dealing members (LDM's) influenced their efforts to inform SME's about the GAX. When asked what percentage would be appropriate, they stated percentages between 20 to 50%. Majority of the brokers (90%) also agreed that tax incentives will motivate both SME's and investors to come unto the GAX whilst all of them agreed market making activity would help solve the liquidity problems the GAX faced.

#### *Brokers Interest in Market Making*

When asked about interest in market making, 19 of the brokers expressed interest in playing that role. Asked about how the LDM's could do to develop the GAX, they responded through public education or awareness creation and active marketing of the GAX. They believed that if more information about the GAX is put out there and if active marketing and advertising is engaged, more SMEs would patronize the GAX. About 13 (65%) of the brokers have sponsored an SME or are in the process of sponsoring an SME to be listed on the GAX while the rest have never sponsored an SME. A higher number of them got in touch with SME's through referrals or recommendations from GSE whilst the rest was through marketing and direct approach. When asked about how they felt about the listing procedures, 35% of the brokers felt they were very cumbersome and time consuming, 6 of them said the procedure was slightly cumbersome and 1 said it was simple and straight forward. The rest did not respond to the question.

Table 9. Table Results

Statistic	Responses	Frequency	Percent
Will your firm be interested in playing a market maker role for the GAX?	Yes	19	95
	No	1	5
Please list in your opinion, what role LDMs can play to help develop the market?	MARKETING OF GAX	8	40
	EDUCATION AND PUBLIC INFORMATION	10	50
	No response	2	10
Has your firm ever sponsored or in the process of sponsoring an SME to be listed on the GAX?	Yes	13	65
	No	7	35
If yes, how did your firm get in touch with the SME for the first time?	Through marketing	3	15
	Recommendation	8	40

Statistic	Responses	Frequency	Percent
	SME approached us (the LDM)	1	5
	All the above	1	5
	No response	7	35
How was the preparation towards listing?	Simple and straight forward	1	5
	Slightly cumbersome	6	30
	Cumbersome and time consuming	7	35
	No response	6	30
Does your firm assist client to meet continuous listing obligation?	Yes	11	55
	No	4	20
	No response	5	25
How easy was it to raise funds or find investors to underwrite the minimum offer?	Challenging	12	60
	Almost impossible	2	10
	No response	6	30

Eleven of the brokers said they proceed to assist the SMEs in other listing obligations after listing them on the GAX whilst 4 of them said they don't engage with the SMEs on any other service. Sixty percent of the brokers however said underwriting the minimum share offer was very challenging. Two of the respondents even said it was almost impossible highlighting the challenges they face.

#### *Brokers perceived constraints in listing SMEs*

In the section we make the respondents rank the constraints preventing SMEs from listing on the GAX. Loss of autonomy was seen as the most important constraint having more respondents saying it was most important (50%) whilst 4 of them thought it was important and partly important. Disclosure requirements had the second highest response and lack of proper governance structures followed. Amount of funding was the least important constraint.

Table 10. Table Results

		LEAST IMPORTANT	IMPORTANT	PARTLY IMPORTANT	MOST IMPORTANT	NO RESPONSE	TOTAL
Loss of Autonomy	Frequency	1	4	4	10	1	20
	Percent	5	20	20	50	5	100
Disclosure requirements and complexities	Frequency	2	3	6	8	1	20
	Percent	10	15	30	40	5	100
Amount of funding received	Frequency	11	1	4	3	1	20
	Percent	55	5	20	15	5	100
Lack of proper governance structure	Frequency	2	8	5	4	1	20
	Percent	10	40	25	20	5	100

#### *Interviews on listed SMEs*

The impact of the GAX on businesses has been positive. Three out of the four listed SMEs were interviewed and they all mentioned that the exposure they had as a result of listing on the GAX has yielded tremendous results for their businesses in terms of access to the required finance and other benefits. Hords Limited's Account Manager, Mr. Jerry Asamanyuah indicated that the funds raised have enabled the business to undergo massive retooling. They have purchased new vans for the sales team, employed seven new staff, opened a number of new outlets for their products and also construction of a new factory is ongoing. Dr. Netey, the CEO of Meridian Marshalls Holdings Limited mentioned that the proceeds helped to pay off existing loans, and also put up a lecture theatre to house the students. Mrs. Leticia Osafo of SAMBA Foods, Limited shared a similar story. She indicated that the business after listing has been able to acquire and install a fully automated groundnut processing plant. She currently has a contract to provide 'shito' for KFC. She mentioned that the business is soaring, with new staff employed and various products added on.

## 5. SUMMARY

The focus of this study was to find out factors influencing SMEs listing on the GAX. The specific objectives of the study was to assess the extent of awareness of the GAX and its benefits among SMEs, to assess the level of involvement of Licensed Dealing Members in development of the GAX, to assess the efforts put in by the Ghana Stock Exchange and Securities and Exchange Commission in promoting the GAX; and, to reveal the real benefits achieved by GAX listed firms. To achieve these objectives we sampled 50 SMEs who had registered their businesses, employed between 2 to 200 staff and had annual turnover of between GHS45,000 and GHS90,000. Questionnaires were also given to 21 Licensed Dealing Members (brokers). Three out of the four listed SMEs were interviewed. We also interviewed representatives of the Ghana Stock Exchange (GSE) and Securities and Exchange Commission (SEC).

After presenting our findings, we found that over half of the SMEs had some information about the GAX. However, their knowledge with regards to the benefits of listing on the GAX as well as what they required to list is very limited. We also found that SMEs in general had a limited knowledge in finance. The analysis revealed that SMEs had a difficulty accessing stock market operators as well as stock market information. It appeared that SMEs did not know where to locate stock market operators (brokers), therefore in the event that an SME needed more information about the GAX, they were hindered by this circumstance. We found generally that SMEs knowledge on the stock market was very low.

SMEs cited many challenges barring them from getting listed on the GAX. The most predominant reason mentioned was the lack of adequate information about the GAX. Other reasons they gave included loss of ownership and disclosure requirements. Majority of the SMEs indicated that they heard about the GAX through online sources. They showed that they had never attended any conference or program or been invited to any activity where the GAX was talked about.

The research also revealed that SMEs preferred long term funding to short term funding and also showed that they preferred equity financing to debt financing. This is in congruence with the fact that majority of the SMEs sampled were registered as companies. This revelation is different from what has been the status quo for many years; over the years SMEs are known to register their businesses as sole proprietorships. That explains why more SMEs preferred equity to debt. SMEs also stated that they faced challenges with their current choice of funding which are loans. Interest rate charges were cited as the most worrisome to the SMEs. The SMEs also gave an indication that if the challenges they faced pertaining to the GAX are addressed, they (80% of the sample) will be willing to patronize the GAX as a financing option rather than their current source of funding. This is a strong indication that the opportunity for SMEs to get listed on the GAX exists. Also, a wholesome majority of the sample responded that in order for the GAX to be effective and functional, education and information concerning the GAX must be made readily available to them.

We also found that the Brokers have shown some commitment towards the development of the GAX except that their effort is passive. Majority of the brokers mentioned that they often embarked on marketing of the GAX to SMEs but have had few responses. Some brokers at the time of the research was conducted were assisting some SMEs to get the necessary documentation required to be listed. Most brokers indicated their willingness to help solve the liquidity problem on the stock market by playing a market maker role for the securities they list to ensure ready demand and supply of listed shares.

In an interview with Mrs. Joyce Boakye of the Listing Department of the Ghana Stock Exchange, she mentioned that her outfit embarked on outreach and education to SMEs in various regions of the country. She indicated that the fear of losing ownership, lack of transparency and poor record keeping among others are some of the hindrances preventing SMEs from coming on board. She also mentioned that the GSE is taking steps to get government to reintroduce the tax rebates which were enjoyed by companies which were listed on the Exchange, more especially for the SMEs, to motivate them. She mentioned also that though they have had some educational forums and other workshops to market the GAX, there is the need to do more to improve the public awareness of the GAX. Since the establishment of the GAX, Securities and Exchange Commission has not engaged in any form of marketing activity towards promotion of the GAX. Mr. Joseph Arthur, of the Issuer's Department indicated that, they have realized the need to get involved in the education of the public especially SMEs about the GAX and therefore, his outfit was working on a proposal to management with regards to holding educational programs for SME Associations. He mentioned that they will roll up such programs by the end of the second quarter of this year.

## 6. Conclusions

Overall, the GAX is a viable initiative which will move SMEs from engaging in small businesses to far reaching heights to propel the economy of Ghana. However the promotional drive from all stakeholders has been rather passive since its establishment. The analysis of responses gotten from the research points to the fact that the SMEs for whom the GAX was set up are not adequately informed about it. There is an indication that SMEs will embrace the GAX once they fully

understand the benefits that come with growth of their businesses, to the extent that issues of loss of ownership, secrecy and poor record keeping which hinder SMEs acceptance of equity will be a thing of the past. There is the need for all stakeholders – GSE, SEC and Brokers to pull their efforts together to make the GAX a success.

## 7. Recommendations

The Ghana Alternative Market (GAX) will excel if the critical success factors as outlined by the World Federation of Exchanges and OECD are adhered to. These include continuous outreach and education, tax incentives for both SMEs and investors, private placement as a mode of issue to reduce entry requirements among others. The study also makes the following recommendations:

- There is the need for LDMs (brokers) to intensify their marketing efforts. LDMs can put in a slot about the GAX anytime they ran an advert about their firms and products they offer. Be it a paper publication, a radio or TV advert. Information about the GAX can also be included in the news bulletins and brochures LDMs give out to their clients.
- The Stock Exchange can provide an incentive for LDMs who sponsor a certain number of SMEs to list on the GAX (Criteria to be set by the Exchange after deliberations with all market stakeholders) such as a reduction in the annual fees paid by such LDMs
- The drive for awareness creation and education must be intensified by the GSE and SEC as well. The GSE can liaise with Imagine 8 Ghana Limited, the organizers of SME awards in Ghana by way of targeting SMEs that have potential for growth and who require the long term financing the GAX provides.
- Also in order to capture the attention of startups, a desk can be created at the Registrar General's Department purposely to give information about the GAX. Information bulletins and brochures as well as a list of LDMs and their contact details must be provided at the desk to provide information and also allow SMEs to easily contact a broker should they require additional information about the GAX.
- The GSE and SEC must create units purposely to coordinate activities of the GAX so as to reach out intensely to make an impact. Such a unit can liaise with SME Associations to have slots at their meetings to educate them.
- Programs could also be organized (on television and radio) in local dialects to enhance public awareness.

As mentioned above, a collaborative effort by all stakeholders, rather than an individualistic approach will make the GAX viable, functional and effective.

## Acknowledgement

We acknowledge the significant contributions Prof. A. Q. Q. Aboagye (lecturer, University of Ghana Business School), Mrs. Joyce Boakye (Listing Department, Ghana Stock Exchange), Mr. Joseph Arthur (Issuer's Department, Securities and Exchange Commission), Mrs. Leticia Osafo (Samba Foods Limited), Dr. Nettey (Meridian Marshalls Holdings) and Mr. Jerry Asamanyuah (Hords Limited), Mr. Richard Norgah and Mr. Kwesi Ofori Jnr (Imagine 8), Mr. Mohammed Kamara (Prudential Stock Brokers Limited) and Mr. Benjamin Solomon for their guidance, provision of data and support towards the completion of this research.

## List of abbreviations

OECD - Organization for Economic Co-operation and Development  
 GDP - Gross Domestic product  
 GSE - Ghana Stock Exchange  
 GAX - Ghana Alternative Market  
 SME - Small and Medium Enterprises  
 UNIDO - United Nations Industrial Development Organization  
 IOSCO - International Organization of Securities Commissions

## References

- Abor, J., & Biekpe, N. (2006). Small Business Financing Initiatives in Ghana. *Problems and Perspectives in Management*, 4(3).
- Abor, J., & Quartey, P. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*.
- Akorsu, P. K., & Agyapong, D. (2012). Alternative model for financing SMEs in Ghana. *International Journal of Arts and Commerce*.
- Africa Business Magazine (May, 2016) "Exchanges Give SMEs A Helping Hand". Retrieved from [www.africabusinessmagazine.com/african-banker/exchanges-give-SMEs-helping-hand/](http://www.africabusinessmagazine.com/african-banker/exchanges-give-SMEs-helping-hand/).
- Aryeetey, E., & Ahene A. A. (2005). *Changing regulatory environment for small-medium size enterprises and their performance in Ghana*. Centre on regulation and competition working paper series, paper no.103.

- Ayadi, R & Gadi, S. (2013). Access by MSMEs to Finance in the Southern and Eastern Mediterranean: What Role for Credit Guarantee Schemes? MEDPRO Technical Report No. 35/April 2013. Available at SSRN: <https://ssrn.com/abstract=2275216>.
- Carsamer, E. (2009). Access to Credit by SMEs in Ghana: Does the type of business matter. *Social Science Today*. Winneba: Jim Waler Light and Salt Publishers.
- Dalberg Global Financial Advisors. (2011). *Report on Support to SMEs in Developing Countries Through Financial Intermediaries*.
- Feeney, L. S., & Riding, A. L. (1997). Business Owners' Fundamental Tradeoff: Finance and the Vicious Circle of Growth and Control. Canadian Business Owner.
- Frimpong, C. Y. (29th July, 2013). SMES as an Engine of Social and Economic Development in Africa.
- Ghana Stock Exchange (2015). Celebrating 25 Years of Stock Market Operations in Ghana. Ghana Stock Exchange.
- International Organisation of Securities Commissions. (2015). *SME Financing through Capital Markets*.
- Ntiamoah, E. B., Opoku, B., Abrokwa, E., Baah Frimpong, G., & Agyei-Sakyi, M. (2014). Assessing the Contribution of Small and Medium Sized Enterprises to Ghana's Economic Growth. *International Journal of Economics, Commerce and Management*.
- OECD, (2015). "Opportunities and Constraints of Market based financing for SMEs: Report to G20 Finance Ministers and Central Bank Governors".
- Parker, H., Measham, f. & Aldridge, J. (1995). *Drugs Futures: Changing Patterns of Drug Use Amongst English Youth*. London: Institute for the Study of Drug Dependence.
- Peterhoff, D., Romeo, J., & Calvey, P. (2014). *Towards Better Capital Market Solutions for SME Financing*. Oliver Wyman.
- S-CAP. (2014). "SME Capital Market Watch – SME Exchanges Worldwide", Sarthi Capital Advisors Private Limited.
- Shinozaki, Shigehiro. (2014). "Capital Market Financing for SMEs: A growing need in Emerging Asia". Working Paper Series on Regional Economic Integration, Asian Development Bank, Issue 121.
- UNIDO. (2002). Annual report of UNIDO.
- Finance and Markets Global Practise Group. (2015). *SME Exchanges in Emerging Market Economies, A Stock taking of Development Practices*.
- World Federation of Exchanges. (2015). *WFE Report on SME Exchanges*.